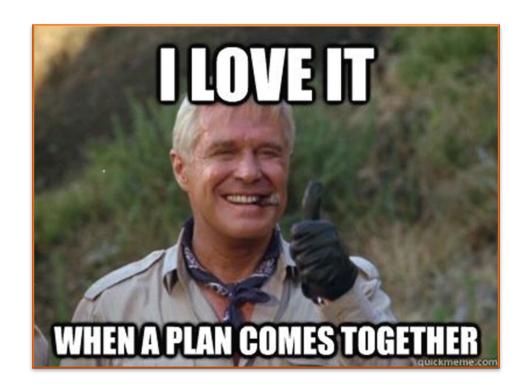


Peak Performance:

Bond Proceeds Investment & Arbitrage Strategies

Investment & Arbitrage Strategies





In Today's Session...

- Arbitrage for tax-exempt debt issuers
- Benefits on involving your Investment Adviser early
- Leveraging the current market environment
- Debt issuance strategies to achieve tax compliance
- Arbitrage compliance considerations



What is Arbitrage?

Arbitrage in the simplest sense is earning a riskless profit by taking advantage of pricing differences on the same asset in different markets.





Investment & Arbitrage Strategies

ARBITRAGE FOR TAX-EXEMPT DEBT ISSUERS

Arbitrage Regulations: Conceptual Framework

Governmental entities enjoy the privilege of issuing debt exempt from federal income taxation

- Interest on debt is often exempt from federal & state income taxation
- Rate subsidy (implicit or explicit) provides lower cost of capital

These issuers are also taxexempt entities

 Local government issuers don't pay federal income tax on interest earned from taxable investments Federal government forgoes tax revenue on debt issued AND investments purchased using bond proceeds

- Distinct interest in limiting amount of tax-exempt debt - AND -
- Limiting uses of bond proceeds & pace of spenddown



Arbitrage Creation





Issuer tax covenants associated with <u>ALL</u> tax-exempt debt



Basic Principles: Arbitrage & Yield Restriction

- Prohibits "abuse" associated with investing proceeds of a tax-exempt issue in higher yielding taxable securities
- IRS limitations related to:
 - ✓ Issuing earlier than necessary
 - ✓ Issuing more than necessary
 - √ Keeping proceeds invested longer than necessary
- Must reasonably establish each tax-exempt issue complies with requirements



Arbitrage: Why it's More Prevalent Now...

Yield environment for borrowing & reinvestment

Project/materials procurement delays extending expenditure periods = increased interest earnings potential

Earnings on ALL funds & accounts have increased due to higher short-term yields (debt service, reserve, etc.)

87,000 additional IRS agents = more potential audit eyes!



Exceptions to Arbitrage Rebate

Small Issuer Status:

- Applies to issuers that reasonably expect to issue no more than \$5MM in tax-exempt debt during a calendar year
- Current refundings generally excluded from \$5 million limit

Spending Exceptions:

	6 Month Spending Exception	18 Month Spending Exception	24 Month Spending Exception
6 Months	100%	15%	10%
12 Months	-	60%	45%
18 Months	-	100%	75%
24 Months	-	-	100%



Debt Proceeds Management & Compliance

Think about

1 =

PLANNING & STRUCTURING

Select type of obligation

Structure and repayment options

Determine best method of sale

2



DEBT ISSUANCE

Select other public finance professionals

Market the issue

Conduct bond sale

Coordinate closing

3

DEBT

MAINTENANCE

Assemble permanent bond record book

Monitor refunding opportunities

Debt management

4



POST ISSUANCE

Paying agent services

Continuing disclosure reporting

Arbitrage rebate monitoring

Investment services

Debt studies/debt service benchmarking

Calls & defeasances





Investment & Arbitrage Strategies

INVOLVING YOUR INVESTMENT ADVISER EARLY

Benefits of Early Engagement

Bond counsel provides tax opinion & conducts due diligence on tax-exempt status of debt

- Issuer must establish a "reasonable expectation" it will comply with an exception to rebate
- Investment Adviser can estimate interest earnings based on project draw schedule to help ensure spend-down compliance
- Adviser can assist issuer with preparing tax certificate, including estimated earnings & gross yield on invested bond proceeds



Benefits of Early Engagement

- Investment Adviser collaborates with <u>entire</u> finance team to:
 - ✓ Create holistic financing plan that considers tax implications & project draw schedule
 - ✓ Establish portfolio strategy prior to bond closing, minimizing idle funds & multiple money transfers
 - ✓ Coordinate with project engineers & architects on project phasing for larger construction initiatives

Early Involvement = More Informed = Higher Value to Issuer



Investment Policy Considerations

Investment policies silent on investment of bond proceeds.



Investing borrowed funds differs from that of general funds

- Higher credit quality
- Higher secondary market liquidity
- Cannot accept call or extension risk
- Maturities typically matched to meet project expenditures



Best Practices Considerations



Investment Adviser assists with policies & procedures to help maximize earnings retention, ensure tax compliance

- Establish segregated investment accounts for bond proceeds
- Minimize deposit balances subject to 110% collateralization
- Perfect collateral & complete pledge agreements, as needed
- Minimize transaction costs
- Complete account transfers for project spending
- Conduct periodic portfolio review
- Report monitoring for arbitrage compliance

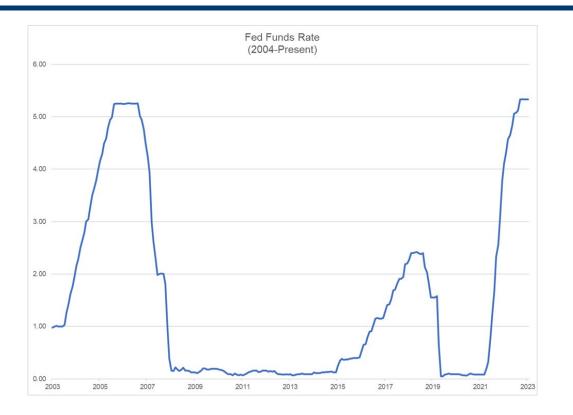




Investment & Arbitrage Strategies

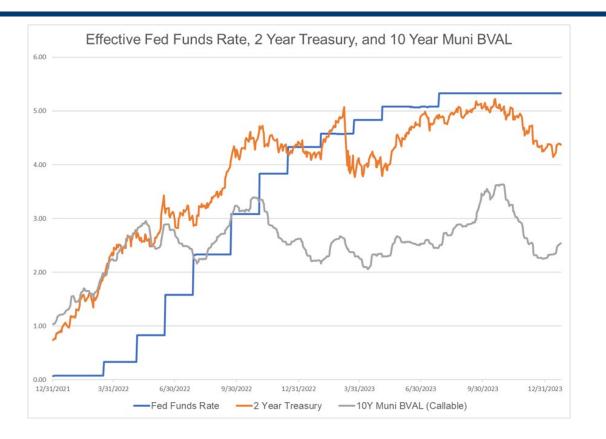
LEVERAGING THE CURRENT MARKET ENVIRONMENT

Yield Environment: Fed Funds Rates





Yield Environment: Fed Funds & 10-yr UST





Yield Environment: Permissible Investments

Investment Type	3-Months	6-Months	1-Year	2-Year
Certificates of Deposit	5.15	5.00	4.90	4.65
US Treasuries	5.35	5.21	4.76	4.31
Tax Exempt AAA Munis	3.66	3.81	4.04	3.86
Taxable AAA Munis	5.16	5.21	4.73	4.76
Agencies	5.20	4.55	4.73	4.44

Investment Type	Yield
Money Market Fund	5.16
Overnight (UST) Repo	5.30



Investment Strategy: Two Tracks

Track 1:

Projects that won't meet spending exception:

Track 2:

Projects that meet spending or small issuer exception:

- Current US Treasury yields allow portfolio to exceed arbitrage yield with minimal risk
- Safety & liquidity are sole considerations; maximizing yield not a goal as issuer will likely need to make rebate payment

 Tactical strategies may add to portfolio performance & seek to maximize earnings available for projects costs



Investment Strategy: Spend Lowest Yield First

Most borrowers receive lower yield on cash accounts than what's currently available by investing in securities.

Paying invoices from available cash prior to reimbursement adds value over time

Planning draw dates in advance results in more efficient portfolio management, no need to hold low-yield cash in investment account



Investment Strategy: Beginning vs. End Period

Treasury Yields as of 1/25/24:

Maturity	Investment		Net	Investment	
Date	Amount		Yield	Earnings	
1/31/2024	\$	500,000	5.39%	\$	-
2/29/2024	\$	500,000	5.40%	\$	2,146
3/31/2024	\$	500,000	5.35%	\$	4,398
4/30/2024	\$	500,000	5.30%	\$	6,538
5/31/2024	\$	500,000	5.25%	\$	8,709
6/30/2024	\$	500,000	5.21%	\$	10,769
7/31/2024	\$	500,000	5.13%	\$	12,794
8/31/2024	\$	500,000	5.06%	\$	14,756
9/30/2024	\$	500,000	4.98%	\$	16,587
10/31/2024	\$	500,000	4.91%	\$	18,424
11/30/2024	\$	500,000	4.83%	\$	20,132
12/31/2024	\$	500,000	4.76%	\$	21,844
1/31/2025	\$	500,000	4.72%	\$	23,681
2/28/2025	\$	500,000	4.69%	\$	25,293
3/31/2025	\$	500,000	4.65%	\$	27,069
4/30/2025	\$	500,000	4.61%	\$	28,750
5/31/2025	\$	500,000	4.58%	\$	30,464
6/30/2025	\$	500,000	4.54%	\$	32,084
7/31/2025	\$	500,000	4.50%	\$	33,735
8/31/2025	\$	500,000	4.47%	\$	35,356
9/30/2025	\$	500,000	4.43%	\$	36,884
10/31/2025	\$	500,000	4.39%	\$	38,442
11/30/2025	\$	500,000	4.35%	\$	39,909
12/31/2025	\$	500,000	4.32%	\$	41,405
1/31/2026	\$	-	4.30%	\$	-
Total	\$	12,000,000		\$	530,170

Maturity	Investment		Net	Investment	
Date	Amount		Yield	Earnings	
1/31/2024	\$	-	5.39%	\$	-
2/29/2024	\$	500,000	5.40%	\$	2,146
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12/31/2025	\$	500,000	4.32%	\$	41,405
1/31/2026	\$	500,000	4.30%	\$	43,091
Total	\$	12,000,000		\$	573,261



Investment Strategy: Playing the Short Game

Buying "top" of the treasury curve doesn't always yield best results given peak short-term rates

Compare two July 2007 investments:

6-month T-bill vs. rolling 1-month bill for 6 months

Issue Date	Maturity Date	Issue Yield	Return on \$1 million	Return as %
8/2/2007	1/31/2008	5.00%	\$ 1,024,870.19	2.487%
Issue Date	Maturity Date	Issue Yield	Return on \$1 million	Return as %
8/2/2007	8/30/2007	5.16%	\$ 1,003,947.19	0.395%
8/30/2007	9/27/2007	4.69%	\$ 1,007,551.99	0.755%
9/27/2007	10/25/2007	3.33%	\$ 1,010,121.06	1.012%
10/25/2007	11/23/2007	3.99%	\$ 1,013,316.81	1.332%
11/23/2007	12/20/2007	3.75%	\$ 1,016,121.30	1.612%
12/20/2007	1/17/2008	2.80%	\$ 1,018,299.33	1.830%
1/17/2008	2/14/2008	3.14%	\$ 1,020,744.59	2.074%



Investment Strategy: Barbell Portfolios

Investing exclusively in short-term assets is a **BET**!

Bet has paid off since Fed began increasing interest rates in 2022, BUT...

Past performance is NOT predictor of future performance, AND... It's imprudent to believe we'll know exactly when to shift from short- to long(er)-term investments

A "barbell" portfolio composed of both short-& long-term assets to meet project payments protects against risk of declining short rates.



Investment Strategies: Tax-Exempt Securities

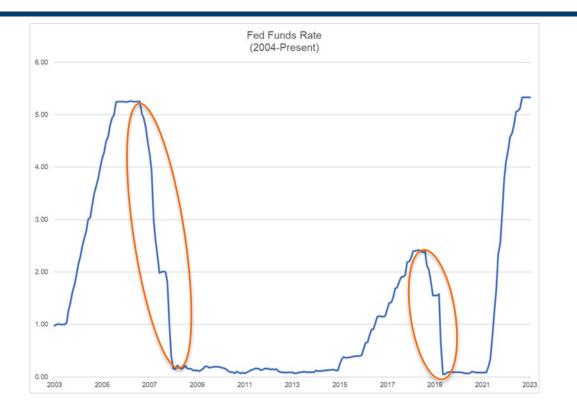
It's counter-intuitive to think investing in tax-exempt assets may benefit tax-free borrowers, BUT...

Delayed projects, shifting yield curves & market dislocations all reasons to use tax-exempts

- Earnings "shielded" from arbitrage considerations.
- Can be considered in positive arbitrage situations where issuer can't meet spending exception
- High credit quality borrowers may find achieve positive "spread"



Investment Strategies: Fed Funds Rate Revisited





Investment Strategies: What We're Telling Clients

Allocate heavily toward treasuries, particularly at longest maturity where there's yield advantage

 Rare opportunity for attractive yields without sacrificing credit & liquidity

Be very conservative about late project liquidity needs

 Invest in CDs or taxable munis at other end of barbell

Don't fall behind schedule if you qualify for a spending exception to arbitrage rebate!



Investment & Arbitrage Strategies

DEBT ISSUANCE STRATEGIES TO ACHIEVE TAX COMPLIANCE

Debt Issuance Strategies: Tax Compliance

If issuer can't "reasonably expect" to meet rebate exceptions under a single debt transaction...there are options!

Issue multiple tranches of debt

Compartmentalize project based on constituent pieces, issue debt for each

Use funds on-hand to carry all prelim & some construction costs

There are pros & cons to each approach.



Debt Issuance Strategies: Multiple Debt Tranches

\$10 million project: Consider issuing two tranches of \$5 million in consecutive calendar years.

Pros

- Achieve small issuer exception for each transaction
- Potentially lower total interest cost

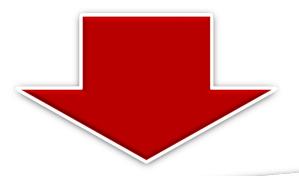
Cons

- Higher costs of issuance
- Interest rate risk
- Higher administrative burden
- Greater future debt management costs



Debt Issuance Strategies: Compartmentalizing

Break project into constituent-based components & issue debt against each to meet spending exceptions.



Cons

- Higher cost of issuance
- •Interest rate risk
- •Higher administrative burden
- •Greater future debt management costs

Pros

- Aligns timing of financing with major project components
- Potentially lower total interest cost
- Longer amortization period





Debt Issuance Strategies: Internal Funding

Use Funds on-hand to carry certain project costs, then reimburse the expenditures.



Can issue single series of bonds

Potential lower total interest cost

Lower future debt management expenses

Must carefully consider timing of project & debt issuance

Diminished interest income

Must calculate impact to operating liquidity



Debt Issuance Strategies: Other Best Practices

Reimbursement

- Execute official declaration of intent to reimburse timely
- May also adopt reimbursement resolution for entire project
- Without declaration, only 60 days to reimburse from tax-exempt debt proceeds

Unspent proceeds from prior issues

- Even if in money markets, still earning much higher rate than arbitrage yield
- Spend funds timely or transfer to debt service fund to pay interest





Investment & Arbitrage Strategy

ARBITRAGE COMPLIANCE CONSIDERATIONS

Best Practices: Maintaining "Bona Fide" Status

Funds & accounts related to a bond issue...

Debt Service

- Should be depleted each bond year to maintain arbitrage & yield restriction exemptions
- Reasonable "carry-over" amount permitted (1/12th of annual)

Debt Service Reserve Fund

 Earnings should be regularly transferred to debt service fund to maintain compliance with traditional "threepronged" test



Best Practices: Maintaining "Bona Fide" Status

Common pitfalls for Minnesota issuers...

105% Over-Levy Requirement:

 Be careful or you may exceed reasonable carry over after two years

Assessment Bonds:

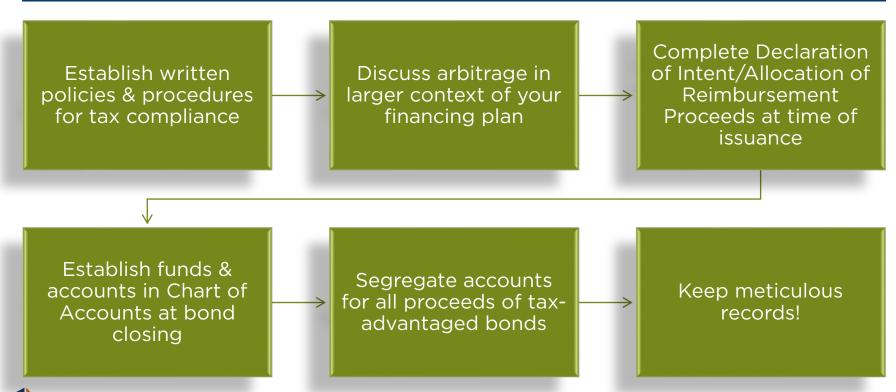
Don't let
 assessments
 accumulate in
 your debt service
 fund

Bond-funded Capital Projects

 Close out funds & allocate unspent proceeds timely



Arbitrage Compliance: Best Practices Process









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