SESSION THREE

Investing Bond Proceeds, Arbitrage, and IRS Tax Compliance

GLENN CASTERLINE
Senior Managing Director
BLX Group LLC

MONIQUE SPYKE
Managing Director
PFMAM, a division of U.S. Bancorp Asset Management, Inc.

JOHN STANLEY
Partner
Orrick, Herrington & Sutcliffe LLP

The Bonds Have Been Issued … Now What?

Congratulations!

- Months of careful planning are over
- At last, the Bonds have been issued
- You've locked in a low cost of funds
- Now it's time to get back to your regular duties

Do Not Forget About the Bond Proceeds

- Probably on your "To Do List"
- Typically, are forgotten
- Are unique assets considering the arbitrage rebate and yield restriction requirements

Do Not Forget About the Arbitrage Rebate Requirements

- Positive arbitrage is BACK!!!

Overview of Arbitrage & Rebate

- General rule is that you cannot invest proceeds of tax-exempt bonds in investments with a yield materially higher than the yield on the bonds
  - Several important exceptions apply
- Intent of these rules is to restrict situations where an issuer might:
  - Issue more bonds than needed
  - Issue bonds earlier than needed
  - Keep bonds outstanding longer than needed
- Hedge bonds limitations are an independent non-arbitrage restriction, which generally requires an issuer to expect to spend 85% within 3 years.

What Do the Arbitrage Rules Apply to?

- Proceeds of Bonds
  - Sale proceeds
  - Investment proceeds (earnings on investments of sale proceeds)
  - Transferred proceeds (unspent proceeds of refunded bonds)
- Replacement or "Gross Proceeds"
  - Debt service funds (P&I accounts, sinking fund accounts, etc.)
  - Cash-funded reserve funds, pledged funds, and defeasance escrows
- Arbitrage restrictions apply until proceeds are spent

Arbitrage – Yield Restriction vs. Rebate

YIELD RESTRICTION

Can you invest proceeds at a higher yield? Only during a "temporary period."

- 3-year temporary period for new money project funds
- 90 days for current refunding escrows
- Reserve funds / bona fide debt service funds
- 30-day period for other funds

REBATE

Can you keep earnings above the bond yield? Only if you meet an exception from rebate:

- Spending exceptions (spend the money quickly enough)
- Small issuer exception (issuers that don't issue more than $5mm)
- Debt service fund exception

Most Common Yield Restriction Exceptions

1 **NEW MONEY BONDS**

Three-Year Temporary Period

- Must expect to spend 85% of proceeds within 3 years
- Must incur a binding obligation to spend at least 5% of the proceeds within 6 months after issuance
- Must proceed with due diligence in spending proceeds
- After 3 years, must make "yield reduction payments"

2 **CURRENT REFUNDING BONDS**

90-day Temporary Period

3 **RESERVE FUNDS**

Lesser of Three Tests (10% / 125% AADS/MADS)

4 **BONA FIDE DEBT SERVICE FUNDS**

Up to 13 Months of Depleted Annually

Spending Exceptions from Rebate

6 Month Exception
No rebate owed if all proceeds spent within 6 months

18 Month Exception
No rebate owed if...

- 15% of proceeds are spent within 6 months
- 60% are spent within 12 months
- 100% are spent within 18 months

24 Month Exception
No rebate owed if at least 75% of the proceeds are spent on construction costs (not acquisition costs) of property owned by a governmental or 501(c)(3) entity, and...

- 10% of proceeds are spent within 6 months
- 45% are spent within 12 months
- 75% are spent within 18 months
- 100% are spent within 24 months

Timing Issues for Rebate and Yield Reduction

- Investment earnings are blended over time for rebate and yield reduction
  - Periods with positive arbitrage can be offset against periods with negative earnings relative to bond yield, and vice versa
- Yield restriction analysis is only blended outside a temporary period
  - After 3-year temporary period for new money, proceeds "not allowed" to be invested above the bond yield, but if they are, can make yield reduction payments
  - Negative arbitrage during that initial 3-year temporary period cannot be used to offset positive arbitrage in later years (different from rebate)

Calculating and Paying Rebate and Yield Reduction Payments

- If rebate or yield reduction payments are owed, first payment must be no later than 5 years after issuance (60 days after fifth year), and every five years thereafter
  - Must pay at least 90% of liability every 5 years, and then 100% of liability after retirement of bonds
  - Possible to have a payment due for one 5-year period, and then a refund in a later 5-year period
- Best practice is to monitor on an annual basis to avoid surprises
- Working with rebate consultants

Do not edit
How to change the design

Do you currently work with an

Do you currently work with an arbitrage rebate consultant?

Why Bother Worrying About Investments?

COSTS

- Interest costs accrue on bonds immediately so…
  - Negative carry (i.e., negative arbitrage) on investments increases financing cost
- Improved investment performance will…
  - Reduce negative carry and even lower overall borrowing costs

TYPICAL FUNDS

- Project Funds
  - Net funding + more earnings = smaller bond issue
  - Gross funding + more earnings = more project funds
- Reserve Funds
  - Earnings will offset debt service costs
  - Higher earnings here can offset costs of negative carry in Project Funds
- Debt Service Funds
  - More earnings = less net debt service (this is a good thing!)

Bond Proceeds Investment Strategy

An Optimal Bond Proceeds Reinvestment Strategy Should…

- Ensure safety of principal while providing adequate liquidity
- Consider current and future interest rate expectations
- Take into account any applicable arbitrage rebate regulations
- Provide a reasonable risk-adjusted return

pfm asset management

Key Questions to Consider When Investing Bond Proceeds

- What is my credit risk, and how can I manage it?
- How does this instrument or investment strategy provide liquidity for both expected and unforeseen draws?
- What are the rebate implications of my reinvestment strategy?
- What is the yield of the instrument or investment strategy, and how can my return change through time?
- Does this reflect my view of market conditions? How does this instrument or investment strategy manage market and reinvestment risk?

Typical Permitted Investments for Bond Proceeds

Money market/short-term investments

- Money market funds
- Local government investment pools (LGIPs)

Open-market and Custom securities

- U.S. Treasuries and direct obligations (examples: Treasury Bills, Treasury Notes)
- Federal Agency securities (examples: Fannie Mae, Freddie Mac)
- Corporate securities (examples: Coca-Cola, Adobe)
- Commercial paper (examples: JPMorgan, Toyota)
- Negotiable certificates of deposit (examples: Rabobank, TD Bank)

Structured investments

- Guaranteed investment contracts (GICs)
- Flexible repurchase agreements (Flex Repos)
- Forward delivery agreements (FDAs)

pfm asset management

Active Management vs. Passive Strategies

Active Management

- Ideal for funds with expansive permitted investments and/or uncertain liquidity needs
- Advisor goal: generate incremental earnings via swapping amongst individual CUSIPs, sectors, and duration buckets to attempt to offset advisory fees
- Enhanced ability to take advantage of benefit from near-constant duration exposure

Real-time monitoring of holdings through time

More frequent trades to manage duration and/or liquidity

Greater ability to take advantage of short-term securities mispricings

Enhanced ability to add incremental net value

Advisor has fiduciary responsibility

pfm asset management

Passive Strategies

- Ideal for funds with conservative, straightforward permitted investments and predictable liquidity needs
- One-time engagements with subsequent opportunities to restructure in the future
- May require significant change to market conditions and/or cash flow requirements for restructurings to add value

Periodic/ad-hoc monitoring

Wholesale restructurings to rebalance to target

No ability to take advantage of short-term opportunities

May require substantial changes in market conditions to add value

No fiduciary responsibility once portfolio is structured

pfm asset management

Do not edit
How to change the design

When investing bond proceeds, it

When investing bond proceeds, it’s important to consider which of the following?

The Slido app must be installed on every computer you’re presenting from

slido

Types of Risks to Manage in Bond Proceeds Investments

Credit Risk

- Is there a government guarantee?
- Who is the ultimate obligor?
- What type of credit?

Liquidity Risk

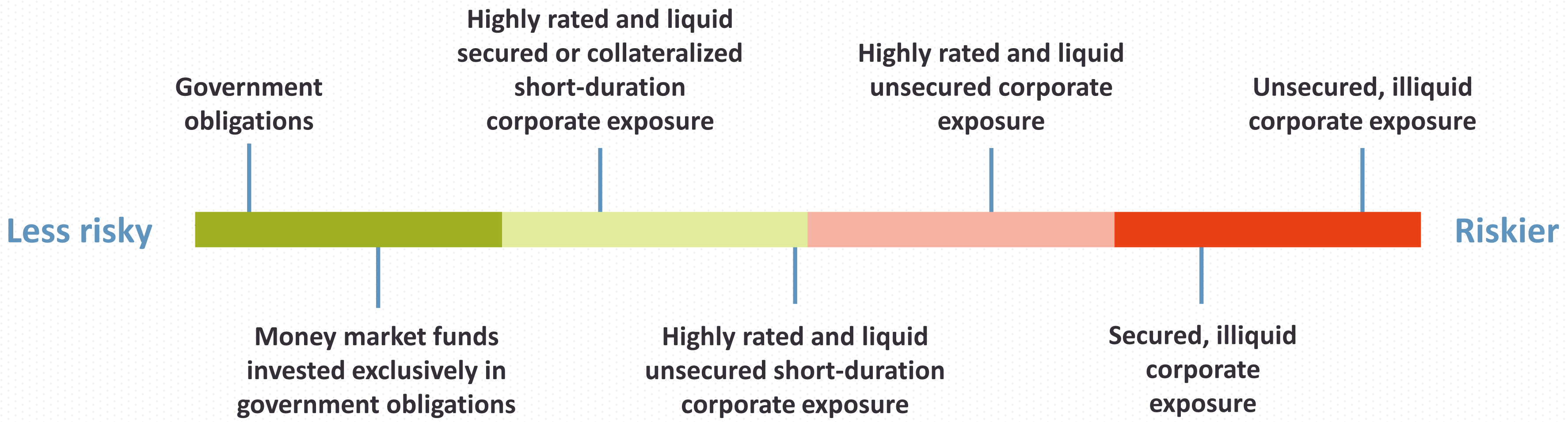
- How quickly and easily can I access the proceeds?
- Are there redemption fees or gates?
- Is there a secondary market that I can access in the event of emergency?

Reinvestment Risk

- What might happen to my return if interest rates go up or down?
- Does the strategy give me any ability to take advantage of changes in interest rates

Credit Risk:
Risk Aversion and Yield

- For any given yield or return a rational investor will choose the least risky investment
  - Given the choice between a 30-day Treasury Bill at 5.23% or 30-day commercial paper at 5.23%, a rational investor would choose the Treasury Bill because it is less risky
- By extension, investors require more yield or return for riskier investments



Liquidity Considerations of Various Investment Alternatives

Strategy	Liquidity Considerations	Additional Points of Consideration
Money market fund	Typically offer same-day liquidity which is a function of cut-off times	Are there redemption fees or gates?
Passively structured portfolio	Underlying investments offer same-day liquidity, but logistical considerations may cause delays	Requires trustee to sell investments or advisor to be engaged which may take time to put into place
Managed portfolio	Underlying investments offer same-day liquidity; function of advisors to access capital markets	How are liquidity needs communicated to advisor?
Structured Investment	Typically have a notice period; official notice may need to come from trustee	**No secondary market**

pfm asset management

Reinvestment Risk

- Impact of interest rate movements on return/yield of instrument
  - Does the strategy give me any ability to take advantage of changes in interest rates or am I "locked in"?

Strategy	Interest Rate Scenario		
	Rising Rates	Falling Rates	Stable Rates
Money market fund	Yield of fund tends to follow short-term rates (with lag)	Yield of fund tends to follow short-term rates (with lag)	Yield of fund will tend to remain stable
Passively structured portfolio	Yields locked in; reinvestments will occur at higher rates	Yields locked in; reinvestments will occur at lower rates	Yields locked in
Managed portfolio	Yields locked in; manager has ability to alter portfolio to take advantage of opportunities	Yields locked in; reinvestment at lower rates	Yields locked in
Structured Investment	Yields locked in	Yields locked in	Yields locked in

pfm asset management

Do not edit
How to change the design

What are some of the risks to consider when investing bond proceeds?

The Slido app must be installed on every computer you're presenting from

slido

Strategy Development

Project Fund Investment Process

Define Universe of Investments

- Bond indentures, state law, investment policy
- Sector specialist recommendations
- Identify value

Identify Constraints & Objectives

- Draw schedule expectations
- Liquidity buffer

Initial Portfolio Optimization

- Meet initial expected cash flow needs
- Horizon and relative value analyses

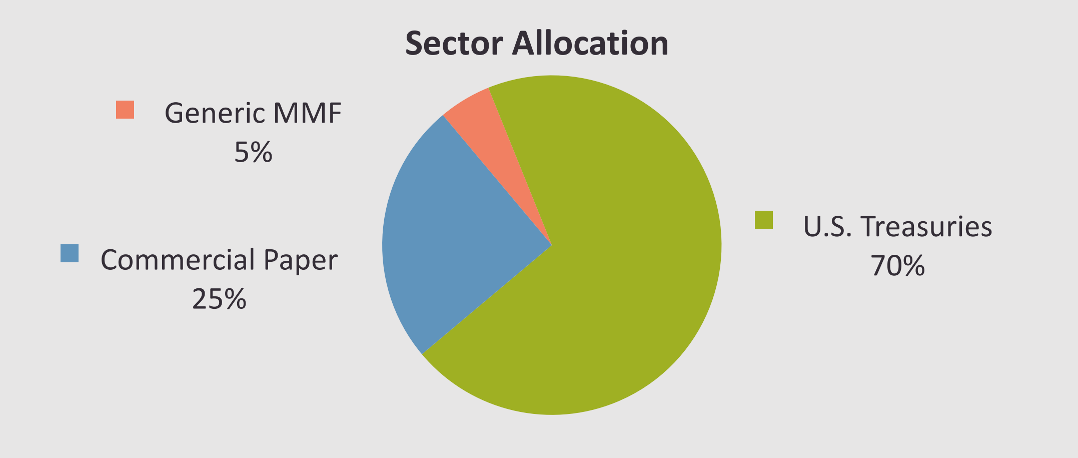
pfm asset management

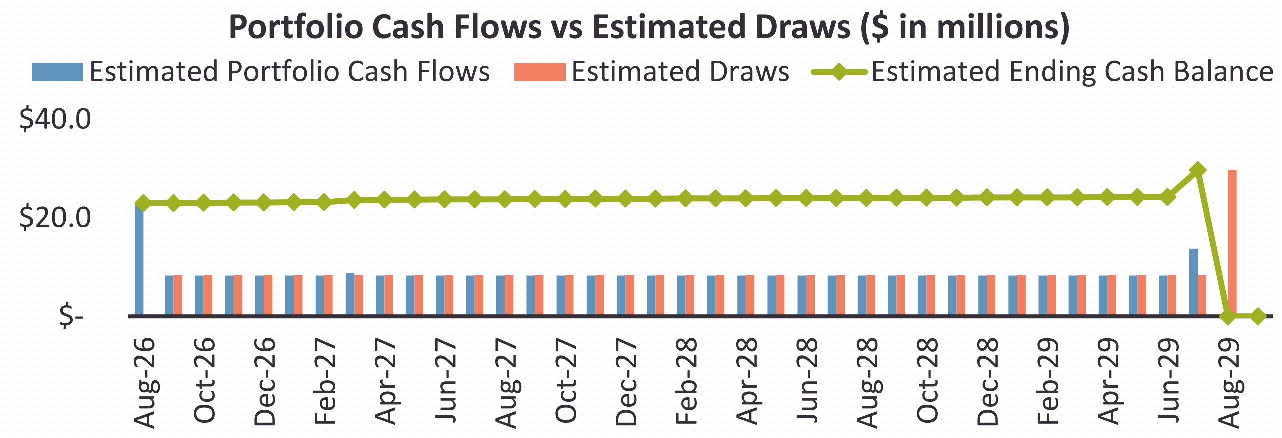
Sample Treasury and Credit Portfolio

Portfolio Statistics Summary	
Approximate Cash Balance (Total)	$15,000,000
Approximate Par Amount (Investments)	$285,000,000
Weighted Average Maturity	544 days
Average Life of Draw Schedule	564 days
Average Gross Yield (IRR)	4.21%
Estimated Gross Earnings	$18,934,000

Strategy Overview

- Approximately 70% allocation to Treasuries, 25% to commercial paper, with the balance in a money market fund
- Commercial paper structured to meet draws inside of nine months
- Treasury maturities laddered to closely match the remaining draws
- Treasuries can be swapped into higher-yielding commercial paper as securities near maturity





For illustrative purposes only.

Investing Reserve Funds

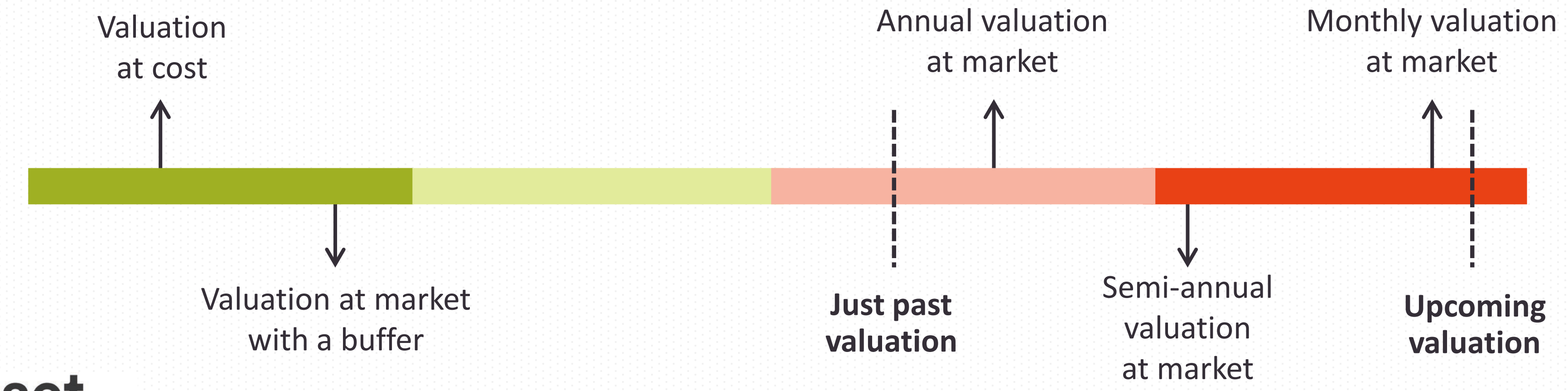
Unique considerations for reserve funds impact reinvestment strategy

Investment Decision Factor	Considerations
Market Outlook	Does the strategy account for the interest rate outlook?
Risk Management	Is interest rate risk based on the investment valuation methodology and frequency?
Replenishment Requirements	If investment values decline, must the reserve funds be replenished?
Opportunity Costs	Are there yield enhancement opportunities within your risk management parameters?

Managing Downside (Replenishment) Risk in Reserves

- Reserve funds are typically funded for the benefit of the underlying bondholders
  - Most indentures require reserve funds to be valued periodically with any shortfalls due to investment losses made up
- In addition to credit, liquidity, and tax risk, the management of reserves also requires focusing on mitigating risk that losses in market value of investments will require additional deposits into reserves
- Sensitivity and breakeven analyses to determine potential outcomes under different interest rate assumptions

Portfolio's Ability to Take Interest Risk



Investing Debt Service Funds

- 1/6th of semi-annual interest payment and 1/12th of principal payment is deposited into debt service fund monthly
- Bona fide debt service funds are typically not subject to rebate
- Investment alternatives include:
  - Ultra-short duration bias: money market fund
  - Short duration bias: managed portfolio of securities
  - Long duration bias: structured investments such as FDAs

Strategy	Gross Yield*	Key Benefits	Key Limitations
Money market fund	3.63%	Can take advantage of increases in interest rates; administrative simplicity	Ultra-short duration
Managed portfolio	3.89% to 3.98%	Extends duration while retaining flexibility to reinvest at higher rates	Duration cannot be extended beyond upcoming principal and interest payment dates
Structured Investment	4.38%	Synthetically extends duration beyond upcoming liquidity needs	Locks in yield; cannot take advantage of increases in interest rates

pfm asset management

For illustrative purposes only.

**Yields sourced from Bloomberg Finance L.P. as of August 3, 2026, and subject to change based on underlying market conditions. Please see further disclosures at the end of this presentation.*

True of False: In the context of reserve fund accounts, funds that are valued more frequently have more ability to take risk relative to accounts that are valued less frequently.

Don’t Forget About the Bond Proceeds!

- Consider your investment strategy soon before or after your bonds are issues
- It’s GOOD to owe rebate!
- Maximize earnings on your bond proceeds
- Actively manage upcoming arbitrage rebate payments
- Avoid surprises (i.e., spent all the investment earnings)
- It's BETTER to keep all the investment earnings
- Aim at meeting one of the spending exception to the arbitrage rebate requirements

pfm asset management

QUESTIONS?

GLENN CASTERLINE
Senior Managing Director
BLX Group LLC

MONIQUE SPYKE
Managing Director
PFMAM, a division of U.S. Bancorp
Asset Management, Inc.

JOHN STANLEY
Partner
Orrick, Herrington
& Sutcliffe LLP

Disclosures

The views expressed within this material constitute the perspective and judgement of U.S. Bancorp Asset Management, Inc., at the time of distribution and subject to change. Any forecast, projection, or prediction of the market, the economy, economic trends, and equity or fixed-income markets are based upon current opinion as of the date of issue and are also subject to change. Opinions and data presented are not necessarily indicative of future events or expected performance. Information contained herein is based on data obtained from recognized statistical services, issuer reports or communications, or other sources, believed to be reliable. No representation is made as to its accuracy or completeness.

PFM Asset Management serves clients in the public sector and is a division of U.S. Bancorp Asset Management, Inc., which is the legal entity providing investment advisory services. U.S. Bancorp Asset Management, Inc., is a registered investment adviser, a direct subsidiary of U.S. Bank N.A. and an indirect subsidiary of U.S. Bancorp. U.S. Bank N.A. is not responsible for and does not guarantee the products, services, or performance of U.S. Bancorp Asset Management, Inc.

NOT FDIC INSURED : NO BANK GUARANTEE : MAY LOSE VALUE

pfm asset management