



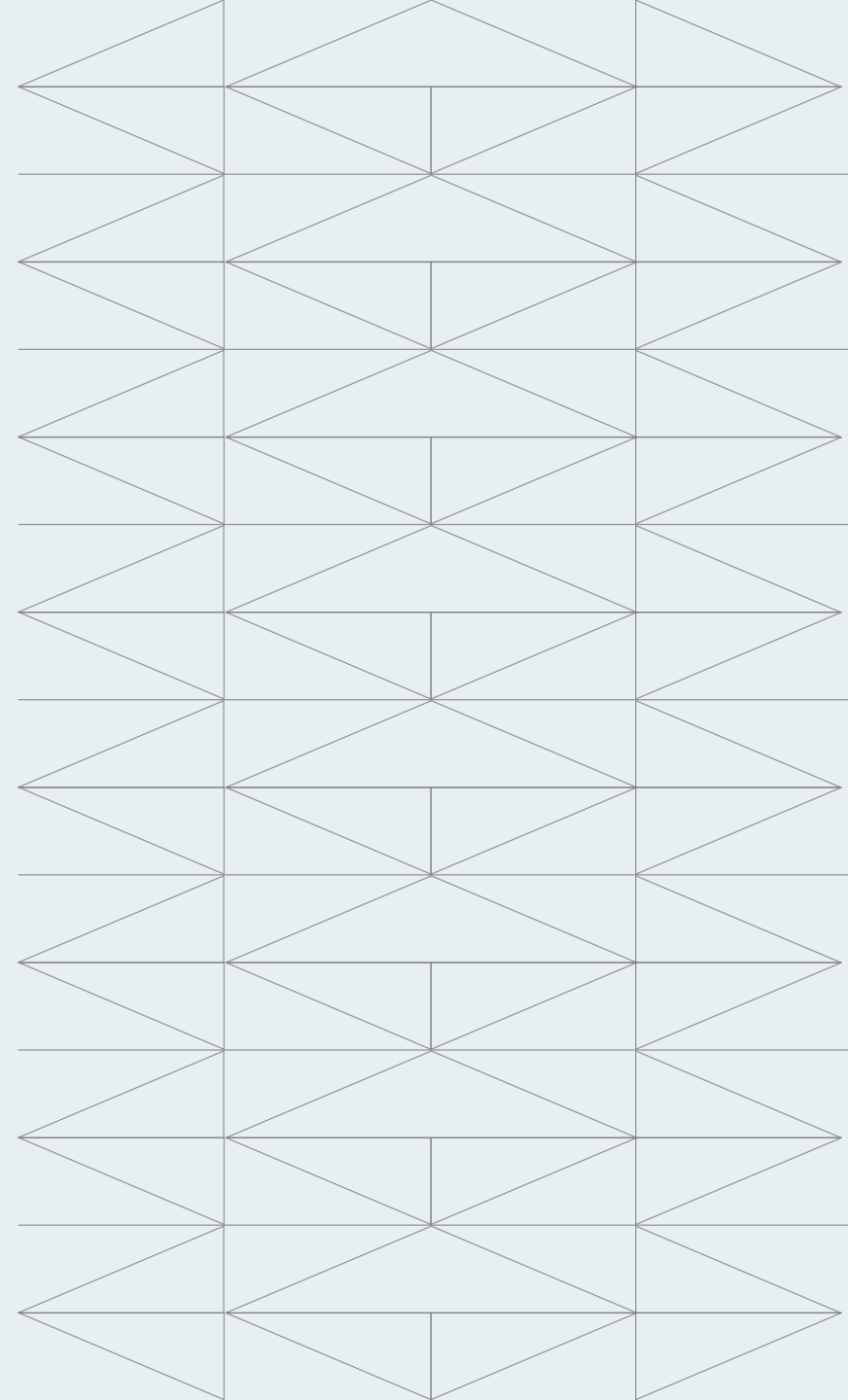
MaherDuessel

Presentation on the Municipal Bond Market

December 15, 2022

BNY Mellon Capital Markets, LLC*

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Agenda

- **1. Municipal Bond Market Conditions - The Bad News**
- **2. Municipal Bond Market Conditions – The Good News**
- **3. Swaps, Derivatives and Other Financing Structures**
- **4. Continuing Disclosure Requirements**
- **5. Emerging Trends in Municipal Finance**

Live Content Slide

When playing as a slideshow, this slide will display live content

**Poll: Have you been involved with the issuance of
Municipal Debt?**

Municipal Bond Market Conditions

•What is a Muni Bond?

- Issuance of debt obligations by state or local governments, their political subdivisions, joint powers authorities, non-profits, airports, affordable housing developers, public utilities
- Usually long-term in nature, can have variable or fixed rates, sold in multiple maturities
- Typically, interest paid will be exempt from federal and/or state income taxes
- Sold to public investors, but can be privately placed

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3/26/18, 2018
 ALLEGHENY COUNTY AUTHORITY
 General Revenue Bonds, Series of 2018

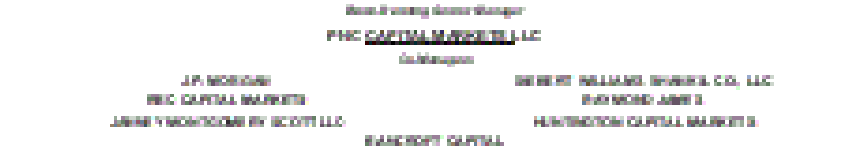
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THE 2018 BONDS ARE LIMITED OBLIGATIONS OF THE AUTHORITY PAYABLE SOLELY FROM THE RECEIPTS AND REVENUES OF THE AUTHORITY PLEDGED UNDER THE INDENTURE, SUBJECT TO THE PAYMENT OF OPERATING EXPENSES OF THE AUTHORITY. ALL AMOUNTS HELD IN THE REVENUE FUND AND ALL OTHER AMOUNTS HELD BY THE TRUSTEE IN THE FUNDS CREATED UNDER THE INDENTURE (EXCEPT THE RESERVE FUND); NEITHER THE CREDIT NOR THE TAKING POWER OF THE COUNTY OF ALLEGHENY, THE CITY OF PITTSBURGH, THE COMMONWEALTH OF PENNSYLVANIA OR OF ANY POLITICAL SUBDIVISION, AGENCY OR INSTRUMENTALITY THEREOF IS PLEDGED FOR THE PAYMENT OF THE 2018 BONDS. NOR SHALL THE 2018 BONDS BE DEEMED AN OBLIGATION OF SAID COUNTY, CITY OR COMMONWEALTH OR ANY POLITICAL SUBDIVISION, AGENCY OR INSTRUMENTALITY THEREOF OTHER THAN THE AUTHORITY. THE AUTHORITY HAS NO TAKING POWER. SEE "SECURITY FOR THE BONDS" HEREIN.

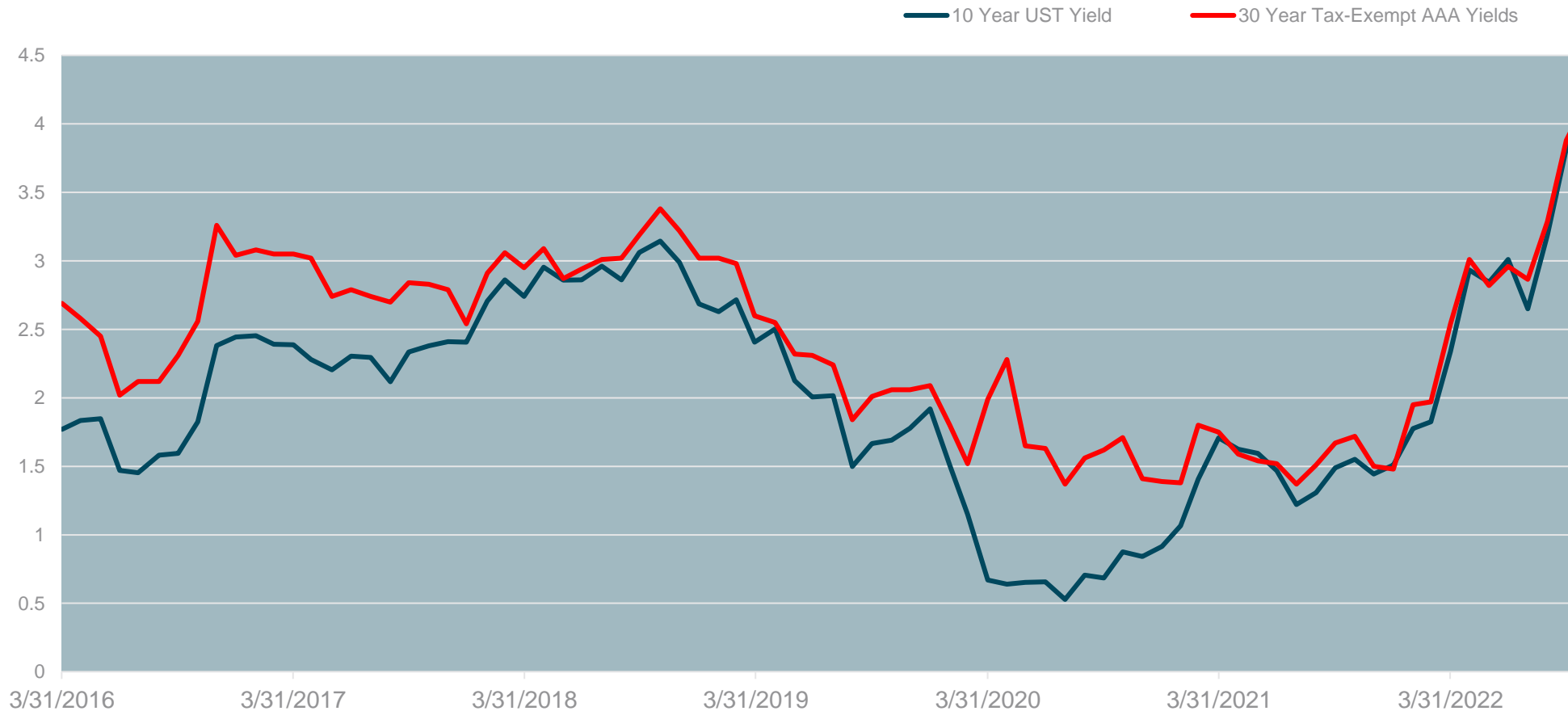
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Municipal Bond Market Conditions

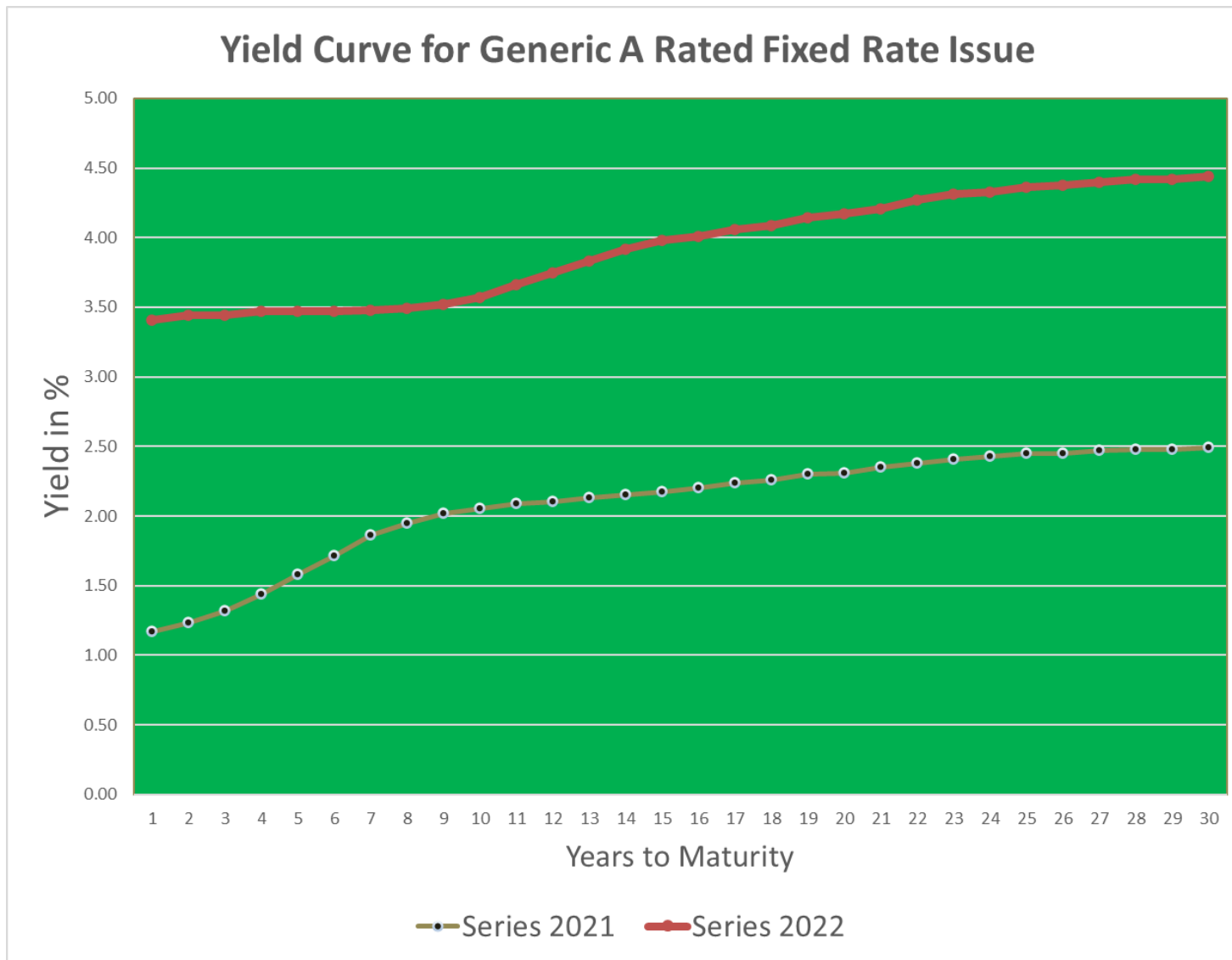
• The Bad News

– Rates have risen dramatically over the past year in response to the actions from the Federal Reserve,



• Source Bloomberg

Municipal Bond Market Conditions



- **The Bad News Cont'd**
 - What the higher rates mean for Issuers
 - On a Typical 30 Year Tax-Exempt Bond Issue generating \$25 million for Projects the interest expense will be \$8 million higher in total or about \$260,000 compared to a year ago.
- Source: Bloomberg A rated yield curves and BNY Mellon Capital Markets, LLC analysis

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Poll: What is Positive Arbitrage?

Municipal Bond Market Conditions

• The Good News

- Yes, Virginia there is Positive Arbitrage!
- Interest Earnings on unspent bond proceeds that exceed the cost of the Debt
- General Rule: Positive Arbitrage needs to be rebated to the US Treasury
- Exception: Meeting Spend down requirements by certain timetables
- Rebate calculation needs to be done every 5 years after issuance and after final maturity
- Contact your Rebate Consultant to review
- Not an Investment recommendation, just for discussion purposes only

Generic Fixed Rate Bond Issue	\$25 mm Deposit 18 month Spend
Earnings Rate	4.358%
IRS Arb Yield	4.217%
Pos. Arbitrage	\$26,000

Swaps, Derivatives and Other Financing Products

- **Swaps and Derivatives**

- Financial Contracts to exchange payments based on certain agreed upon values such as an Index, Fixed Rate or other defined Variables
- Often used to hedge certain risks such as Interest Rate Risk
- With interest rates rising, issuers may consider using
- If used appropriately, and the expected occurs, can generate financial benefit
- Typically has complex legal documentation
- Will have risks inherent in them that will need to be fully understood and analyzed
- Work with skilled accountants, attorneys and advisors to evaluate before entering into the contract.

Continuing Disclosure

- **Do Not to Forget to Keep Current on your Continuing Disclosure Requirements**

- Annual Filing Requirements: Audited Financials, Budgets, Engineer's Reports, Operating Statistics and whatever else was agreed to
- Material Events filings now up to 16 events, including new ones such as Incurrence of Financial Obligations (which includes Swaps, Guarantees, as well as Bank Loans) and Changes to Financial Obligations (including Default, Amendment, Termination, Acceleration, etc.)
- SEC is carefully watching Municipal Issuer Disclosures (City of Rochester, NY case among others) and Bond Underwriters use of Exemptions
- Work with skilled accountants, attorneys and advisors to evaluate need for Material Event filings

Emerging Trends

• **ESG has come to the Muni Market**

- Green Bonds, Blue Bonds, Climate Bonds, Social Bonds, etc.
- Not seeing definitive trading value (*i.e.* lower rates than non-ESG Bonds), but strong body of anecdotal evidence of value for Issuers
- The ESG Bonds that have higher ESG premiums utilize Second Party Opinions, ESG Ratings
- Document your Impact, “Greenwashing” is a hot topic
- SEC has draft rules around Climate Disclosures for Corporate Issuers, similar rules might be imposed on Muni Issuers, including Greenhouse Gas emissions, indirect emissions from energy use and an Issuer’s supply chain.

Questions

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