FGFOA Webinar

Current Municipal Market Conditions

September 21, 2023

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AGENDA

- Debt Capital Market Update
- Local and National Trends to Watch
- Bonds 101
- Credit Rating Discussion

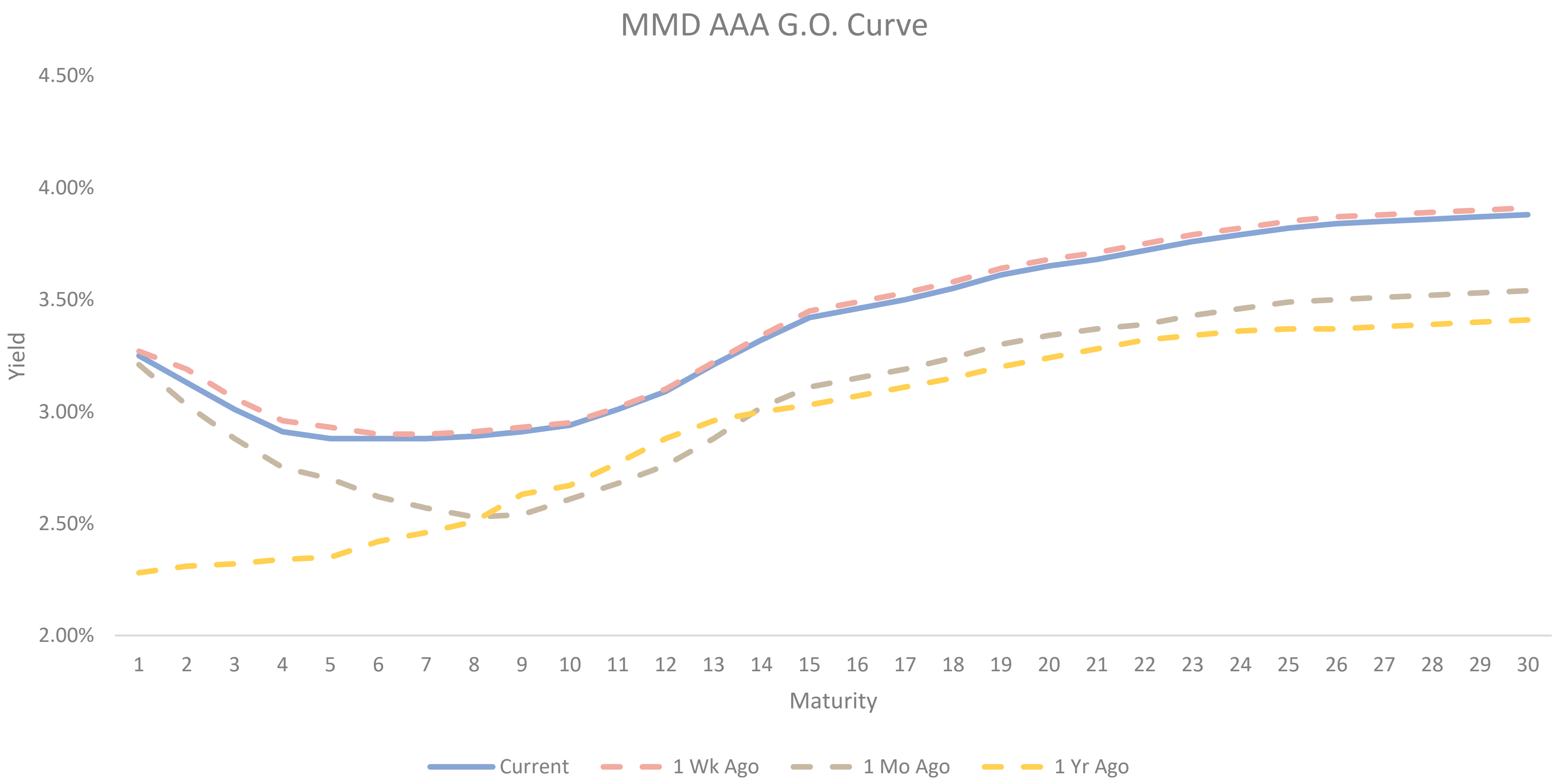
Debt Capital Market Update

AAA MMD

- Tax-exempt bond pricing is based on the AAA MMD scale
- Revised daily based on actual pricing in the primary and secondary markets
- The underlying rate scale fluctuates based on a number of factors:
  - Federal Fund target rates
  - U.S. treasury rates (ratios)
  - Demand (Institutional and TE fund inflows and outflows)
- The slope of the yield curve indicates current market opinion of short-term and long-term volatility
  - Under normal market conditions, rates rise as the term increases

MMD AAA G.O. Curve

- An inverted yield curve is unusual; it reflects bond investors’ expectations for a decline in longer-term interest rates, typically associated with recessions



AAA Municipal and U.S. Treasury Curve Slopes

Source: Bloomberg & treasury.gov

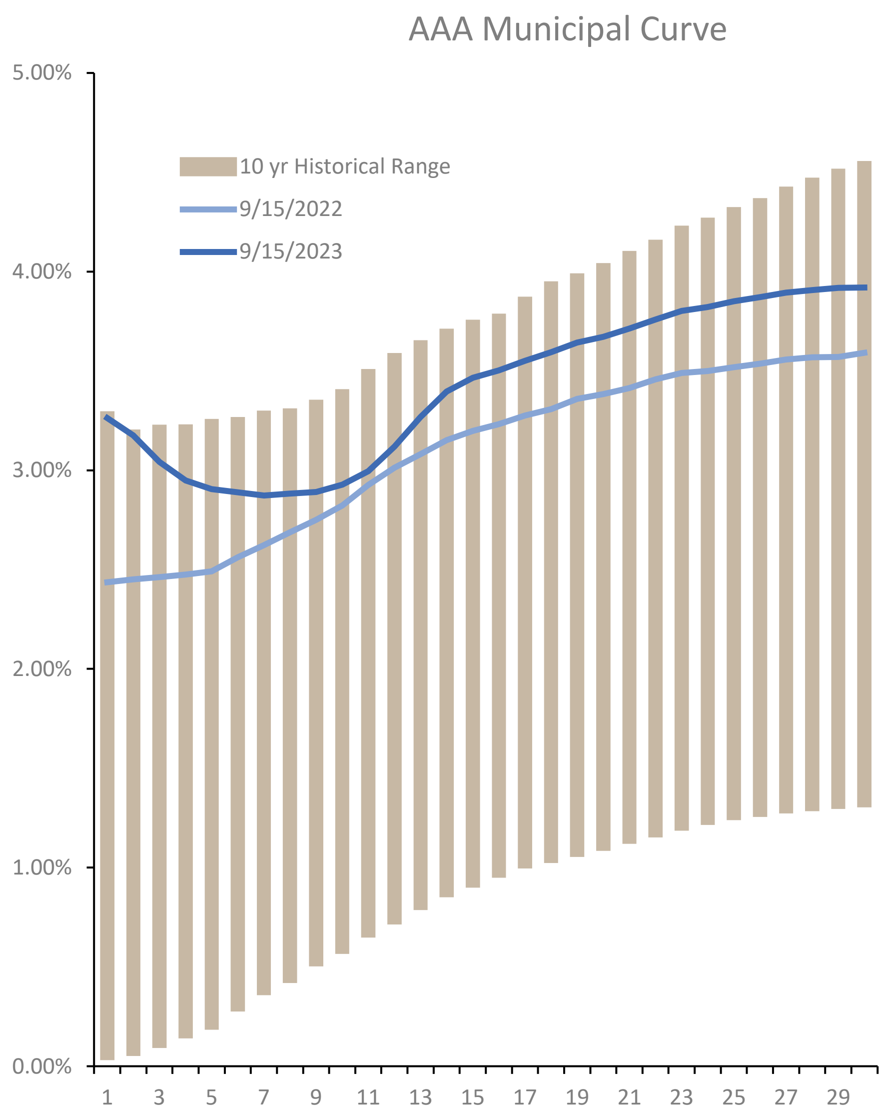
PFM Pricing Group

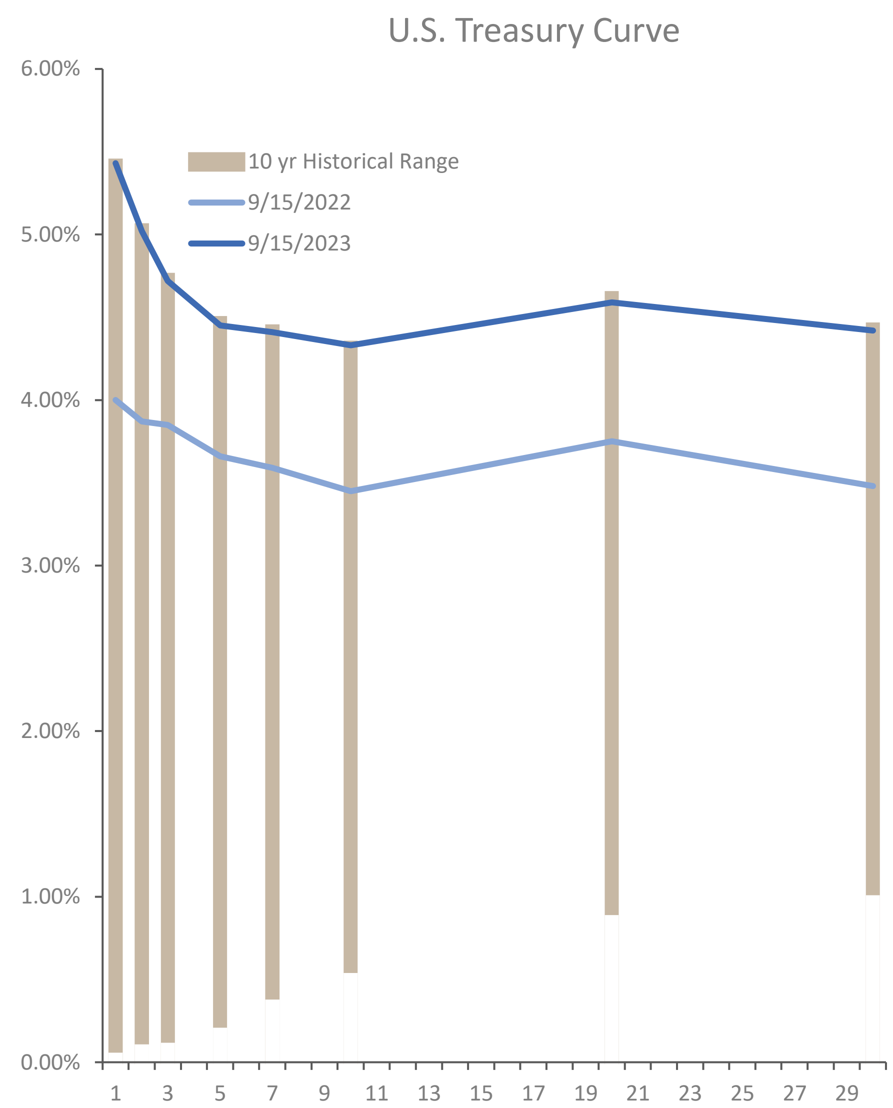
U.S. Treasury Market Index Rate Movement

- Taxable bond pricing is based on the U.S. Treasury curve
- Treasuries rate are revised throughout the day
- The underlying rates fluctuate based on several factors:
  - Fed funds target rate
  - Primary market pricing - Dutch Auction
  - Demand and trading activity - flight to quality and credit spreads

Source: Bloomberg, treasury.gov

Treasury & Municipal Interest Rate Movements





Source: Bloomberg, treasury.gov

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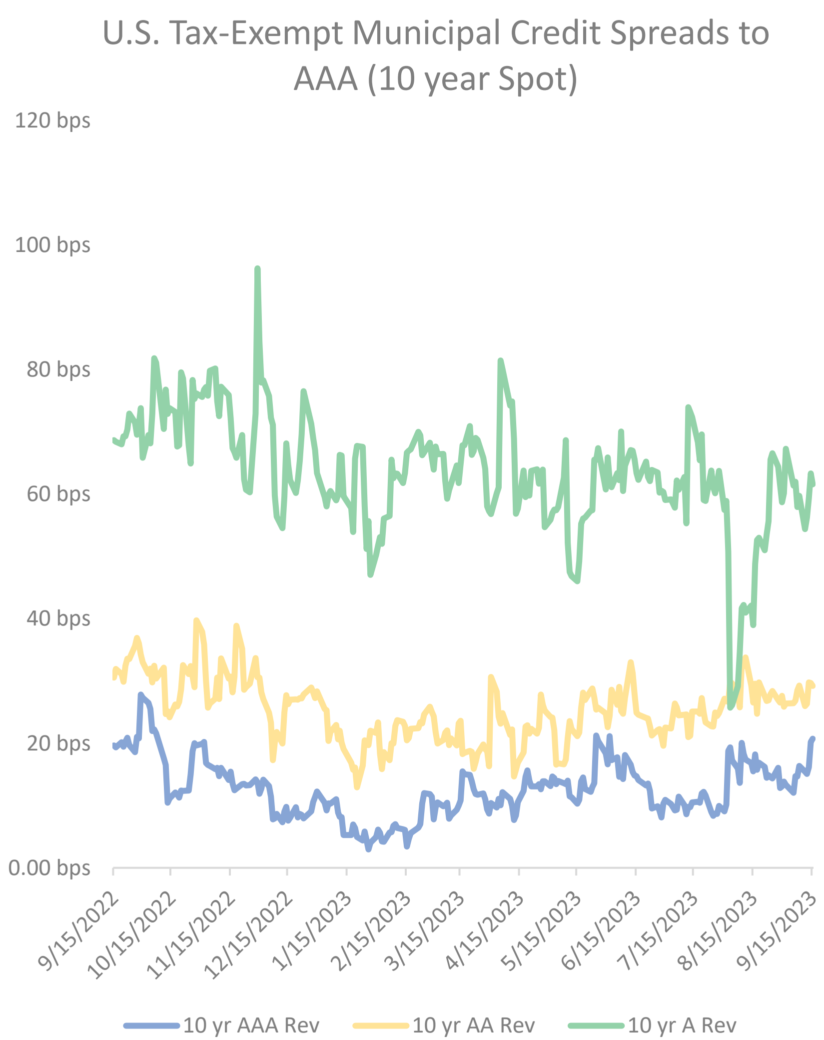

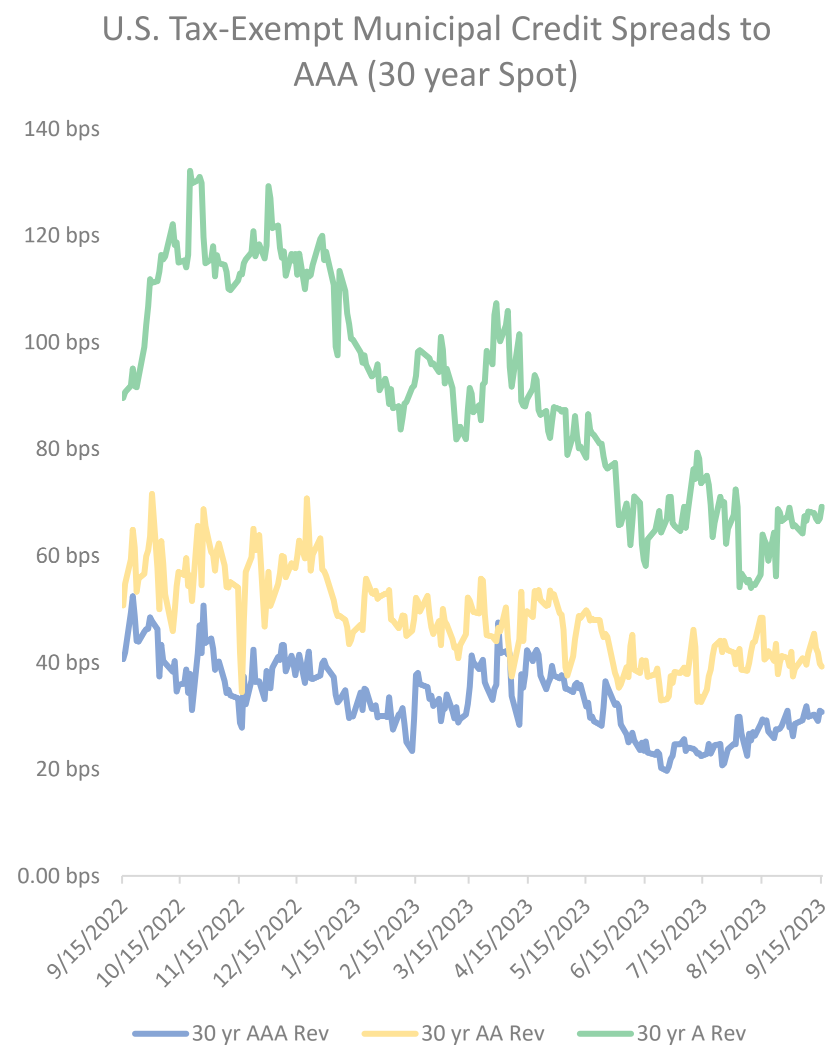

Source: Bloomberg, treasury.gov

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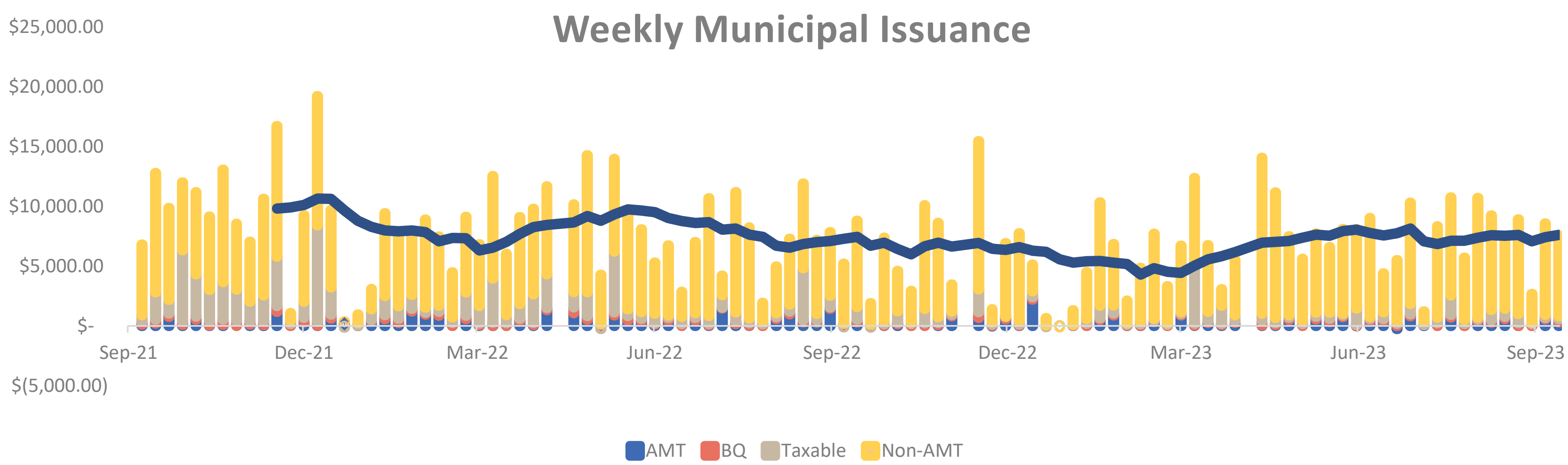
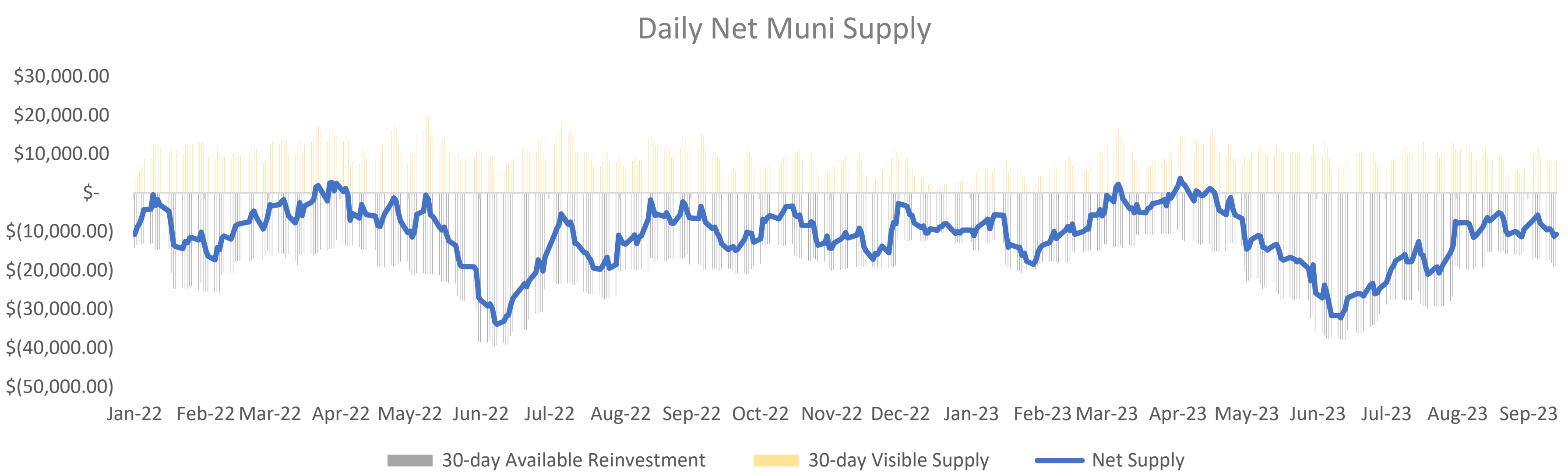
Weekly Issuance and Net Visible Supply





Source: Bloomberg

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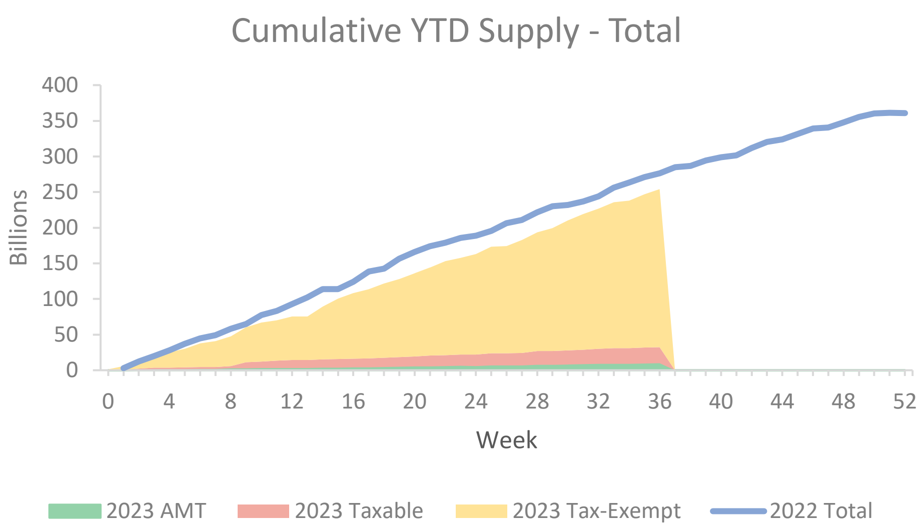
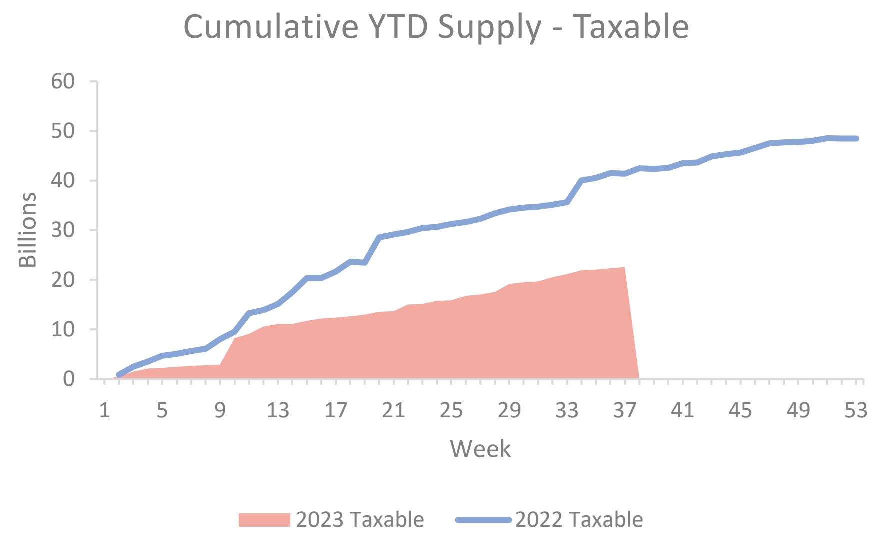
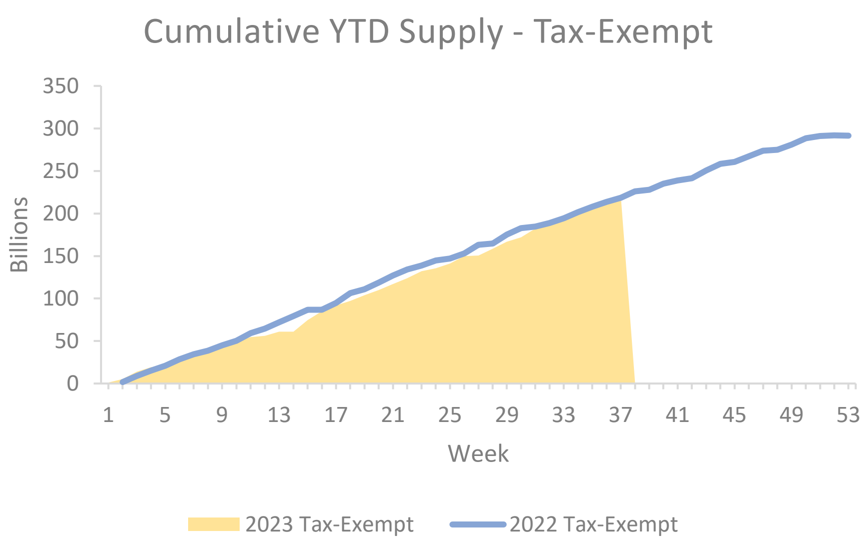
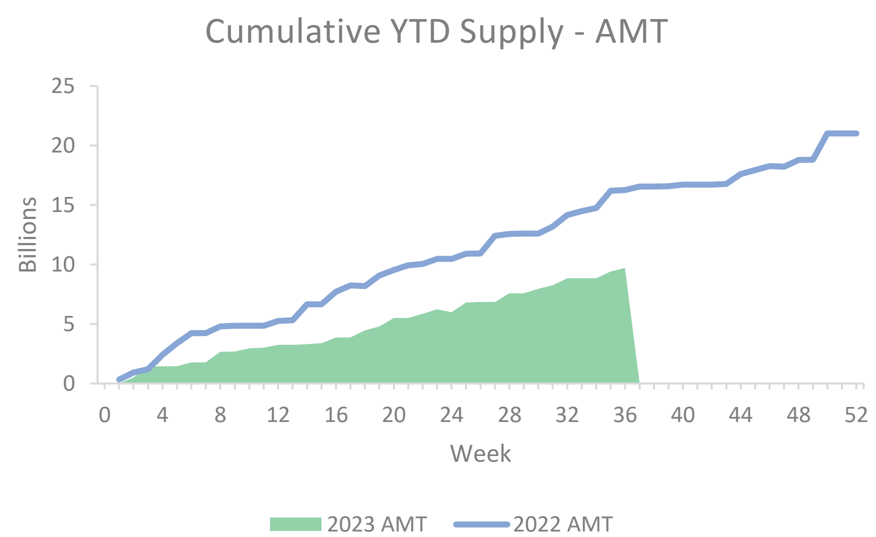
Cumulative Year-to-Date Supply





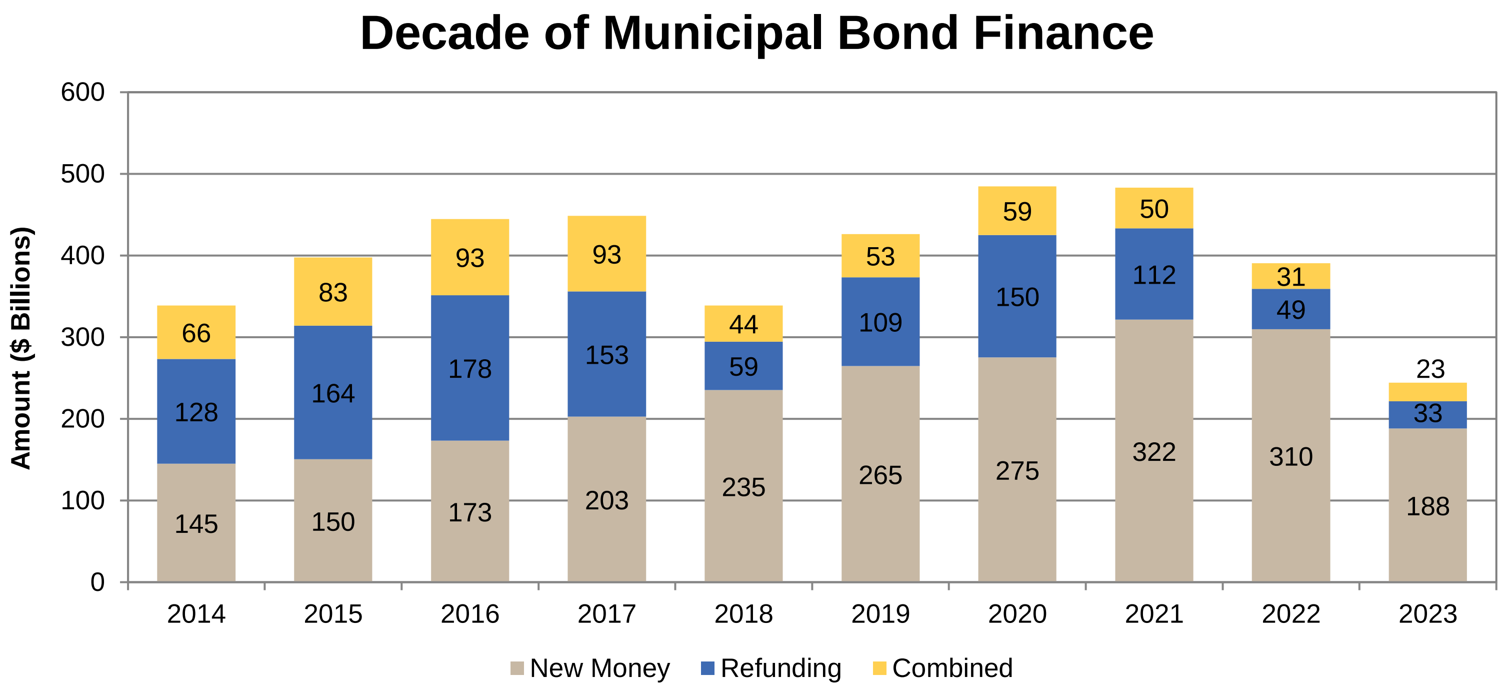




Source: Bloomberg
PFM Pricing Group

Municipal Bond Finance

- New Money vs. Refunding
  - Refunding volume has been high over the past decade due to historically low borrowing rates
  - This volume has dramatically shrunk over the past two years due to high interest rates, and new money issuances are dominating the market



Source: The Bond Buyer

Question #1

Local and National Trends to Watch

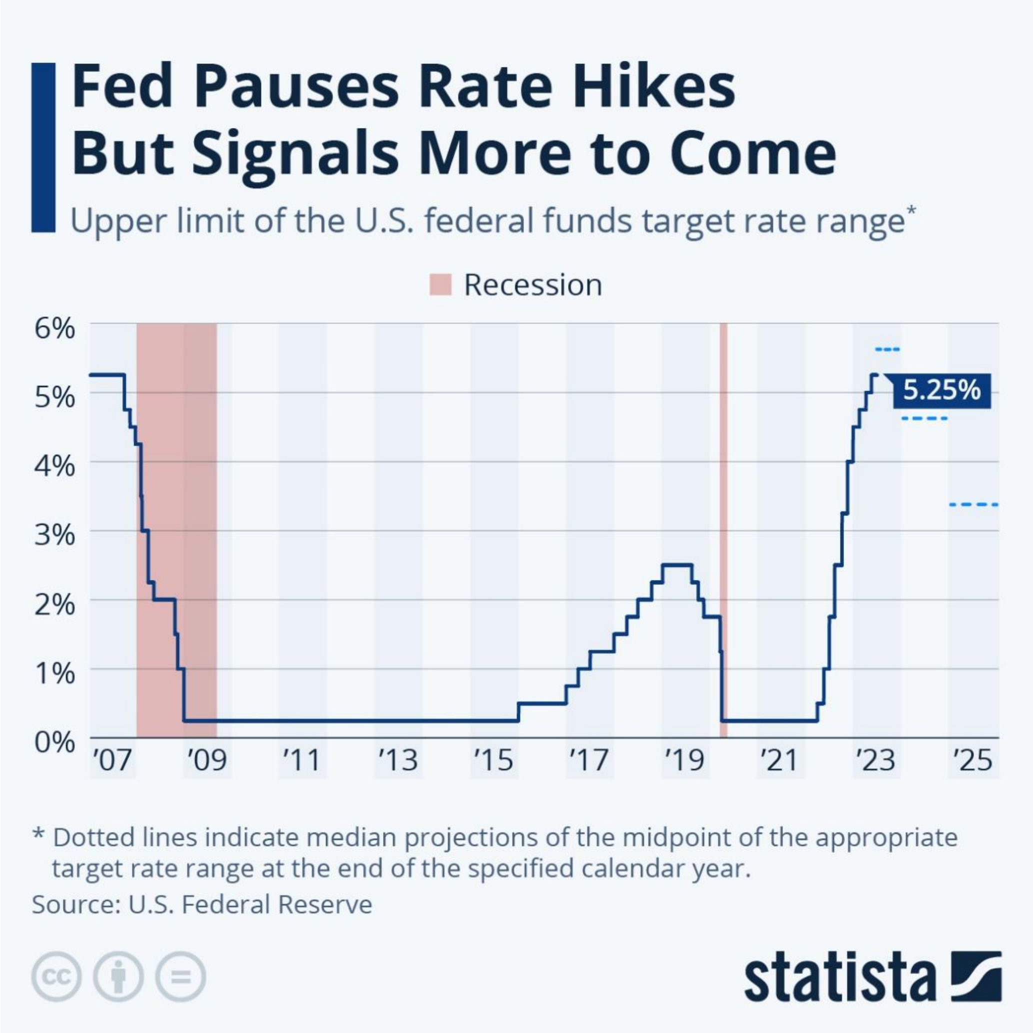
Florida House Bill 3

- The Florida Legislature has passed a bill that bans the issuance of municipal bonds using environmental, social or governance standards
- House Bill 3 prohibits the use of ESG (Environmental, Social, and Governance) factors by state and local governments when issuing bonds, and bans using rating agencies whose ESG methodology negatively impact an issuer's bond ratings
  - Other parts of the bill also affect banking services
- All rating agencies currently state that while they are analyzing ESG factors, they will not lead to a rating downgrade
- In the current market this doesn’t seem to limit the ability to use any of the rating agencies
  - A potential future issue is if one or all the rating agencies do start taking rating action related to ESG factors
  - If issuers are not able to get credit ratings in the future this could have a material impact on the pricing of bonds

Resilient U.S. Economy Defies Expectations

The Fed Forecasts Just One More Rate Hike This Year

- As of June, most officials forecast the fed funds rate peaking at between 5.5 per cent and 5.75 per cent this year, suggesting one more quarter-point rate rise
- Most economists and market participants believe the Fed is already finished with that rate-rising phase of its tightening cycle, even as officials keep the door ajar to further action



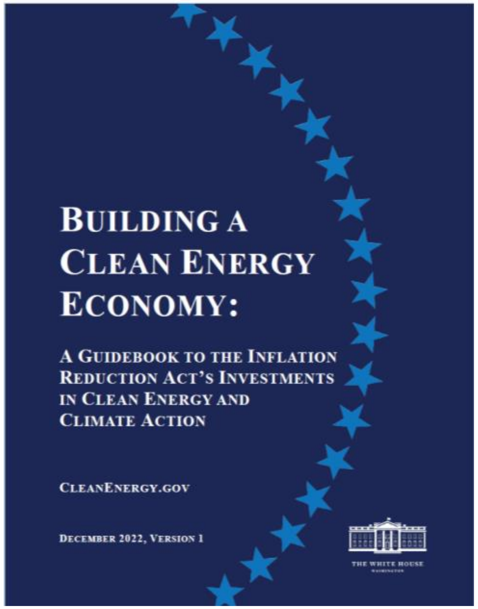
Source: Financial Times, Statista

Question #2

Inflation Reduction Act ("IRA") Overview

Largest investment in U.S. Energy Infrastructure, with varied incentives to help subsidize the cost of the transition to cleaner energy.

- Signed into law on August 16th, 2022, with goal of reducing emissions by ~40% by 2030
- Provides $369 billion over the next decade for new & existing programs; accomplished through tax incentives & direct investment
- Potential for tax incentives on solar projects & other aspects of your operations & community
  - Installation of energy facilities (e.g., solar, wind, geothermal, microgrid facilities, biogas projects)
  - Conversion of vehicle fleets to electric/hybrid
  - Electric Vehicle (EV) deployment to include the charging station network
  - Use of renewable fuels, such as biodiesel
  - Energy efficient building design & construction
  - Availability of many of these incentives to members of your community



Source: Inflation Reduction Act, Pub. L. No. 117-169, 136 Stat. 1818 (2022), https://www.congress.gov/bill/117th-congress/house-bill/5376/text

Tax Incentives for Tax-Exempt Entities

- Incentives available to tax-exempt entities primarily take the form of a direct payment from the U.S. Treasury
  - One-time direct payment on a reimbursement basis for qualified costs
  - Investment Tax Credit (ITC), which is an upfront subsidy of project costs for renewable energy
  - Production Tax Credit (PTC), which is a subsidy over time based on power generated

- For energy efficiency projects in commercial buildings, the tax credit takes the form of a deduction that can potentially be traded to the business partner

- The IRA contains a “gross-up” provision to prevent direct-pay subsidies from being reduced under budget sequestration rules (not tested by courts though)

Sources: Inflation Reduction Act, Congressional Research Service, "Tax Provisions in the Inflation Reduction Act of 2022", August 10, 2022; https://crsreports.congress.gov/product/pdf/R/R47202; https://home.treasury.gov/system/files/136/Fact-Sheet-IRA-Equitable-Clean-Energy-Economy.pdf

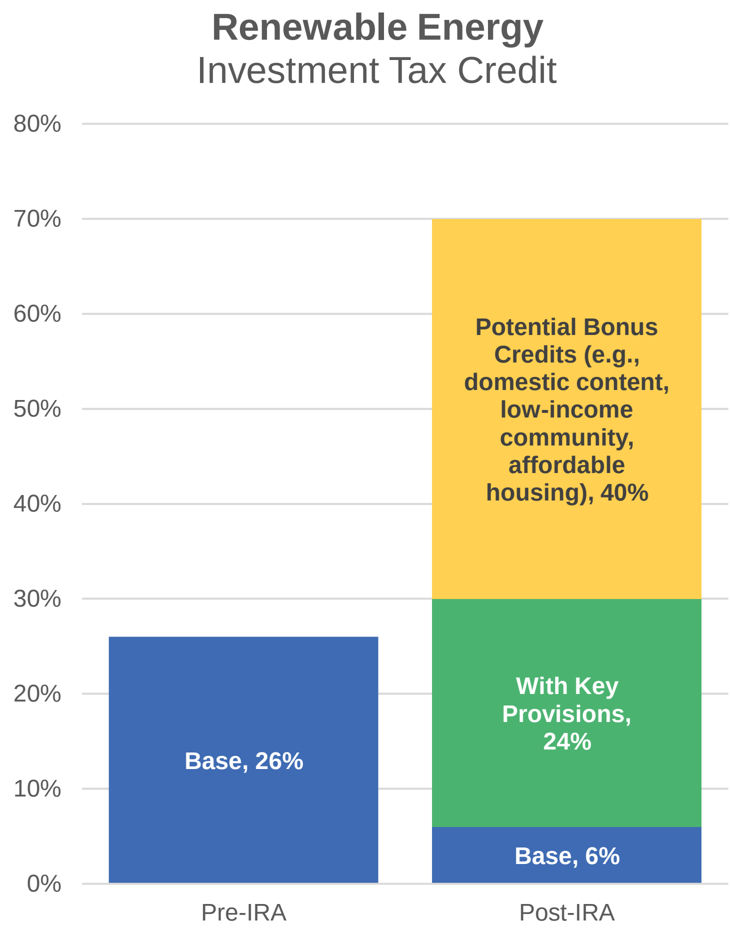
Key Provisions of the Tax Incentives

- For certain tax incentive programs & projects[1], there are opportunities to significantly enhance the base benefit (i.e., by five times) by:
  - Paying a Fair Wage (i.e., Davis-Bacon Act) during both construction & operations
  - Meeting Apprenticeship Requirements

Summary of Apprenticeship Requirements

- U.S. Treasury released guidance Nov. 2022
- Applies to the project owner, contractors, & sub-contractors with 4 or more employees
- Registered apprenticeship programs through the National Apprenticeship Act, Department of Labor, or state's apprenticeship agency
- Sliding scale of hours based on when construction begins (e.g., 12.5% between Jan. 1, 2023 & Jan. 1, 2024)
- Exceptions may apply

- The Investment Tax Credit includes domestic content requirements that increase over time



Sources: Inflation Reduction Act, Pub. L. No. 117-169, 136 Stat. 1818 (2022), https://www.congress.gov/bill/117th-congress/house-bill/5376/text; The White House "Building a Clean Energy Economy: A Guidebook to the Inflation Reduction Act's Investments in Clean Energy and Climate Action," December 2022, Version 1; IRS Notice 2022-61

1) Solar projects under 1 MWh are exempt from the Fair Wage & Apprenticeship Requirements.

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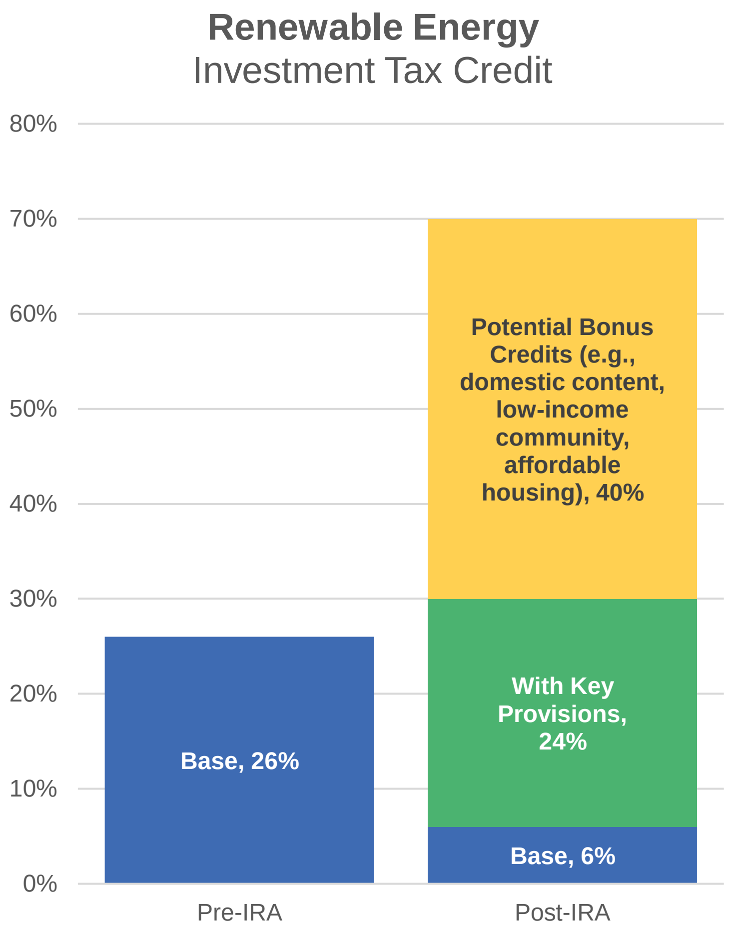

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Question #3

Bonds 101

Pay-As-You-Go vs. Debt Financing

Pay-As-You-Go	Debt Financing
• Construction or acquisition as revenues become available • Current users bear cost • Construction/acquisition capacity limited to available revenues • Lower total cost (potentially) • Political and economic climate considerations	• Construction or acquisition as needed • Reduced current payments • Current and future users bear cost – known as generational equity • Enhanced construction/acquisition capacity • Useful life of assets financed

What Types Of Bonds Are There?

- **Municipal Bonds**, also called “munis,” are debt securities issued by states, cities, counties and other government entities

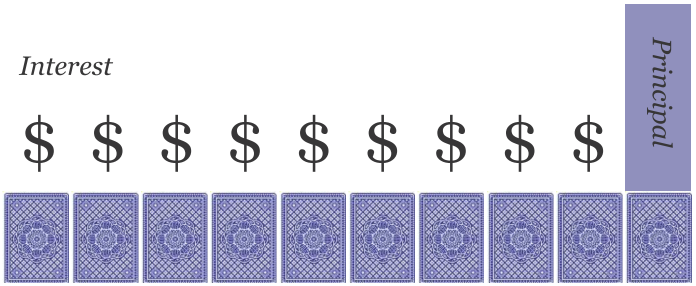
  - **General Obligation Bonds** are bonds backed by the full faith and credit of the issuer, which has the power to tax residents to pay bondholders (require voter referendum in Florida)

  - **Revenue Bonds** are bonds that are backed by revenues from a specific project or source, such as sales tax, gas tax, utility revenues, tolls, etc.

  - **Conduit Bonds** are issued by governments on behalf of private entities such as non-profit colleges or hospitals -- these “conduit” borrowers agree to repay the issuer who in turn pays the interest and principal on the bonds

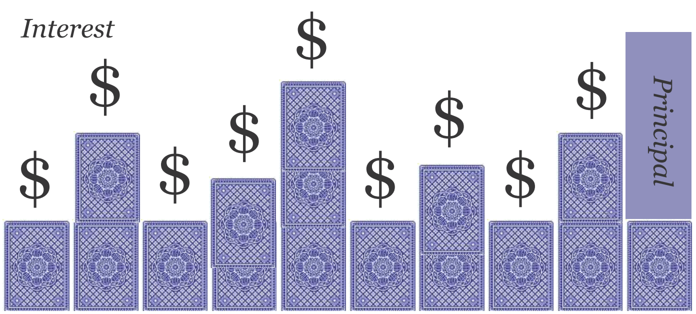
  - Local governments also utilize **Leases** to fund heavy equipment, technology, vehicles. Lease are generally short-term financings and repayment is subject to annual appropriation

Fixed Rate vs. Variable Rate



Fixed Rate Bonds

- Interest rates are set on the day of the pricing and do not change
- Issuer pays the same interest payments (usually twice a year) for as long as the bonds are outstanding
- Fixed payments provide for budgetary certainty



Variable Rate Bonds

- Interest rates are reset at predetermined points throughout the year, most commonly weekly
- Issuer's interest payments vary over the life of the bonds based on market movement
- Having a portion of an issuer's capital structure as variable rate debt can create an asset-liability match

Bank Loan vs. Bond Issuance

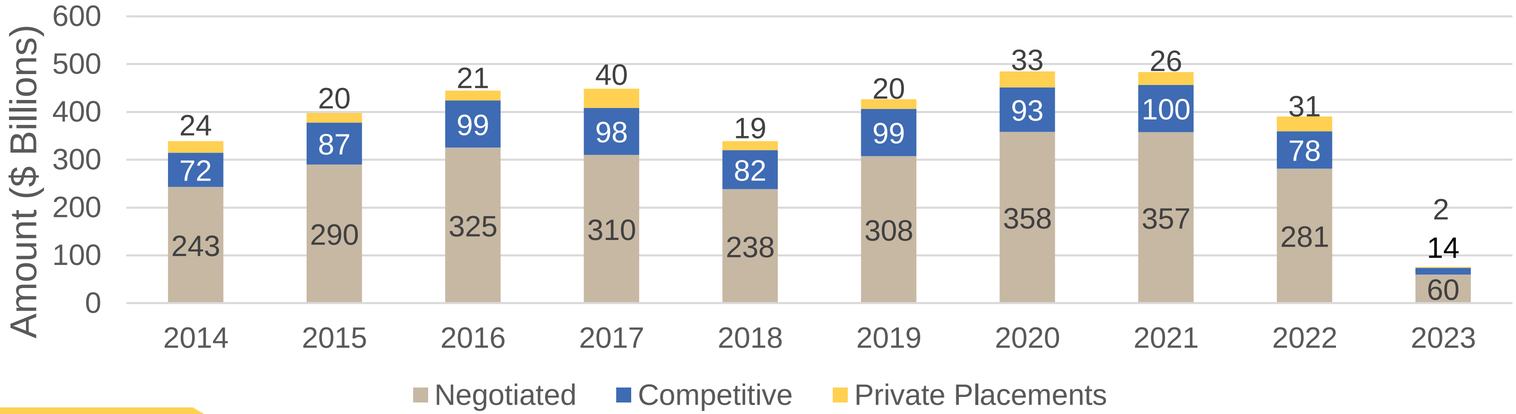
	Bank Loan	Bond Issuance
Pros	• No ratings required • No offering documents & minimal disclosure requirements • Minimal issuance costs • Usually, shorter timeframe to close financing	• Financings up to 30 years are typical and easy to finance • Future tax law change risk is with holders of bonds • 10-Year Call Provision is the industry standard
Cons	• Limited banks willing to finance greater than 15 years • Some banks require interest rate gross-up language if tax laws change • Call provisions are sometimes not available or costly, can vary greatly between banks	• Ratings would be required • Issuance documentation considerations and ongoing administration • Issuance costs greater than Bank Loan • Additional time to complete financing due to additional documents and ratings process

Methods of Selling Bonds

- Competitive Sale
  - Bonds are sold through a competitive bidding process to the underwriter (or group of underwriters) providing the lowest borrowing cost

- Negotiated Sale
  - Bonds are sold through negotiations directly with one or more underwriting firms (investment banks)

- Private placement
  - Bonds are sold directly to an investor (typically a commercial bank), without involving an underwriting firm

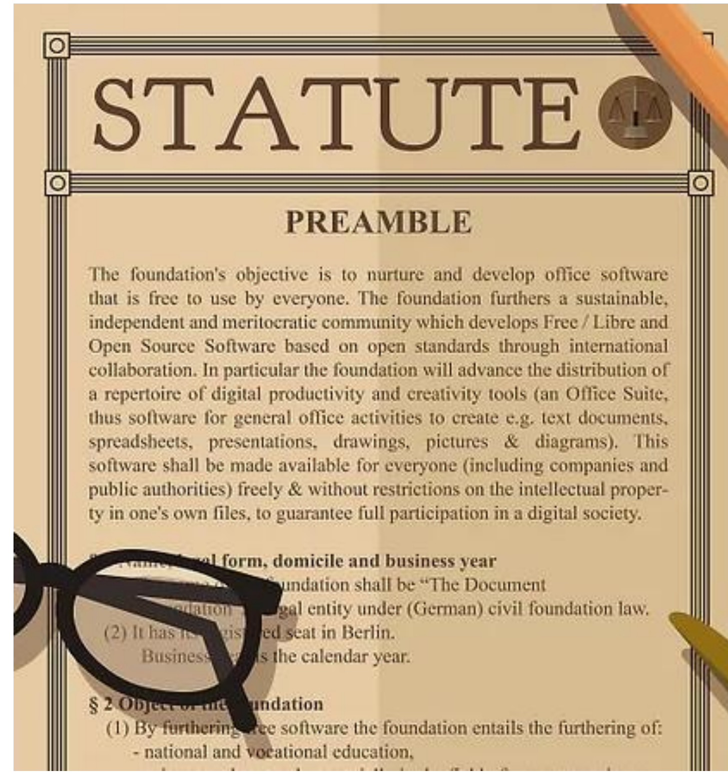


Source: The Bond Buyer

Question #4

Florida Statute

- Pursuant to Florida statute 218.385, “All general obligation bonds and revenue bonds sold by a unit of local government, as defined in s. 218.369, shall be sold at public sale by competitive bids at such place or places as the governing body shall determine to receive proposals for the purchase of such bonds”
- This section also provides for waiving the competitive sale requirement when circumstances are warranted, based on specific findings concluding that a negotiated sale is the appropriate method of sale as determined by the municipality’s governing body



Competitive or Negotiated?

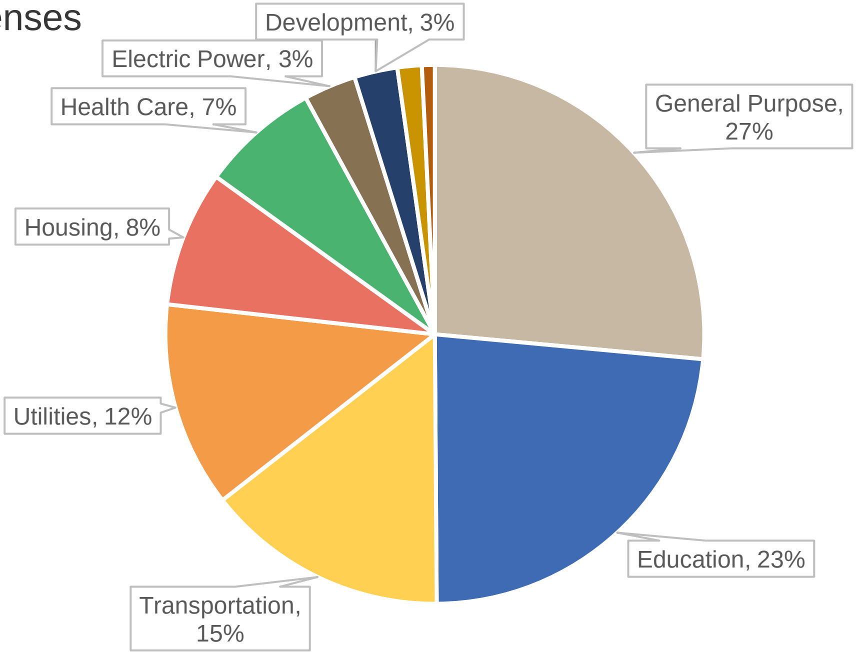
Attributes	Competitive Sale	Negotiated Sale
ISSUER		
Type of Organization	Broad-based, general-purpose government	Special-purpose, independent authority
Frequency of Issuance	Regular borrower in public market	New or infrequent issuer of debt
Market Awareness	Active secondary market with wide investor base	Little or no institutional base, but growing dealer interest
CREDIT QUALITY		
Rating	Generally, "AA" or better	Generally, below "AA"
Pledged Revenues	General obligation, lease revenue, utility revenue	Project supported revenues
Security Structure	Conventional resolution and cashflow; rate covenant and coverage	Unusual or weak covenants; subordinated debt
Trend	Stable or improving	Weakening or under stress
MARKET CONDITIONS		
Interest Rates	Stable, predictable market	Volatile or declining market
Demand	Strong investor demand, good liquidity, light forward calendar	Oversold market, heavy supply
DEBT STRUCTURE		
Tax Status	Tax-exempt, no concerns; taxable	Taxable
Debt Instrument	Traditional serial and term, full-coupon bonds	Aggressive use of innovative bond structuring, derivative products, swaps, or variable-rate debt instruments

Public Use of Debt

- Cities – libraries, parks, roads, water and sewer plants, solid waste
- Counties – many of the same plus courthouses and jails
- States – roads, colleges, economic development (SCRIPPS), environmental land (SFWMD Everglades restoration)
- Not for Profit – hospitals, nursing homes, low income housing developments
- Education – capital construction and operating expenses

Dollar Amount Issued in 2022 ($ Mil)

Type	Amount	
General Purpose	$	103,434
Education	$	91,489
Transportation	$	56,883
Utilities	$	48,187
Housing	$	31,879
Health Care	$	27,774
Electric Power	$	12,251
Development	$	10,114
Public Facilities	$	5,697
Environmental Facilities	$	3,008
Total	**$**	**390,715**



Issuance Timing

- From start to finish, the process of issuing bonds is expected to take approximately 3-4 months.
- Provided below is an outline of the sequence of events for issuing bonds:

Months 1-2

- Select the Team
- Distribute Timetable & Distribution List
- Tax Analysis & Review of Project List
- Draft Financing Documents
  - Bond Ordinance/Resolution
  - Preliminary Official Statement (POS)
- Determine Structure & Sale Parameters
  - Notice of Sale (NOS)
- Submit Documents by Agenda Deadline

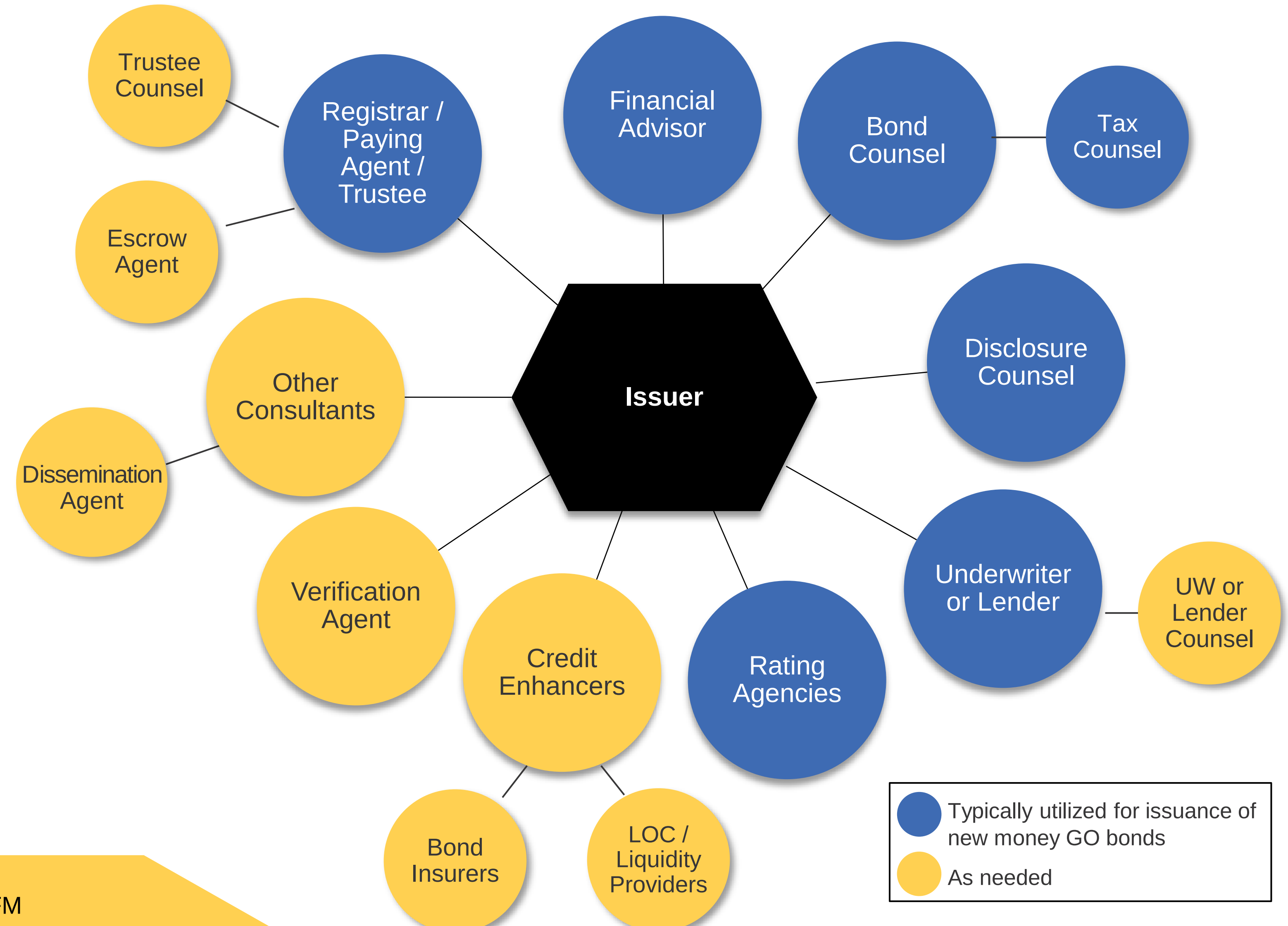
Months 2-3

- Commission/Council Meeting for Approval
- Obtain Credit Ratings
- Post POS & NOS
- Price & Sell Bonds
- Finalize Numbers

Months 3-4

- Distribute Closing Documents
- Print/Post Final OS
- Prepare Closing Memorandum
- Pre-Closing
- Signing of Documents
- Closing
  - Transfer of Funds

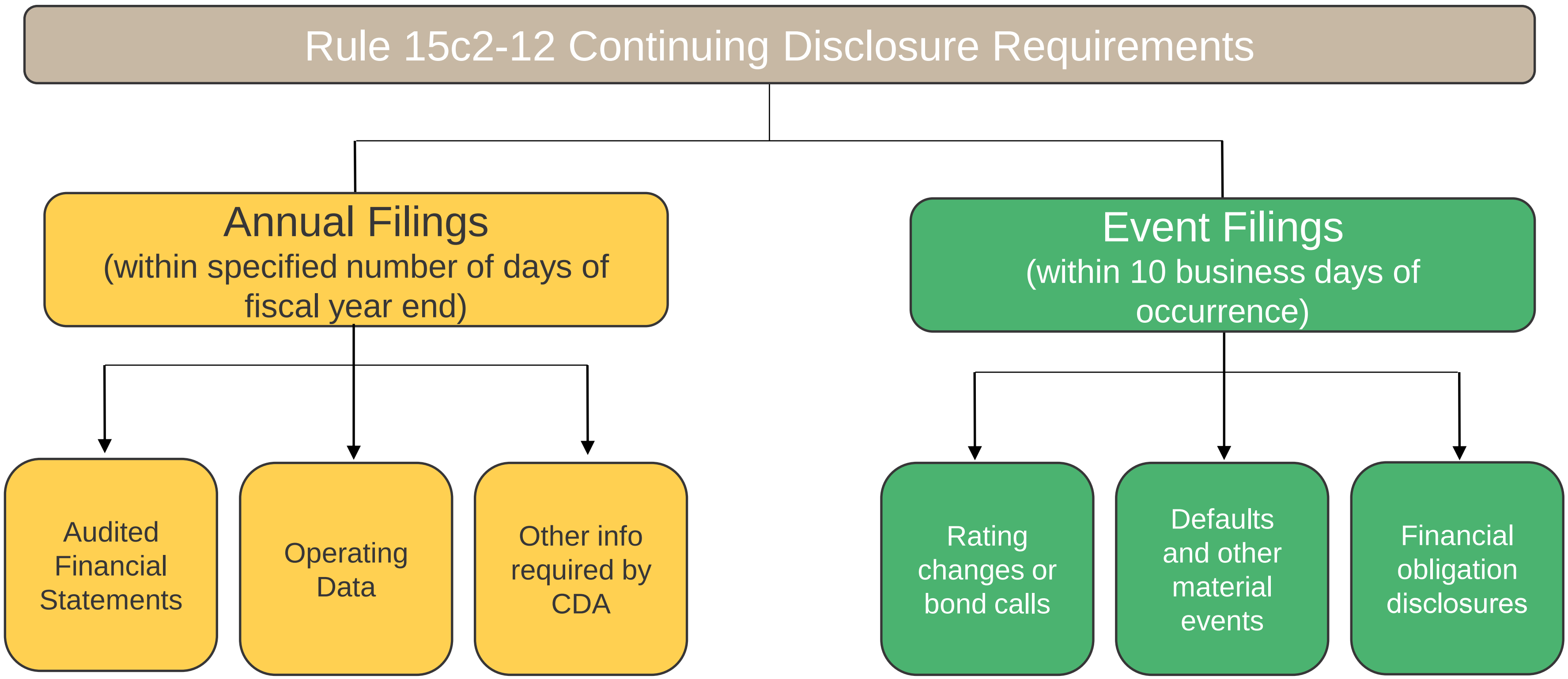
Participants in the Transaction Team



Issuer Responsibilities

- Keep in mind that once debt is issued, you have certain responsibilities for the life of the debt:
  - Disclosure Requirements (All Debt Issued Over $1 million)
    - Final official statement
    - Annual continuing disclosure filings via EMMA
    - Material event notices via EMMA
  - Bond Covenants (Revenue Debt Only)
    - Debt service reserve fund balances
    - User rates and charges
    - Debt service coverage ratios
    - Parity test for new debt issuance
  - Rating Agency Updates (Rated Debt Only)
    - Periodic credit reviews

Continuing Disclosure Illustrated



Question #5

Credit Rating Discussion

Credit Ratings

WHAT IS A BOND RATING?

- Measure of risk to bondholders
- Reflects issuer's ability & willingness to repay debt on time and in full
- Factors in expected loss and recovery
- Denotes credit quality by rating level
- Independent opinion (subjective process)
- Forward looking projection

BOND RATING IS NOT

- Audit
- Recommendation to buy, sell or hold a security
- Static or permanent
- Opinion of community's quality of life
- Performance evaluation of current political leadership
- Judgement of quality-of-service delivery

Bond Ratings

- A key factor in determining the interest rate is the bond rating
- The higher the rating, the lower the interest rate

Highest Rating

Below Investment Grade

S&P	Fitch	Moody's
AAA	AAA	Aaa
AA+	AA+	Aa1
AA	AA	Aa2
AA-	AA-	Aa3
A+	A+	A1
A	A	A2
A-	A-	A3
BBB+	BBB+	Baa1
BBB	BBB	Baa2
BBB-	BBB-	Baa3
BB	*BB*	*Ba*
B	*B*	*B*
C	*C*	*C*

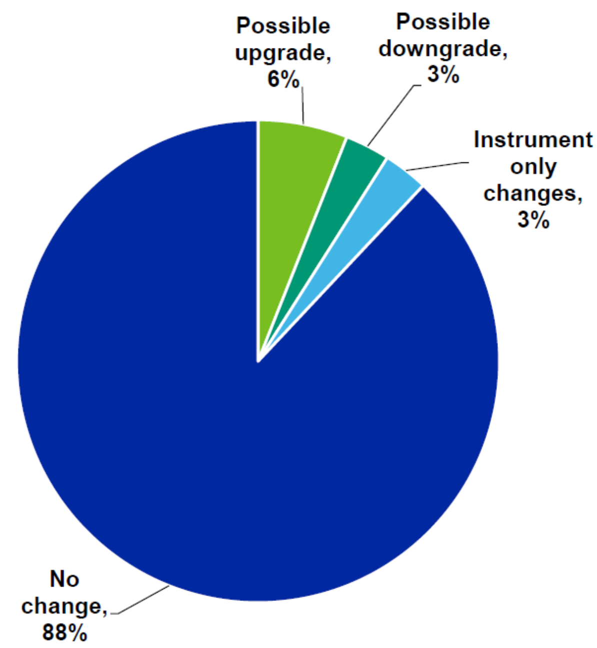
Credit Strategy

- Managing credit ratings takes preparation, long-term planning and an in-depth understanding of credit agency criteria
- One role of the municipal/financial advisor is to provide that credit expertise
- This means providing credit advice during the decision-making process to understand how policies, practices and financial decisions impact credit BEFORE implementing policies or making those decisions
- Municipal/financial advisors are in regular communication with rating agencies and should be able to update you on changing rating agency methodologies and how they impact you as you plan for new debt issuance

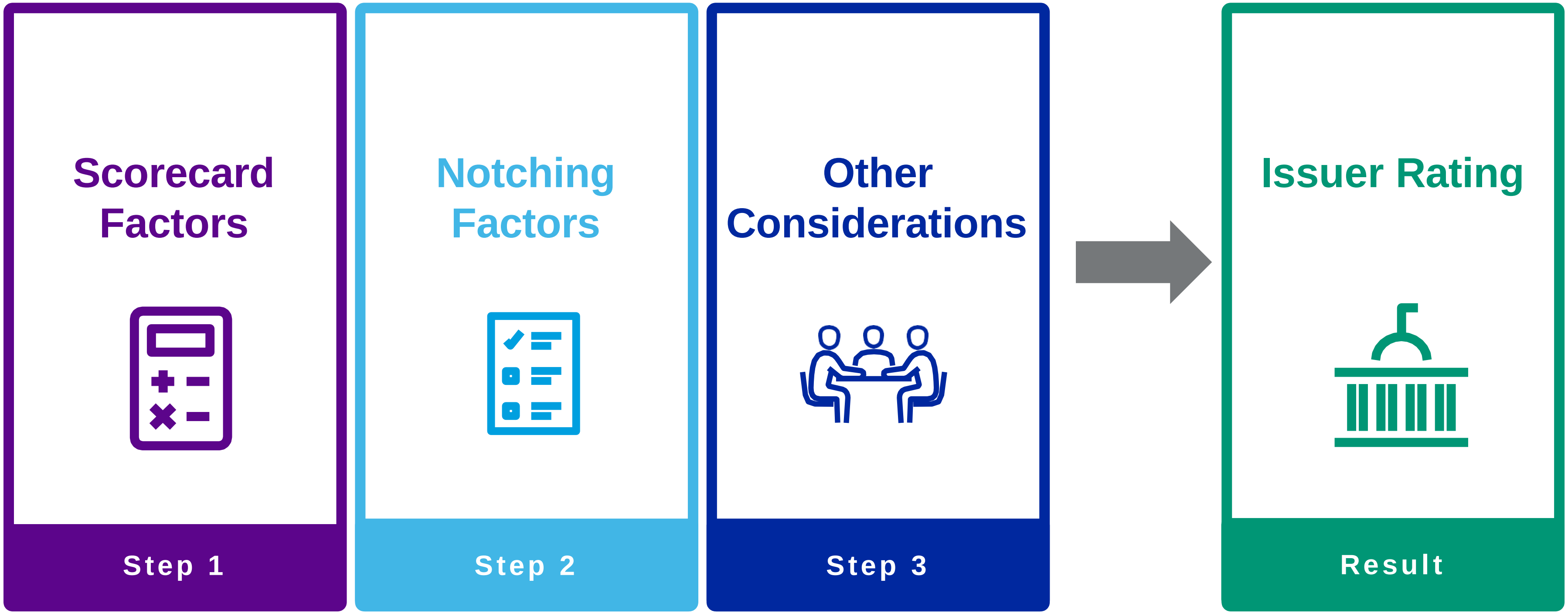
Moody's Methodology Updates

- Recently, Moody's released a ***new*** methodology for US Cities an Counties (currently rated under the US Local Government General Obligation methodology)

- On November 3, Moody's placed ratings of 345 cities and counties on review for possible change: 252 for potential upgrade and 93 for potential downgrade
  - Florida non-ad valorem revenue credits were subsequently upgraded

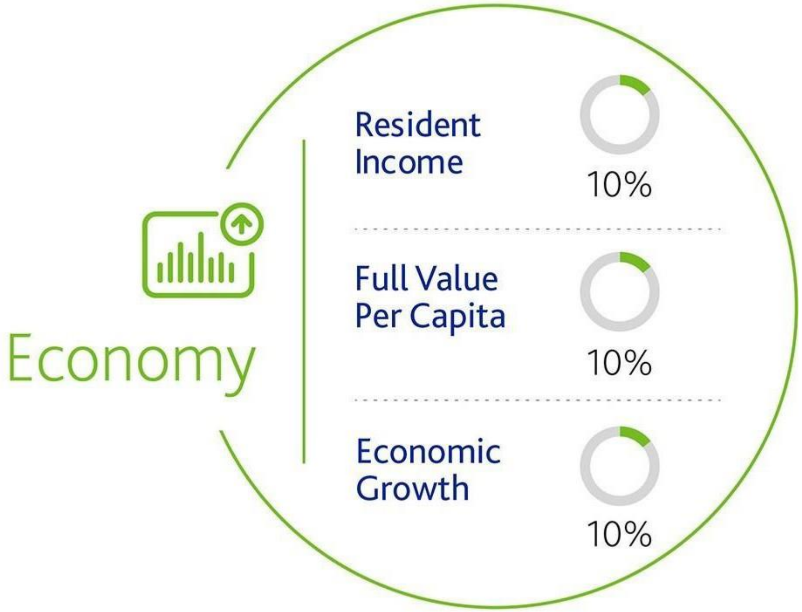


Arriving at the issuer rating



Source: Moody's Investor Service, "US Cities and Counties Webinar", November 10, 2022

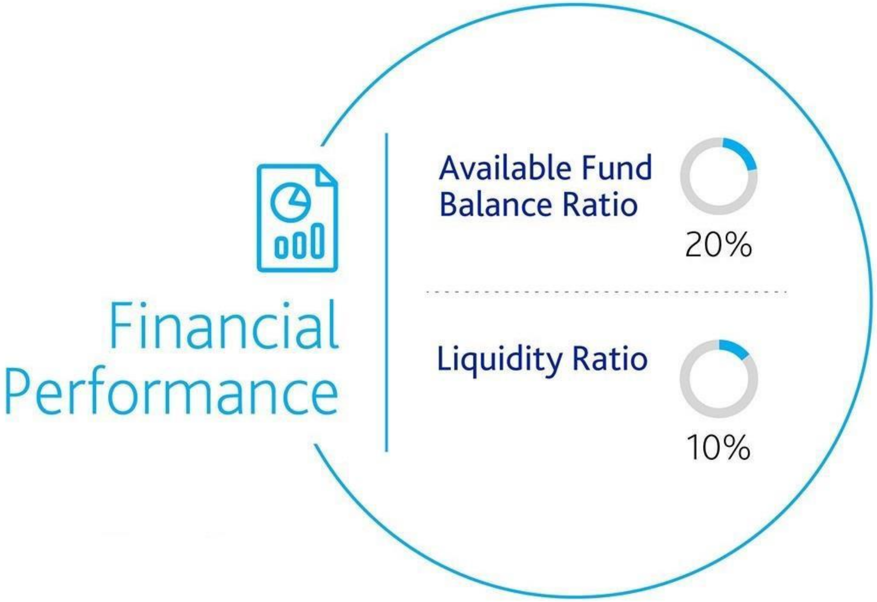
Scorecard Factor 1: Economy



Sub-factor	Sub-factor calculation
Resident Income (10%)	MHI adjusted for RPP / US MHI
Full Value Per Capita (10%)	Full valuation of tax base / population
Economic Growth (10%)	Difference between 5-year CAGR in real GDP and 5-year CAGR in real US GDP

Source: Moody's Investor Service, "US Cities and Counties Webinar", November 10, 2022

Scorecard Factor 2: Financial Performance



Sub-factor	Sub-factor calculation
Available Fund Balance Ratio (20%)	(Available fund balance + net current assets) / revenue
Liquidity Ratio (10%)	Unrestricted cash / revenue

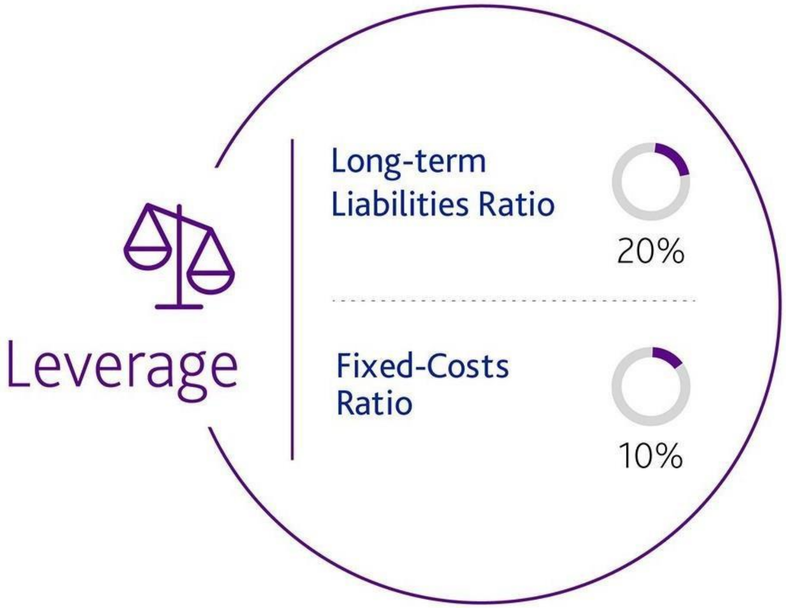
Source: Moody's Investor Service, "US Cities and Counties Webinar", November 10, 2022

Scorecard Factor 3: Institutional Framework

Aaa	Aa	A	Baa	Ba	B
The majority of revenue is not subject to externally imposed caps and the governing body can increase revenue meaningfully without limitation or without approval of voters or other governments. And: The ability to meaningfully reduce expenditures is not constrained by externally imposed mandates or restrictions.	The majority of revenue is subject to externally imposed caps but the governing body can increase revenue meaningfully without the approval of voters or other governments. Or: The ability to meaningfully reduce expenditures is mildly constrained by externally imposed mandates or restrictions.	The majority of revenue is subject to externally imposed caps but the governing body can increase revenue moderately without the approval of voters or other governments. Or: The ability to meaningfully reduce expenditures is moderately constrained by externally imposed mandates or restrictions.	The majority of revenue is subject to externally imposed caps and the governing body can increase revenue only minimally without the approval of voters or other governments. Or: The ability to meaningfully reduce expenditures is heavily constrained by externally imposed mandates or restrictions.	The majority of revenue is subject to externally imposed caps and the governing body cannot increase revenue without the approval of voters or other governments. Or: The ability to meaningfully reduce expenditures is very heavily constrained by externally imposed mandates or restrictions.	The majority of revenue is subject to externally imposed caps and the governing body cannot increase revenue. Or: The ability to meaningfully reduce expenditures is extremely constrained by externally imposed mandates or restrictions.

Source: Moody's Investor Service, "US Cities and Counties Webinar", November 10, 2022

Scorecard Factor 4: Leverage



Sub-factor	Sub-factor calculation
Long-term Liabilities Ratio (20%)	(Debt + ANPL + adjusted net OPEB + other long- term liabilities) / revenue
Fixed Costs Ratio (10%)	Adjusted fixed costs / revenue

Source: Moody's Investor Service, "US Cities and Counties Webinar", November 10, 2022

Question #6

Example Rating Calculator

	Old Factor Weighting		New Factor Weighting
Economy/Tax Base	30%	Economy	30%
Finances	30%	Financial Performance	30%
Management	20%	Institutional Framework	10% *(-10%)*
Debt/Pensions	20%	Leverage	30% *(+10%)*
Total	***100%***	***Total***	***100%***

Moody's Cities and Counties Rating Calculator

Final Scores Example

Category	Weight	Indicated Rating
Economy Score	30%	2.56
Financial Performance Score	30%	0.50
Institutional Framework Score:	10%	3.00
Leverage Score	30%	1.36
Preliminary Score	*100%*	*1.63*
Sum of Notching Factors	-	0.00
Indicated Rating Score	100%	1.63
Indicated Rating	**-**	**Aa1**

Ranking Score	
0.0	Aaa
1.5	Aa1
2.5	Aa2
3.5	Aa3
4.5	A1
5.5	A2
6.5	A3
7.5	Baa1
8.5	Baa2
9.5	Baa3
10.5	Ba1
11.5	Ba2
12.5	Ba3
13.5	B1
14.5	B2
15.5	B3

Arriving at the issuer rating – Step 2

Notching Factors

Step 2

1. Additional strength in local resources
2. Limited scale of operations
3. Financial disclosures
4. Potential cost shift to or from the state
5. Potential for significant change in leverage

Source: Moody's Investor Service, "US Cities and Counties Webinar", November 10, 2022

Arriving at the issuer rating – Step 3

Other Considerations

Step 3

- Examples of qualitative other considerations (not an exhaustive list):
  - Fund-specific financial considerations
  - Competitive enterprise risk in governmental or business-type activities
  - Likelihood of receiving extraordinary or ongoing support
  - Strengths or weaknesses related to economic concentration
  - Unusual risk or benefit posed by long-term liabilities

Source: Moody's Investor Service, "US Cities and Counties Webinar", November 10, 2022

Rating Agency Guidance

- **What do rating agencies look for?**
  - **History of strong management**
    - Track record of making tough decisions during challenging fiscal times
    - Documented good management policies and practices
  - **Diverse economy**
    - A broad economic base that can withstand economic downturns
    - Demonstrated tax base stability
  - **Sound financial position with reserves and stable enrollment**
    - Financial flexibility to address unforeseen circumstances
    - Stable enrollment
  - **Manageable debt burden**
    - Debt service as percent of operating expenditures
    - Rapid amortization of debt
    - Pension and OBEP liabilities

Thank You

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