



FSFOA Conference Presentation

(Tax Reform & Refunding Strategies)

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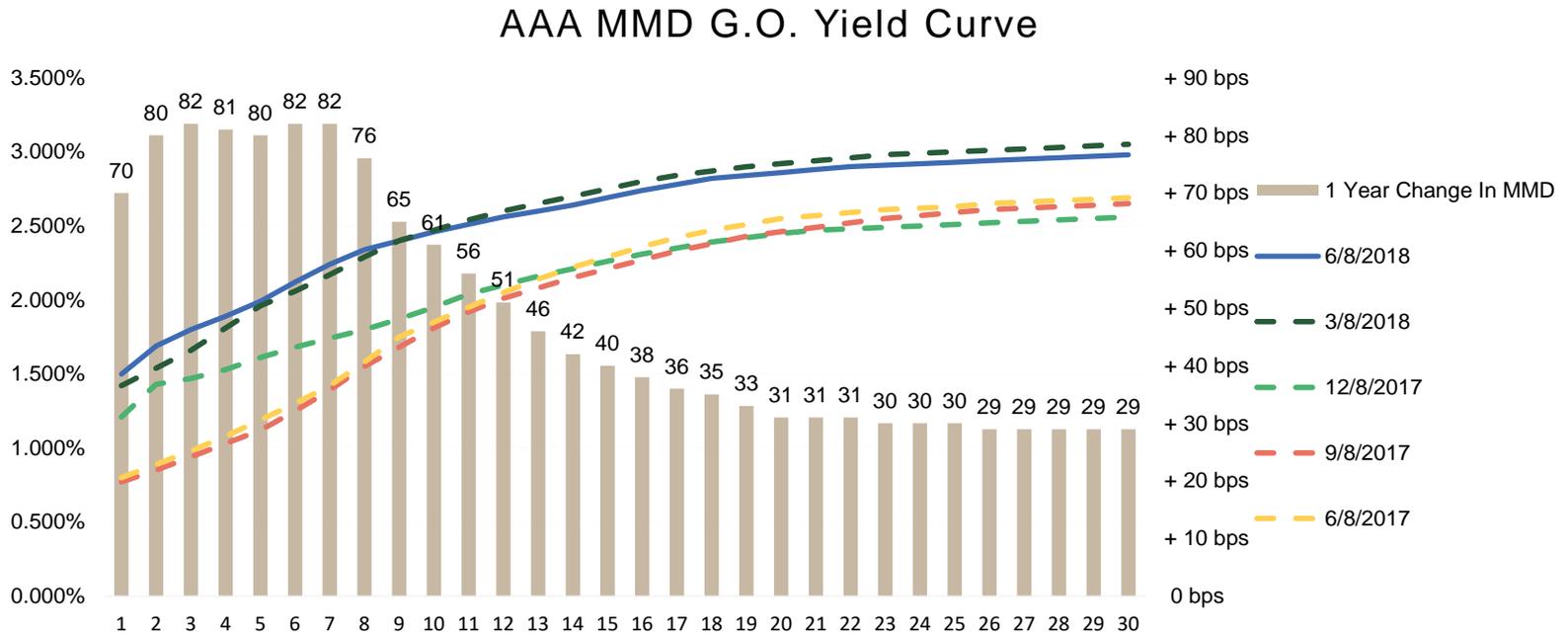


Market Update



Market Rate Movement

- Short-term interest rates have risen significantly since 2017, while long-term rates have risen but at a lesser magnitude



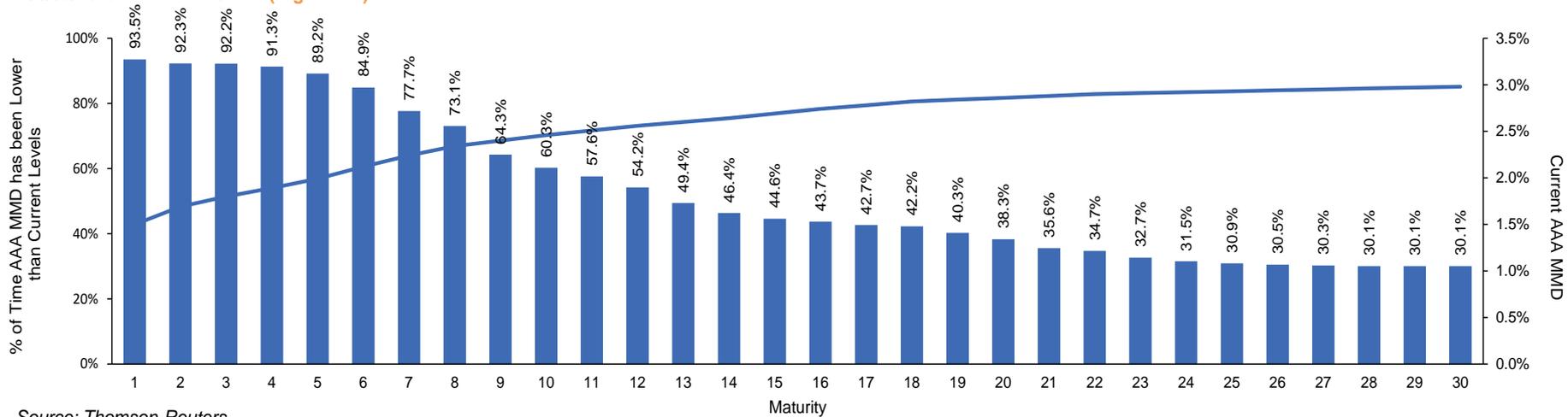
Source: Thomson – Reuters



Percentages of Time Rates Have been Lower Across the Curve

- The graph below shows the progression of the MMD curve since 2008

% Of Time AAA MMD Has Been Lower Since 2008
06/08/2018 AAA MMD Curve (Right Axis)

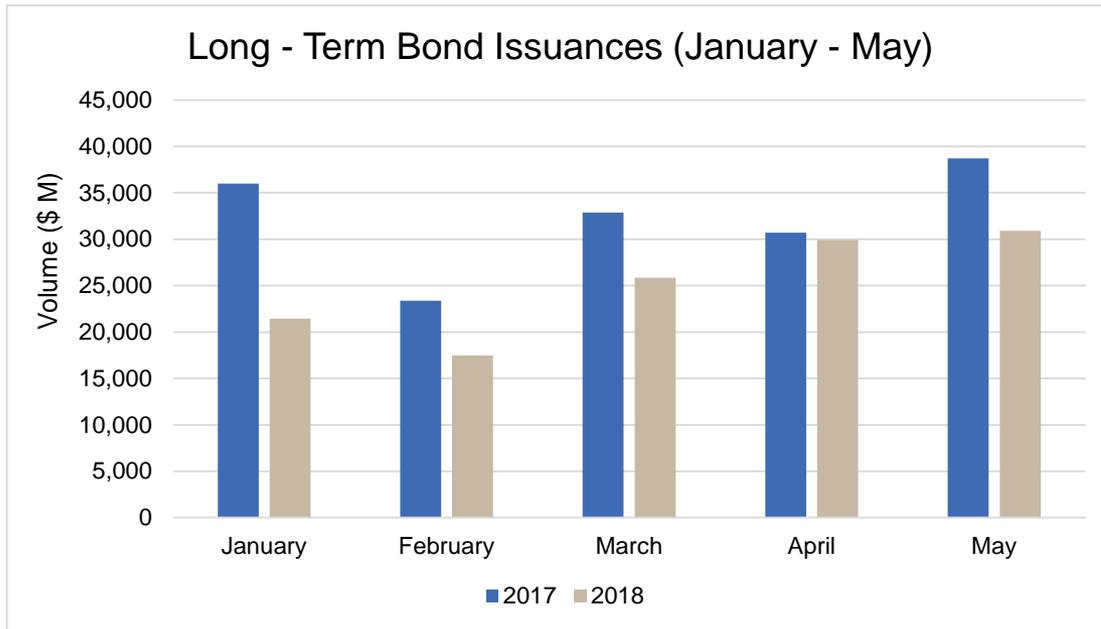


Source: Thomson-Reuters



Issuances in 2017 vs. Issuances in 2018

- In 2018, overall issuances are down 22.3% in contrast to the same period in 2017



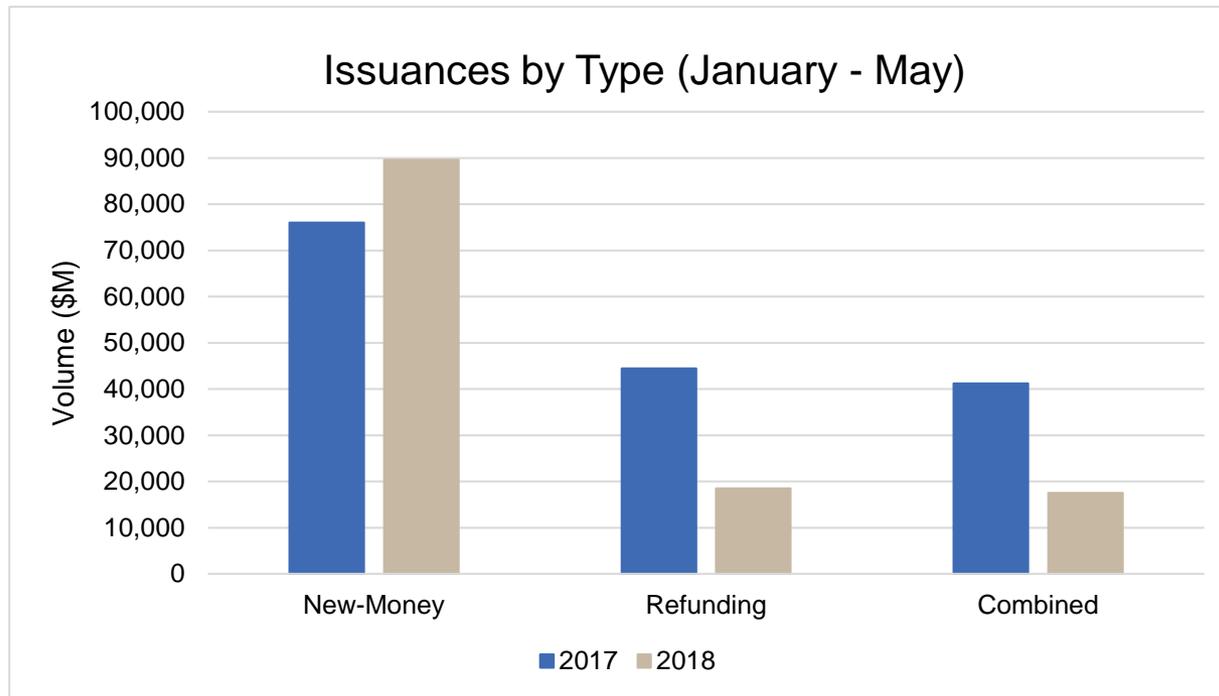
Source: Bond Buyer





Issuances in 2017 vs. Issuances in 2018

- New money issuances have increased in 2018, while refundings and combined transactions have decreased over 50%



Source: Bond Buyer



Bloomberg's Interest Rate Forecast and Commentary

	Current Rates	Forecast								
		2018			2019				2020	
		Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3
US 30-Year	3.10%	3.27%	3.37%	3.47%	3.53%	3.63%	3.73%	3.87%	3.92%	3.90%
US 10-Year	2.98%	3.09%	3.17%	3.25%	3.30%	3.40%	3.49%	3.59%	3.59%	3.58%
US 2-Year	2.58%	2.63%	2.76%	2.88%	2.98%	3.06%	3.15%	3.21%	3.23%	3.22%
US 3-Month Libor	2.34%	2.46%	2.58%	2.74%	2.88%	3.02%	3.11%	3.14%	3.20%	3.21%
Fed Funds Rate - Upper Bound	2.00%	2.20%	2.40%	2.60%	2.80%	2.90%	3.00%	3.00%	3.00%	3.05%
Fed Funds Rate - Lower Bound	1.75%	1.96%	2.14%	2.37%	2.56%	2.67%	2.75%	2.71%	2.77%	2.78%
2 Year - 10 Year Spread	0.40%	0.46%	0.41%	0.37%	0.33%	0.34%	0.34%	0.38%	0.37%	0.36%

- Bloomberg Intelligence (“BI”) interest rate strategists' forecasts imply slight movement in 10-year Treasury yields from now through the end of 2019, which is below consensus expectations
- BI's interest rate strategists forecast that 10-year Treasury yields will breach 3% during 2018, but will continue to be broadly range-bound, making new tops of the yield range
- Higher conviction that curves will be flatter by year-end as the market prices for "further" hikes by the Federal Reserve in 2019 and beyond

Source: Bloomberg, as of June 12, 2018.



Refunding Basics



What is a Refunding?

- A refunding constitutes the issuance of debt obligations, the proceeds of which are used to pay all or a portion of the principal, interest and redemption premium (if applicable) on a prior bond issue
- Proceeds of the refunding bonds are placed in an escrow and typically invested in Treasury securities until the call date
- Once escrow is established, the prior bonds are deemed “defeased”
- Two types of defeasance:
 - *Legal*: The bond resolution or trust indenture of the prior bonds usually defines the criteria and procedures by which the lien on the assets/revenues pledged to pay debt service on the prior bonds may be formally released. That is, the refunded bonds may no longer be considered outstanding from the issuer’s viewpoint
 - *Economic*: If the cash flow requirements of the refunded bonds are fully met by the (escrowed) refunding bond proceeds, the prior bonds are considered economically defeased



Rationale – WHY REFUND?

- There are three basic reasons issuers choose to refund or defease debt:
 1. Reduce Interest Expense / Lower Debt Service Payments
 2. Reduce or Eliminate Debt
 3. Restructure Terms & Conditions



"It's not like that at all. I'm simply offering sound financial advice. Now, gimme your lunch money."



High-to-Low Refundings – Most Common

- Occurs when interest rates on refunding bonds are lower than the interest rates on the prior bonds & generally produces debt service savings for the issuer.
- Whether a high-to-low refunding generates debt service savings depends on four factors:
 - 1) Interest rates on the prior bonds (old coupons) vs. interest rates (new yields) on the refunding bonds;
 - 2) Length of time between the call date and maturity dates of the prior bonds;
 - 3) Allowable/achievable investment rate on the escrowed securities from settlement of refunding bonds to the call date of prior bonds; (arbitrage yield vs. escrow yield); and
 - 4) Issuance costs



Low-to-High Refundings

- Occurs when interest rates on refunding bonds are higher than the interest rates on the prior bonds & does not produce debt service savings for the issuer
- Motivation is often to release the issuer from onerous, outdated or burdensome covenants established when the bonds were originally issued
 - To effect a change in the covenants, the refunding must typically defease a significant portion of the outstanding prior bonds
- Refunding proceeds are permitted to be invested at the (higher) bond yield of the refunding bonds vs the prior bonds. Therefore, assuming the proceeds can be invested at the permitted yield, the only “cost” to the issuer are issuance costs which cannot be recovered from the arbitrage yield



Restructuring

- Issuers will complete a refunding, either high-to-low or low-to-high, to change the amount of debt service payable in any given period
- Such a restructuring of the prior debt service often involves the deferral or extension of the prior debt, producing (at least) short-term debt service relief

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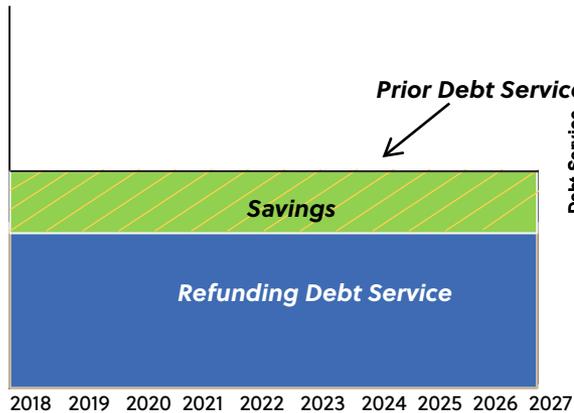
"We're not leaving until we find out who's been messing with the books."



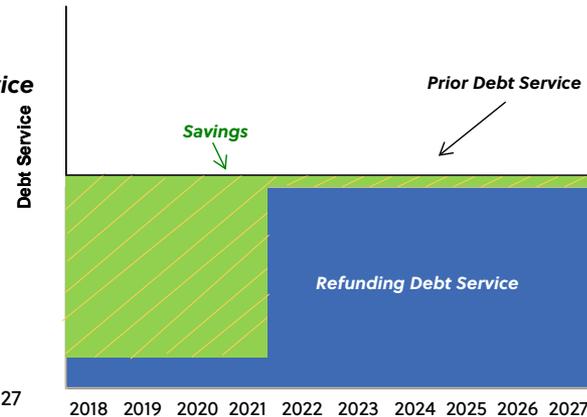
Refunding Saving Structures

- Level Savings – most common structure provides for uniform cash flow savings through maturity
- Accelerated savings – defers debt payments to generate near term cash flow savings
- Deferred savings – accelerates debt payments to shorten final maturity & lower interest expense

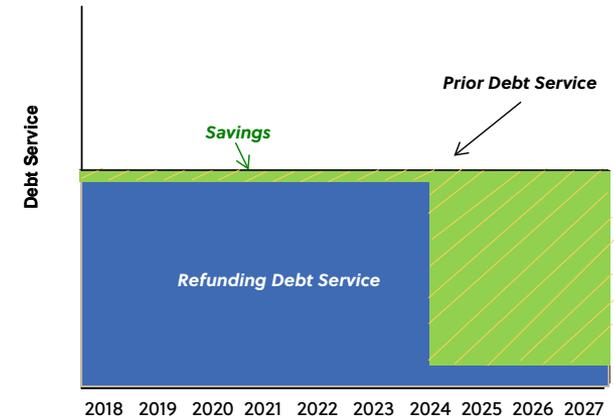
LEVEL SAVINGS



ACCELERATED SAVINGS



DEFERRED SAVINGS





Refunding Pre-Tax Reform



Refunding Basics – Pre Tax Reform Legislation

- Tax Exempt Current Refunding:
 - If the proceeds of the refunding issue are fully expended within 90 days of issuance, the refunding issue is considered a current refunding
- Tax Exempt Advance Refunding:
 - If the proceeds of the refunding issue are not fully expended within 90 days of issuance, the refunding issue is considered an advance refunding
- Tax Exempt Forward Delivery Refunding:
 - If an issue is not subject to advance refunding, a forward refunding can be implemented. This is accomplished by pricing the bonds (entering into a bond purchase agreement) but not closing the transaction until 90 days or less from the call date
- Tax Treatment:
 - Prior Federal tax law treats current refundings differently than advance refundings
 - There is no limit on the number of current refundings
 - May advance refund bonds issued after 1/1/86 once
 - May advance refund bonds issued before 1/1/86 twice



Refunding Post Tax Reform



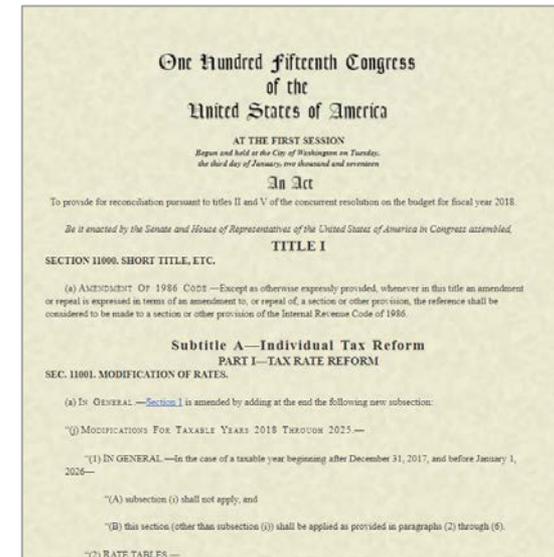
Tax Reform Legislation

- H.R.1 (the “Tax Cuts and Jobs Act”) was signed into law on December 22, 2017
- Among the various provisions, the legislation eliminated tax-exempt advance refundings of tax-exempt bonds after December 31, 2017.
- For issuers, the questions become:
 - What options remain to achieve or simulate the economic benefits of refundings for outstanding bonds?
 - What features might be incorporated into financing structures and bond documents to maximize the opportunities for achieving or simulating economic refundings (either advance or current) in the future?



Municipal Bond Market Impacts of Tax Cuts & Jobs Act of 2017

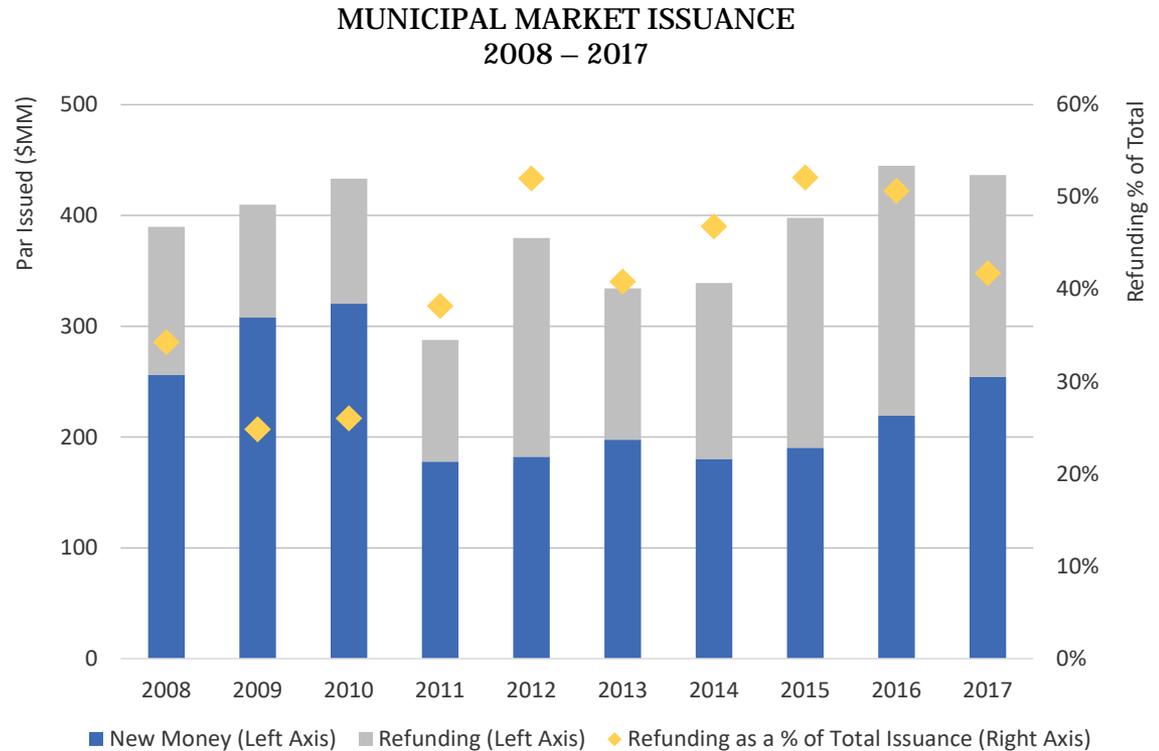
- Tax reform legislation impacting municipal bonds became effective starting January 1, 2018
- The initial legislative tax reform proposals included the elimination of:
 - Tax-exempt Private Activity Bonds
 - Tax-exempt advance refundings
 - Authorization for issuance of new tax credit bonds
 - Tax-exempt stadium bonds
- **SPARED** from tax reform:
 - Stadium bonds
 - Private Activity Bonds
- **ELIMINATED** through Tax Reform:
 - Tax-exempt advance refundings
 - New tax credit bonds
 - Additionally, lower tax rates for corporations (21% from 35%) and individuals could lead to a drop in demand for municipal bonds or higher return requirements (i.e., higher rates) from investors





Supply and Demand Factors

- In the long-run, tax-exempt municipal supply will be reduced
 - Since the Great Recession, total advance refunding volume ranged from 13% - 22% of the market
- Reduction in corporate and individual maximum tax rates will impact classes of investors differently
 - Municipals become less attractive to corporate buyers, namely commercial banks and property & casualty insurers





Tax Reform Impact on Florida Schools – Bank Loans

- The change in corporate tax rate may impact tax exempt loans outstanding with a commercial bank
 - The change in corporate tax rate from 35% to 21% creates the risk that commercial bank lenders could amend their loan pricing to offset the loss in value from the exemption
 - The interest rates for future loans may be impacted as commercial banks increase spreads to adjust for the new relative value of municipal bonds/loans and overall bank profitability
- Early indications:
 - Fixed rates may be approximately 15% higher than before tax reform
 - Potential reduction in appetite for banks to lend to municipal credits





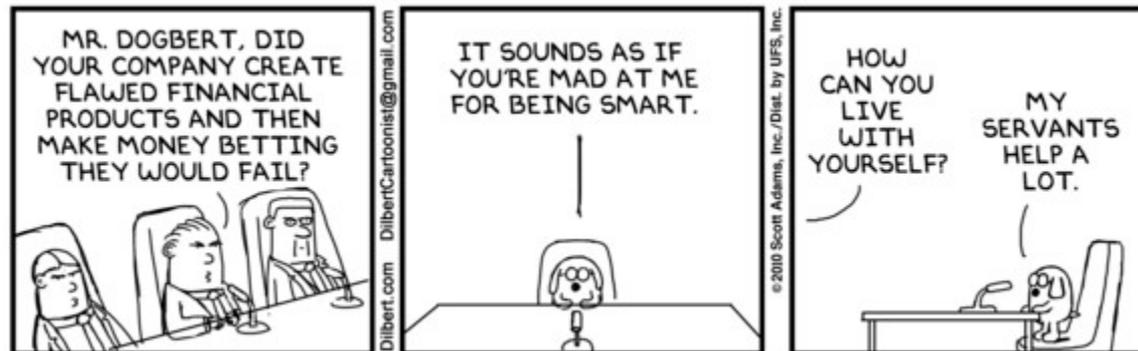
Tax Reform Impact on Florida Schools – Sequestration

- As part of the Continuing Resolution passed on December 21, 2017 to fund the federal government, the mandatory PAYGO Act cuts were waived, removing ARRA subsidies from the threat of complete elimination
 - District who have debt with subsidies such as QZABs will continue to receive federal subsidies at their current levels
- However, ARRA subsidies could continue to be threatened beyond their current levels of sequestration if Congress seeks ways to further pay for the cost of the final tax reform package
 - The current federal fiscal year (10/1/2017 – 9/30/2018) sequestration amount for ARRA subsidies is 6.60% and has ranged from this level to 8.7% since 2013



Tax Reform Impact on Florida Schools – Redemption Options

- Many Districts have enjoyed a long history of generating debt service savings by issuing both advance & current refunding bonds
- In the wake of tax reform, Districts may consider the following alternative structures for potential refunding opportunities
 - Tax-Exempt Current Refunding
 - Taxable Advance Refunding
 - Forward Delivery Bonds
 - Forward Starting Swap
 - Cinderella Bonds
 - Tender
 - Cash Optimization





Refunding Strategy #1 - Tax-exempt Current Refunding

	#1: Tax-exempt Current Refunding
Ease of Execution	Easy
Investor Demand	Good investor demand
Added Borrowing Costs/Features for non-traditional structures	
Interest Rate Risk	√
Opportunity Cost	√
Tax Risk	
Counterparty Risk	
Issuer Risk Profile Change/Market Perception Risk	
Increased Transactional Costs	
Market Dislocation	√

- **Strategy:** Wait until existing bonds become currently callable (i.e., 90 days prior to the call date) to execute a tax-exempt current refunding
- **Benefits:** Traditional structure with tax-exempt issuance, no legal restrictions or considerations, limited negative arbitrage, ability to capture benefit of potential lower interest rates at time of current refunding
- **Risks:** Issuers are exposed to interest rate risk (i.e., higher interest rates) - loss of ability to lock in current borrowing levels, issuer exposed to credit risk if credit deteriorates while awaiting current refunding period, issuance will be subject to market access at time of current refunding
- **Legal Considerations:** No unique legal considerations. Customary tax-exempt bond rules apply



Refunding Strategy #2 – Taxable Refunding

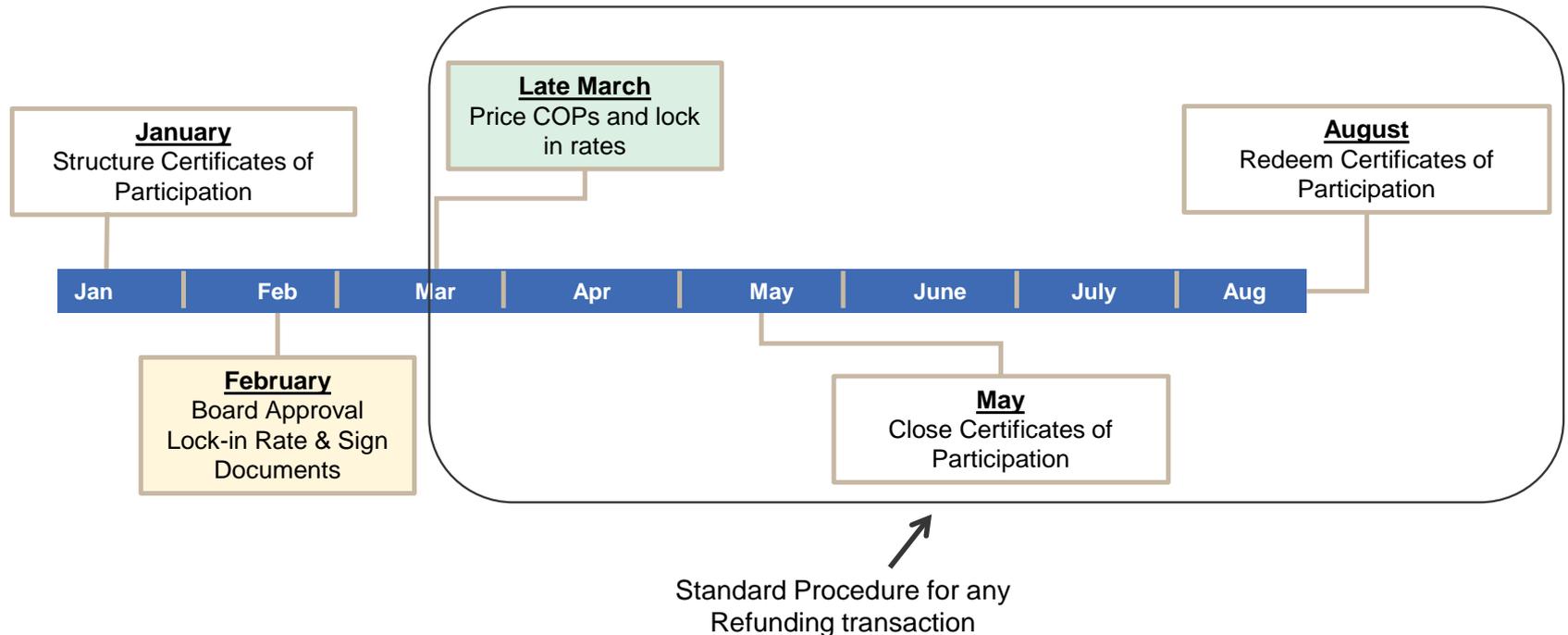
	#2: Taxable Refunding
Ease of Execution	Easy
Investor Demand	Good investor demand
Added Borrowing Costs/Features for non-traditional structures	√
Interest Rate Risk	
Opportunity Cost	√
Tax Risk	
Counterparty Risk	
Issuer Risk Profile Change/Market Perception Risk	
Increased Transactional Costs	√
Market Dislocation	

- **Strategy:** Issue taxable refunding bonds on an advance refunding basis
- **Benefits:** Locks in current interest rate levels, allows for potential arbitrage in refunding escrows
- **Risks:** Typically higher costs, limited ability to benefit from lower interest rates at call date, potential for more restrictive / costly redemption, inability to benefit from future changes to tax law
- **Legal Considerations:** If the taxable bonds have no call protection, then they can be currently refunded with tax-exempt bonds, as long as the original refunded tax-exempt bonds and the third-generation, tax-exempt current refunding bonds are not outstanding concurrently for more than 90 days. If the taxable refunding bonds have call protection of their own, there may still be a technical possibility for a tax-exempt advance refunding of that taxable issue



Refunding Strategy #3 – Forward Delivery Bonds

- **Strategy:** Financing process completed similar to advance refunding except pricing and closing separated by extended period of time. Issuer enters into a bond purchase /rate lock agreement for the purchase of tax-exempt bonds to be issued not earlier than 90 days before the refunded obligation may be redeemed





Refunding Strategy #3 – Forward Delivery Bonds

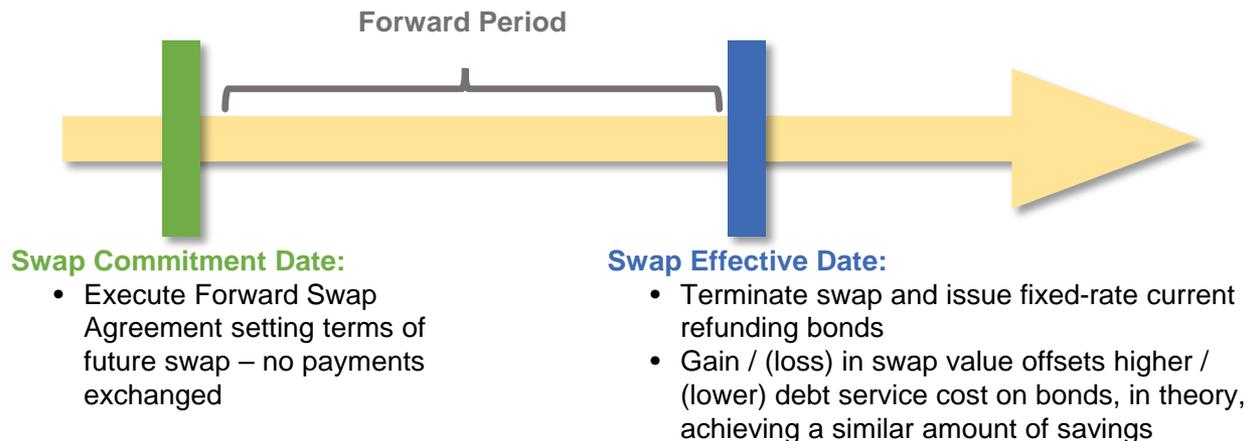
	#3: Forward Delivery Bonds
Ease of Execution	Easy
Investor Demand	Execution is dependent upon investor demand
Added Borrowing Costs/Features for non-traditional structures	√
Interest Rate Risk	
Opportunity Cost	√
Tax Risk	√
Counterparty Risk	√
Issuer Risk Profile Change/Market Perception Risk	√
Increased Transactional Costs	√
Market Dislocation	

- **Benefits:** Allows issuer to lock interest rates at levels close to current market rates for a future current refunding
- **Risks:** Depending on forward period, **forward premium** could erode economic benefit, no ability to benefit from lower interest rates or improved credit position at call date (opportunity cost), risk that tax law changes make forward strategy unnecessary, exposure to counterparty risk / market access, future market dislocation could create challenges to selling bonds in future
- **Legal Considerations:** Minimal tax concerns (other than change in law risk). Seek to minimize the additional conditions to closing and underwriter/purchaser “outs” that may prevent the eventual closing



Refunding Strategy #4 – Forward Starting Swap

- **Strategy:** Enter into a forward-starting, cash-settled interest rate swap in current market; at current refunding date, terminate swap and issue tax-exempt bonds. Termination payment from/to counterparty is partially offset by higher/lower interest rates at time of termination and refunding issuance



- If swap rates are higher on the Effective Date than the executed swap rates on the Commitment Date, the District would receive a termination payment from the swap counterparty
- If swap rates are lower on the Effective Date than the executed swap rates on the Commitment Date, the District would make a termination payment to the swap counterparty



Refunding Strategy #4 – Forward Starting Swap

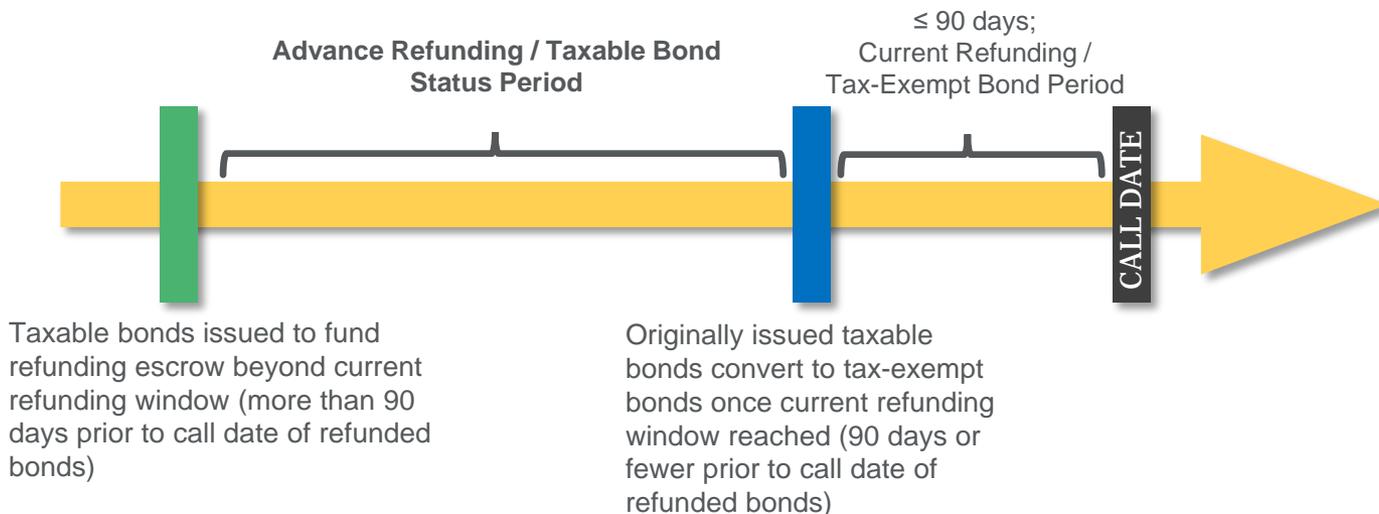
	#4: Forward Starting Swap
Ease of Execution	Difficult
Investor Demand	Execution is dependent upon investor demand
Added Borrowing Costs/Features for non-traditional structures	√
Interest Rate Risk	√
Opportunity Cost	√
Tax Risk	√
Counterparty Risk	√
Issuer Risk Profile Change/Market Perception Risk	√
Increased Transactional Costs	√
Market Dislocation	√

- Benefits:** Lock interest rates at current levels for a future time of issuance, efficient structure driven by liquidity of swap market
- Risks:** No ability to benefit from lower interest rates at call date, tax and issuer credit risk results in basis risk, exposure to counterparty credit risk, risk of potential out-of-pocket termination payment even if bonds not ultimately issued, extended forward period may erode economic benefit
- Legal Considerations:** Issuer’s termination payment obligation will be required to be a parity payment obligation, but existing trust agreement or bank agreements may subordinate such payments; swap will need to be “identified” by issuer for tax integration purposes; consider accounting and disclosure treatment; if no recent swap activity, issuer will need to sign or adhere to ISDA Dodd-Frank Protocols



Refunding Strategy #5 – Cinderella Bonds

- **Strategy:** Issuing long-term bonds with an initial taxable interest rate and a subsequent tax-exempt interest rate term on a date not earlier than 90 days before the refunded bonds may be redeemed
- Must be accompanied by a bond counsel opinion upon initiation and closing
- Typically executed as direct purchase, although public sale option could be evaluated (limited investor appetite with few precedents)





Refunding Strategy #5 – Cinderella Bonds

	#5: Cinderella Bonds
Ease of Execution	Moderate
Investor Demand	Execution is highly dependent upon investor demand
Added Borrowing Costs/Features for non-traditional structures	√
Interest Rate Risk	
Opportunity Cost	√
Tax Risk	√
Counterparty Risk	
Issuer Risk Profile Change/Market Perception Risk	√
Increased Transactional Costs	√
Market Dislocation	√

- **Benefits:** Allows issuer to lock interest rates at levels close to current market rates for a future current refunding
- **Risks:** Non-traditional structure will carry additional costs / limited liquidity in market, reduced ability to benefit from lower interest rates at time of conversion due to “sunk costs” of advance taxable borrowing, risk that tax law changes make conversion strategy unnecessary, changes to issuer credit could negatively impact tax-exempt conversion economics, future market dislocation could create challenges at conversion to tax-exempt structure
- **Legal Considerations:** Documents may need to be structured so that a “reissuance” can be triggered to cause the conversion. In other words, it may not be as simple as filing an 8038-series form with the IRS and getting a bond counsel opinion



Refunding Strategy #6 – Tender

	#6: Tender
Ease of Execution	Difficult
Investor Demand	Execution is highly dependent upon investor demand
Added Borrowing Costs/Features for non-traditional structures	√
Interest Rate Risk	
Opportunity Cost	
Tax Risk	√
Counterparty Risk	
Issuer Risk Profile Change/Market Perception Risk	
Increased Transactional Costs	√
Market Dislocation	

- **Strategy:** Make an offer to tender outstanding bonds from a bondholder (or bondholders) at a certain price by with bond proceeds
- **Benefits:** A tender constitutes a current refunding for federal tax law purposes
- **Risks:** Success of a tender would hinge upon participation of the bondholders, as bondholders can elect not to participate. Can be costly and some of the fees are not contingent on a successful transaction
- **Legal Considerations:** The purchase price of the tendered bonds is typically funded from cash and/or bond proceeds of a refunding bond issue



Refunding Strategy #7 – Cash Optimization

	#7: Cash Optimization
Ease of Execution	Easy
Investor Demand	Good investor demand
Added Borrowing Costs/Features for non-traditional structures	
Interest Rate Risk	√
Opportunity Cost	
Tax Risk	√
Counterparty Risk	
Issuer Risk Profile Change/Market Perception Risk	
Increased Transactional Costs	
Market Dislocation	√

- Strategy:** Utilize existing cash on hand to defease outstanding bonds instead of issuing refunding bonds. Issue tax-exempt bonds to fund new money projects
- Benefits:** In optimal conditions, new money debt service will be less than the defeased debt service of refunded bonds, generating overall debt service savings for the issuer
- Risks:** Must consider the impacts of exercising call options on outstanding bonds and the associated opportunity risk related to defeasing bonds in the current market
- Legal Considerations:** Issuers must consider any nexus between funds used to defease existing debt and the issuance of new money bonds or risk creating replacement proceeds, which are limited to the arbitrage yield of the new money bonds (versus yield of defeased bonds)



Tax Reform Impact on Florida Schools – Issuance Strategies & Structures

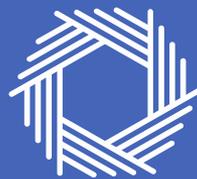
- Tax-exempt bonds may be issued with a variety of different features to allow for more flexible redemption options in the absence of the ability to advance refund on a tax-exempt basis
 - Variable rate debt (VRDNs and VRDBs)
 - Callable anytime
 - Issuer stays shorter on the curve to lower interest costs
 - Liquidity needed, LOC or liquidity provider
 - Assumes additional interest rate risk
 - Shorter-term fixed rate debt
 - Issuer stays shorter on the curve to lower interest costs
 - Debt coverage constraints may limit this structure
 - Roll-over / market access risk at maturity
 - Provisions to allow for future use of swaps and other derivative products that may synthetically create some of the benefits of advance refundings



Tax Reform Impact on Florida Schools – Issuance Strategies & Structures

- Shorter call features (call dates less than 10 years)
 - Relative value vs. 10-year par call
 - Impact on gross proceeds
 - Shorter call dates do not always equate to greater optionality
 - Option value = Time value + Intrinsic value
 - To date, the increase in time value is more than offset by the loss in intrinsic value
 - Decision should be based on current relative value (i.e., relationship between short-, medium- and long-term rates) and dependent on future rate movement
 - Analysis to determine proper valuation and direction on timing of call date provision should be completed on a case-by-case basis

Q&A



pfm