



JOSH MANDEL
TREASURER OF OHIO

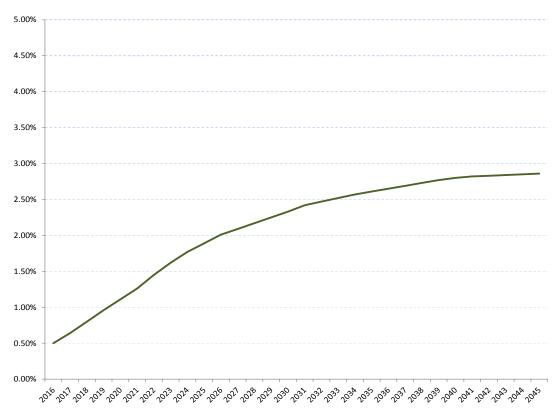
A PROGRAM BROUGHT TO YOU BY:

FIN 330:

Trends in Capital Improvement Refinancing

- Ability to refund (pay bondholder off early) is determined at time of original bond issue
- Example language:
 - The Bonds maturing on December 1, 2025 and thereafter are subject to optional redemption prior to maturity, in whole or in part on any date in any order maturity as determined by the City and by lot within a maturity, at the option of the City on or after December 1, 2024 at par plus accrued interest thereon to the date of redemption.
 - This bond is callable for redemption prior to maturity at the option of the City, such redemption shall be at a price equal to the principal amount to be redeemed plus accrued interest to the date of redemption. In the event the City redeems the bond from proceeds of a financing with a financial institution other than XYZ Bank, there will be a one percent (1%) fee of the outstanding principal.

 Why are nearly all bonds refunded at some point? Because of an upward sloping yield curve and the ability to "move down the yield curve."



Moving down the yield curve graphs

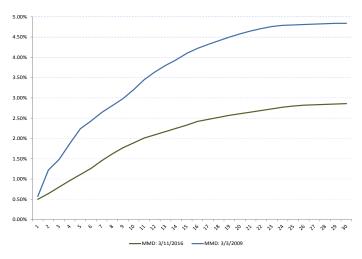


Dates	Old Yield %	New Yield %	Difference %
2021	1.26	0.50	-0.76
2022	1.45	0.64	-0.81
2023	1.62	0.80	-0.82
2024	1.77	0.96	-0.81
2025	1.89	1.11	-0.78
2026	2.01	1.26	-0.75
2027	2.09	1.45	-0.64
2028	2.17	1.62	-0.55
2029	2.25	1.77	-0.48
2030	2.33	1.89	-0.44

- Refunding Bonds:
 - Applies to all types of bonds.
 - Most bonds are callable after 10 years; sometimes a redemption premium applies
 - May pay a price for less than a 10 year call
- Two Types:
 - Current Refunding: Bonds being refunded are outstanding > 90 days after the date of the refunding.
 - 2. Advance Refunding: Bonds being refunded are outstanding > 90 days after the date of the refunding

- Advance Refunding
 - Only one opportunity to "Advance Refund" (tax-exempt rules)
 - Example:
 - Call Date: December 1, 2024
 - Refunding Bond Close Date: December 1, 2022
 - Refunding Bond Proceeds: Escrow Account

Tax-Exempt Advance Refunding of Series 2009 Bonds				
Dated Date	April 6 , 2016			
Call Date	December 1, 2019			
Par amount	30,906,072			
\$ savings (PV)	2,596,302			
% savings (PV)	8.40%			
Negative Arbitrage	1,308,838			
Interest rate on bonds being refunded	4.85%			
Interest rate on new bonds	2.73%			

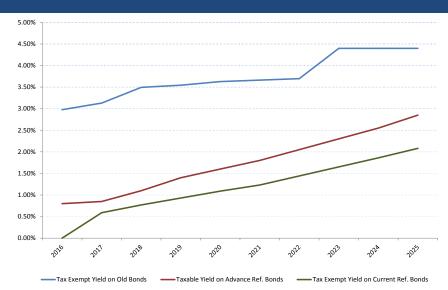


Year	Old Debt	New Debt	Cash Flow		
i Cai	Service	Service	Savings		
2016	\$1,601,259	\$1,351,664	\$ 249,595		
2017	\$1,601,259	\$1,297,913	\$ 303,346		
2018	\$1,606,259	\$1,298,763	\$ 307,496		
2019	\$3,101,184	\$2,939,313	\$ 161,871		
2020	\$3,045,319	\$2,885,713	\$ 159,606		
2021	\$2,984,369	\$2,826,013	\$ 158,356		
2022	\$2,917,989	\$2,756,013	\$ 161,976		
2023	\$2,851,394	\$2,691,013	\$ 160,381		
2024	\$2,789,584	\$2,630,363	\$ 159,221		
2025	\$2,722,344	\$2,564,863	\$ 157,481		
2026	\$2,650,200	\$2,489,663	\$ 160,538		
2027	\$2,577,569	\$2,420,063	\$ 157,506		
2028	\$2,504,450	\$2,345,913	\$ 158,538		
2029	\$2,430,844	\$2,272,900	\$ 157,944		
2030	\$2,356,750	\$2,195,375	\$ 161,375		
2031	\$2,285,000	\$2,124,125	\$ 160,875		
2032	\$2,207,500	\$2,048,225	\$ 159,275		
2033	\$2,134,500	\$1,972,850	\$ 161,650		
2034	\$2,060,750	\$1,903,000	\$ 157,750		
2035	\$1,986,250	\$1,825,000	\$ 161,250		
2036	\$1,911,000	\$1,752,400	\$ 158,600		
			\$ 3,734,631		

- Options
 - Traditional, tax-exempt
 - Taxable Refunder
 - Forward Rate Lock

- Refunding with Taxable Bonds
 - One opportunity rule only applies to taxexempt debt
 - Economics must work

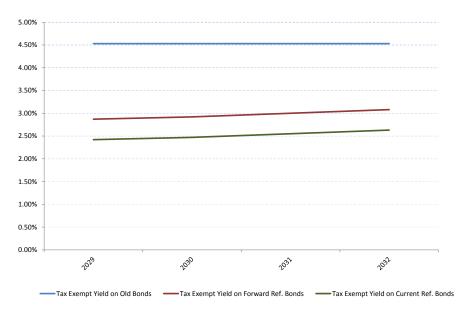
Summary of Refunding Scenarios					
	Taxable Advance Refunding of Series 2007	Tax Exempt Current Refunding of Series 2007			
Dated Date	4/27/16	3/1/17			
Call Date	6/1/17	6/1/17			
Par amount	34,381,064	32,090,000			
\$ savings (PV)	2,196,594	3,823,192			
% savings (PV)	6.38%	11.11%			
Negative Arbitrage	602,607	111,664			
Interest rate on bonds being refunded	4.48%	4.46%			
Interest rate on new bonds	2.20%	1.59%			



Taxable Advance Refunding				Tax Exempt Current Refunding					
Year	Old Debt Service	New Debt Service		ash Flow Savings	Year	Old Debt Service	New Debt Service		ash Flow Savings
2016	\$1,575,725	\$1,426,966	\$	148,759	2017	\$4,565,725	\$4,212,700	\$	353,025
2017	\$4,565,725	\$4,312,298	\$	253,428	2018	\$4,646,225	\$4,173,600	\$	472,625
2018	\$4,646,225	\$4,395,890	\$	250,335	2019	\$4,603,275	\$4,132,800	\$	470,475
2019	\$4,603,275	\$4,348,980	\$	254,295	2020	\$4,850,100	\$4,378,800	\$	471,300
2020	\$4,850,100	\$4,595,710	\$	254,390	2021	\$4,957,688	\$4,490,000	\$	467,688
2021	\$4,957,688	\$4,705,710	\$	251,978	2022	\$4,616,738	\$4,146,200	\$	470,538
2022	\$4,616,738	\$4,364,840	\$	251,898	2023	\$4,567,913	\$4,100,200	\$	467,713
2023	\$4,567,913	\$4,313,865	\$	254,048	2024	\$4,837,700	\$4,365,400	\$	472,300
2024	\$4,837,700	\$4,587,325	\$	250,375	2025	\$4,998,788	\$4,529,200	\$	469,588
2025	\$4,998,788	\$4,746,528	\$	252,260				\$	4,115,250
			\$:	2,421,764					

- Forward Rate Lock
 - Price now/sign BPA/lock in deal
 - Close at date allows to be a current refunding <u>Example</u>:
 - Price/sign BPA: February 25, 2016
 - Close: September 5, 2016
 - Pay off Prior Bonds: December 1, 2016
 Closing is within 90 days = Current Refunding

Summary of Refunding Scenarios					
	Tax Exempt Forward Current Refunding of Series 2006	Tax Exempt Current Refunding of Series 2006			
Dated Date	9/6/16	9/6/16			
Call Date	12/1/16	12/1/16			
Par amount	57,230,000	55,280,000			
\$ savings (PV)	4,034,704	6,826,889			
% savings (PV)	6.28%	10.62%			
Negative Arbitrage	414,321	345,916			
Interest rate on bonds being refunded	4.28%	4.28%			
Interest rate on new bonds	3.58%	3.26%			



Tax Exempt Forward Current Refunding			Tax Exempt Current Refunding				
Year	Old Debt			Cash Flow Savings		New Debt Service	Cash Flow Savings
2029	\$ 9,636,875	\$ 7,872,250	\$ 1,764,625	2029	Service \$ 9,636,875	\$ 7,350,000	\$ 2,286,875
2029			. , ,	2029		. , , ,	. , ,
2030	\$25,107,200	\$23,341,000	\$ 1,766,200	2030	\$25,107,200	\$22,820,250	\$ 2,286,950
2031	\$25,102,838	\$23,338,750	\$ 1,764,088	2031	\$25,102,838	\$22,820,500	\$ 2,282,338
2032	\$11,627,175	\$ 9,864,750	\$ 1,762,425	2032	\$11,627,175	\$ 9,345,000	\$ 2,282,175
			\$ 7,057,338				\$ 9,138,338

- Rule 15(c)2-12: governs primary offering disclosure and continuing disclosure, including submission of annual financial information and material event notices
 - Primary offering of municipal securities in principal amount of \$1 million or more, subject to exceptions
 - Directly governs underwriters and indirectly governs issuers and obligated persons

- Primary Offering Disclosure
- Example: Official Statement Compliance Section

Continuing Disclosure Compliance

Rule 15c2-12 (the "Rule"), promulgated by the Securities and Exchange Commission, requires continuing disclosure with respect to new offerings of municipal securities of \$1,000,000 or more. The Issuer is obligated to provide such continuing disclosure with respect to one or more previously issued and currently outstanding bond or note issues. The Issuer has been in material compliance with their obligations in the past five years. The audited financial statements were not always available by the annual filing date of March 1; therefore the Issuer filed operating data and certain unaudited financial reports by the filing date and filed the audited financial statements either by the March 1 filing date or within 30 days of when they became available on the Ohio Auditor of State's website. The Issuer's latest disclosure was filed in February 2015 for fiscal year ending June 30, 2015.

- Dealers are responsible for due diligence regarding compliance by Issuers
 - Typically diligence requires an independent review of EMMA to ensure the Issuer is in substantial compliance
 - Has the Issuer filed an annual report pursuant to Rule 15(c)2-12 for each of the last five (5) years?
 - Has the Issuer filed any material event notices in any of the last five (5) years?

- Compliance Strategies
 - Post-Issuance Compliance Policy
 - Dissemination Agent
 - EMMA e-mail reminders

Questions?

Questions

If you have any questions or need additional information, please contact us:

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