Market Update and Refunding Strategy

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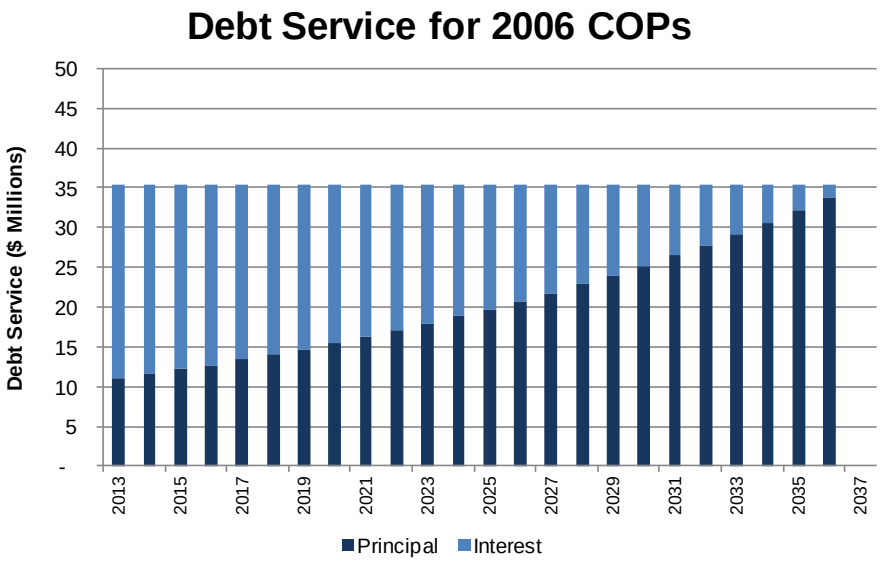
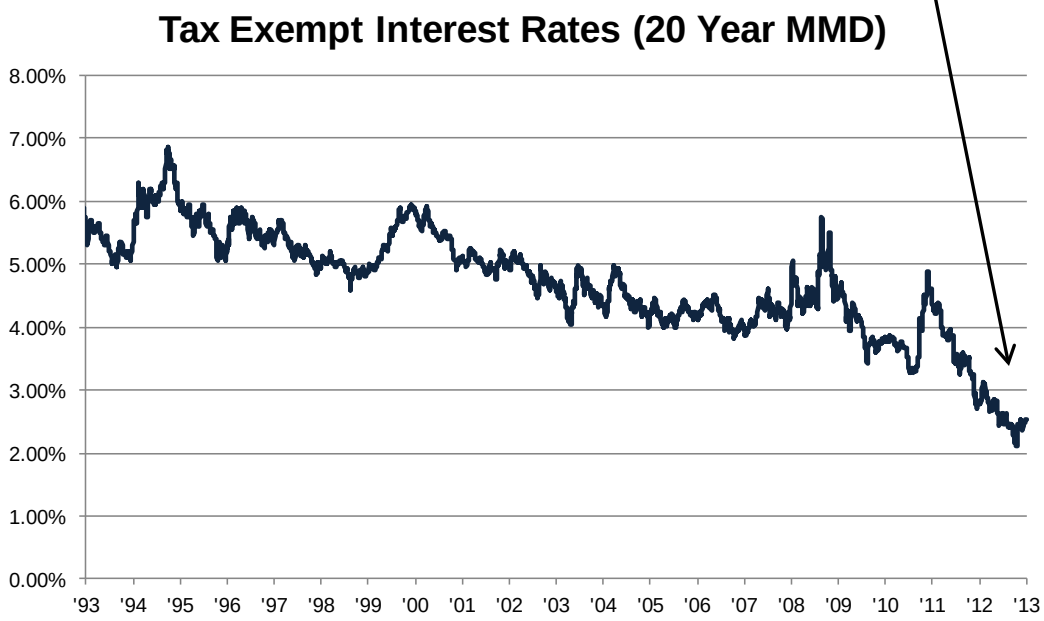
SFWMD Debt Update

- The District funded restoration projects (Acceler8) through the issuance of $546 million of Certificates of Participation (COPs) through the South Florida Water Management District Leasing Corporation.
- Details:
  - "COPs" are a form of lease financing
  - SFWMD Board is the Board for the Leasing Corporation
    - Corporation is largely administrative in nature
      - Meets once annual unless financings/refinancings occur
  - COP Structure:
    - $489,610,000 currently outstanding
    - Level debt service maturing in 2036
    - Annual payment of approximately $35.5 million



Tax Exempt Interest Rate Trends

- Interest rates have trended down during the last three years
  - Low interest rates create the opportunity to refinance the COPs
    - similar to a home mortgage refinancing
  - But, the COPs are not “callable” until 2016
    - Refinancing in “advance” of the call date creates inefficiencies
    - Only one “advance refunding” is permitted under current tax regulations; so there is potential opportunity cost in completing a refunding early

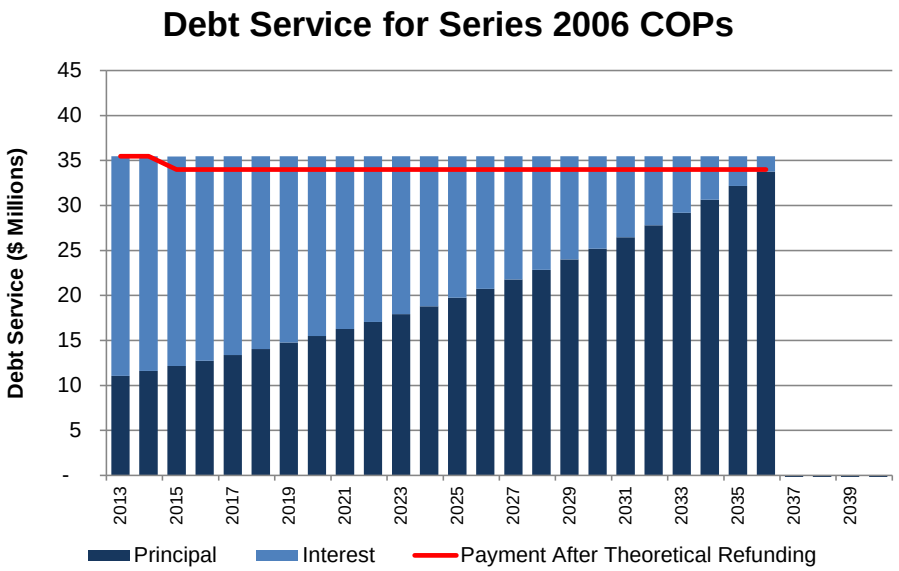


Can the District Refinance for Savings Today?

- Current Refinancing characteristics:
  - Present Value (PV) Savings = $6 million
    - 1.4% savings (typical threshold is 3% or 5%)
    - Annual Savings = $230k through 2016, $400k from 2017-2036
  - Escrow inefficiency = $37.9 million
    - *Most issuers want the PV savings to exceed the escrow inefficiency*
- Not a viable refinancing today
  - Options
    - Wait – develop parameters for moving forward
    - Complete a partial refunding
      - Take advantage of maturities where savings is material
    - Use financial products (swaps or similar products) to enter into the transaction today
      - Introduces risk, for marginal reward

Refunding Strategy - Parameters

- The District should continue to monitor the refunding opportunity as market conditions evolve and time passes.
  - i.e. in a neutral interest rate environment, PV savings increases $1 million per month
- Parameters/Guidelines:
  - For advance refundings, target in excess of 5% present value savings
  - Escrow inefficiency no more than the savings for each maturity
  - Material annual cash flow savings
  - Partial refundings
    - Consider partial refundings for high savings maturities, but only if the annual savings and the size of the financing is material - don't refinance just one or two maturities



Interest Rate Sensitivity

- If interest rates are at or below the pink-colored line in 2016 (call date), the District benefits from waiting to obtain the same or better savings than is available today.

Recommendation

1) Continue to monitor the market and potential for a refunding of the District's Series 2006 COPs
   - If interest rates fall further, savings goes up, and
   - inefficiencies decrease over time
2) Target at 5.0% PV Savings minimum by maturity
3) Wait for a more efficient escrow
   – higher escrow earnings rates and/or lower long-term interest rates
4) Evaluate on a "maturity-by-maturity basis", and move forward when a sizeable refunding can be completed

Exhibit

Maturity-By-Maturity Analysis

- The savings and negative arbitrage can be monitored separately for each maturity enabling the District to optimize refundings
- Negative arbitrage decreases as time goes by and has a corresponding positive impact on savings (all other factors being constant)

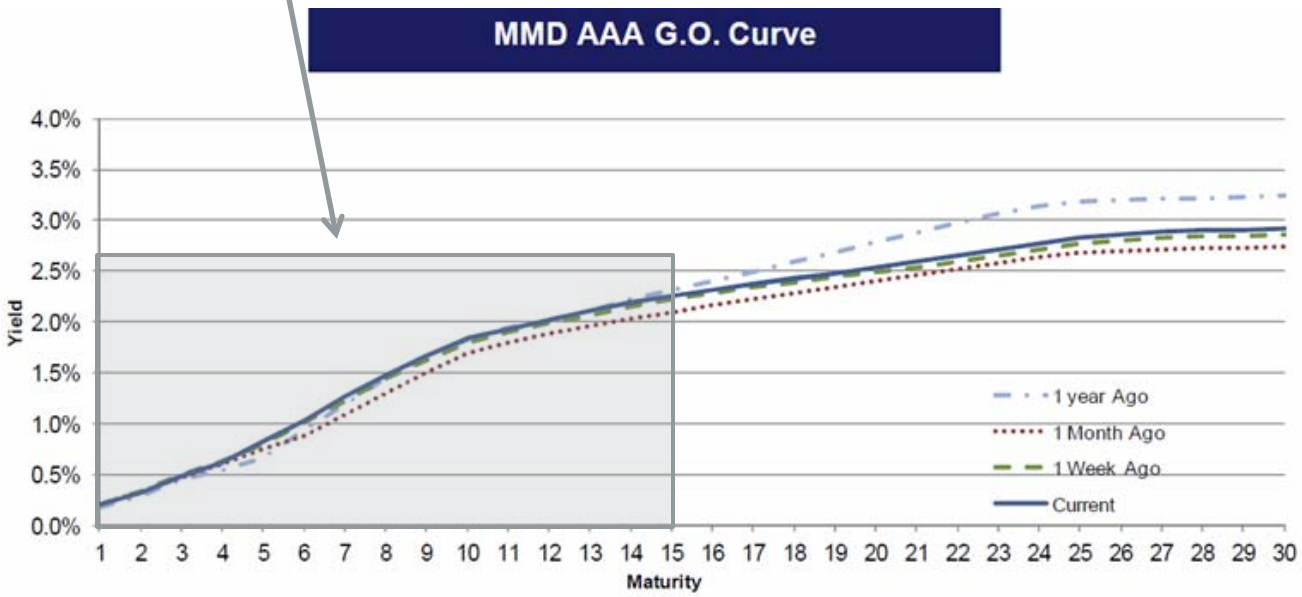
SFWMD - COPS, Series 2006

Refunding on	6/1/2013
Bond Call	10/1/2016
Coupon Periods Escrowed	6.67

Maturity Date	Interest Rate	Par Amount	PV Savings	PV Savings Percent	Present Value of 1 bp	Amount in Escrow	Negative Arbitrage	Monthly Negative Arbitrage
10/1/2017	5.000%	13,385,000	(62,956)	(0.47%)	6,079	15,615,833	1,148,515	28,713
10/1/2018	5.000%	14,055,000	241,596	1.72%	7,770	16,397,500	1,206,005	30,150
10/1/2019	5.000%	14,755,000	512,131	3.47%	9,467	17,214,167	1,266,069	31,652
10/1/2020	5.000%	15,495,000	689,043	4.45%	11,475	18,077,500	1,329,565	33,239
10/1/2021	5.000%	3,280,000	682,454	5.25%	13,655	3,826,667	281,444	7,036
10/1/2021	4.250%	12,990,000	973,503	5.71%	13,655	14,830,250	1,090,736	27,268
10/1/2022	5.000%	17,055,000	1,054,351	5.89%	15,516	19,897,500	1,463,423	36,586
10/1/2023	5.000%	17,910,000	951,331	5.06%	17,887	20,895,000	1,536,787	38,420
10/1/2024	5.000%	18,805,000	835,809	4.23%	18,409	21,939,167	1,613,584	40,340
10/1/2025	5.000%	19,745,000	686,145	3.31%	19,325	23,035,833	1,694,241	42,356
10/1/2026	5.000%	20,735,000	62,834	1.92%	20,090	24,190,833	1,779,189	44,480
10/1/2027	5.000%	21,770,000	543,503	2.50%	21,095	25,398,333	1,867,999	46,700
10/1/2028	5.000%	22,860,000	410,160	1.79%	21,922	26,670,000	1,961,527	49,038
10/1/2029	5.000%	24,000,000	285,419	1.19%	22,781	28,000,000	2,059,346	51,484
10/1/2030	5.000%	25,200,000	173,940	0.69%	23,918	29,400,000	2,162,313	54,058
10/1/2031	5.000%	26,460,000	81,107	0.31%	25,114	30,870,000	2,270,429	56,761
10/1/2032	5.000%	27,785,000	(25,973)	(0.09%)	26,097	32,415,833	2,384,122	59,603
10/1/2033	5.000%	29,175,000	(139,818)	(0.48%)	27,403	34,037,500	2,503,393	62,585
10/1/2034	5.000%	30,630,000	(326,875)	(1.07%)	28,468	35,735,000	2,628,241	65,706
10/1/2035	5.000%	32,165,000	(531,141)	(1.65%)	29,574	37,525,833	2,759,953	68,999
10/1/2036	5.000%	33,770,000	(753,045)	(2.23%)	31,053	39,398,333	2,897,672	72,442
Total		442,025,000	6,343,519	1.435%	397,096	515,371,083	37,904,552	947,614

Steep Yield Curve Makes Some Refundings More Efficient Than Others

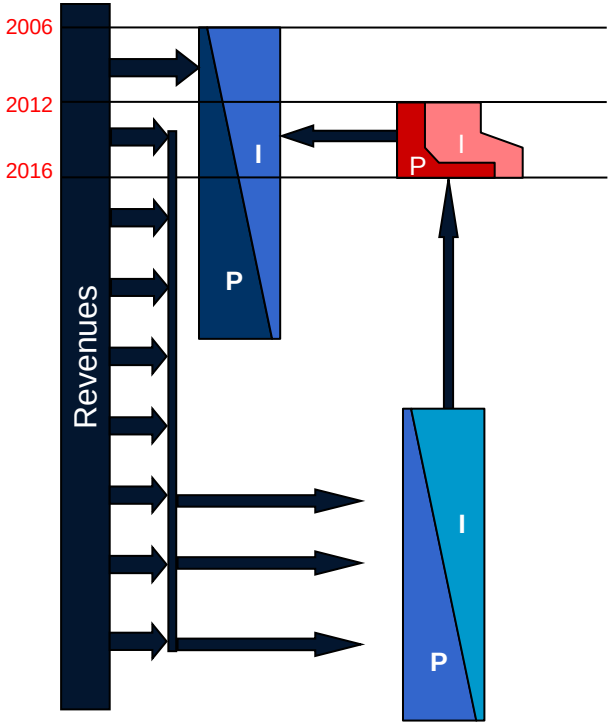
- Both the taxable and tax-exempt yield curves are very steep
  - What are the ramifications of a steep yield curve?
- The most cost effective refinancings are for maturities less than 15 years – early on the yield curve
- Near 0% short-term Treasury rates make “advance refundings” very inefficient. Why?



Why Are Advance Refundings Inefficient?

- First, what is an advance refunding?
  - Refunding bonds are issued BEFORE the call date for the original bonds (2016 in this case) so the proceeds have to be invested until the call date

- Why does this create inefficiencies?
- The proceeds pay off the principal, but also have to pay the old higher interest rate (5%), while the proceeds are invested at current low rates (0.50%)
- For example, in order to advance refund $442 million of the Series 2006 COPs, $512 million must be placed in the escrow
- This “drag” on savings totals over $35 million and is referred to as “negative arbitrage”



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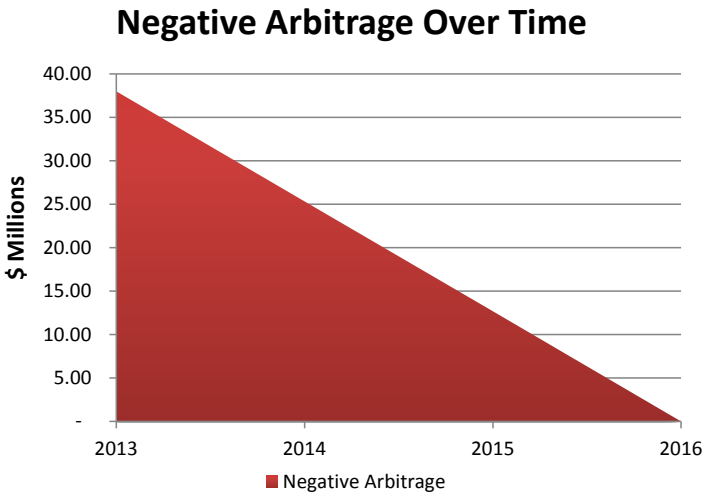
- Negative arbitrage declines over time as the date of the refunding gets closer to the first call date
  - The optimal time to complete a refunding is on the call date (2016 in this case). But it's impossible to know if interest rates will still be low by 2016.
- Techniques for working around negative arbitrage:
  - Issue "forward starting" refunding bonds (The interest rates on the refunding bonds are set now, but closing occurs in 2016)
    - Investors require a premium making this inefficient for long forward periods
  - Sell a swaption
- Both techniques are not cost effective today and/or involve significant exposure to derivatives