

Deceptive Present Value

Who's time-value of money is it calculating? For a bond investor or the average taxpayer?

\$ 28,620,367.72

Same rate used for both bond investor returns and discount rate for taxpayers!!!

3.0504063%

Dec 13, 2017 11:14 am Prepared by DBC Finance (Finance 8.000 PIEDMONT:PIEDUSD-REF2017B,REF2017B) Page 2

SAVINGS

Piedmont City Unified School District
2017B GO Refunding Bonds (CIBs refund of Series E Bonds)

Predatory Exponential Compound Interest by using a series of Zero Coupon Bonds

	Repayment Multiplier	
		(in thousands)
\$ 490,742	* power(1 + 5.28 %/2, 28) = \$ 1,018	2.1
\$ 212,731	* power(1 + 5.52 %/2, 30) = \$ 481	2.3
\$ 162,248	* power(1 + 5.74 %/2, 32) = \$ 401	2.5
\$ 176,626		
\$ 155,932		
\$ 135,161		
\$ 115,300		
\$ 99,022	***	***
\$ 643,366		
\$ 612,077		
\$ 1,443,926		
\$ 1,416,731		
\$ 1,388,084		
\$ 1,359,955		
\$ 1,334,791	* power(1 + 6.31 %/2, 56) = \$ 7,601	5.7
\$ 1,313,609	* power(1 + 6.32 %/2, 58) = \$ 7,982	6.1
\$ 938,377	* power(1 + 6.33 %/2, 60) = \$ 6,086	6.5
\$ 11,998,678		

Received by the District	New Repayment Multiplier	3.2
	Old Repayment Multiplier	5.3

Date	Prior Debt Service	Refunding Debt Service	Refunding Receipts	Refunding Net Cash Flow	Savings	Present Value to 12/21/2017 @ 3.0504063%
08/01/2018		533,522.92	533,522.92			
08/01/2019		873,037.50	873,037.50			
08/01/2020		873,037.50	873,037.50			
08/01/2021		873,037.50	873,037.50			
08/01/2022		873,037.50	873,037.50			
08/01/2023		873,037.50	873,037.50			
08/01/2024		873,037.50		873,037.50	-873,037.50	-720,130.39
08/01/2025		873,037.50		873,037.50	-873,037.50	-698,656.02
08/01/2026		873,037.50		873,037.50	-873,037.50	-677,822.01
08/01/2027	1,015,000.00	2,373,037.50		2,373,037.50	-1,358,037.50	-1,020,167.20
08/01/2028	480,000.00	1,813,037.50		1,813,037.50	-1,333,037.50	-971,282.60
08/01/2029	400,000.00	1,773,037.50		1,773,037.50	-1,373,037.50	-970,249.13
08/01/2030	470,000.00	1,733,037.50		1,733,037.50	-1,263,037.50	-866,017.43
08/01/2031	445,000.00	1,693,037.50		1,693,037.50	-1,248,037.50	-830,056.40
08/01/2032	415,000.00	1,653,037.50		1,653,037.50	-1,238,037.50	-798,682.67
08/01/2033	380,000.00	1,623,037.50		1,623,037.50	-1,243,037.50	-777,840.12
08/01/2034	350,000.00	1,593,037.50		1,593,037.50	-1,243,037.50	-754,506.47
08/01/2035	5,650,000.00	2,573,037.50		2,573,037.50	3,076,962.50	1,802,891.26
08/01/2036	5,935,000.00	2,702,737.50		2,702,737.50	3,232,262.50	1,837,795.74
08/01/2037	6,230,000.00	2,836,737.50		2,836,737.50	3,393,262.50	1,872,187.31
08/01/2038	6,545,000.00	2,979,737.50		2,979,737.50	3,565,262.50	1,908,811.93
08/01/2039	6,870,000.00	3,131,287.50		3,131,287.50	3,738,712.50	1,942,366.76
08/01/2040	7,215,000.00	3,285,937.50		3,285,937.50	3,929,062.50	1,980,772.70
08/01/2041	7,575,000.00	3,449,531.26		3,449,531.26	4,125,468.74	2,018,165.39
08/01/2042	7,955,000.00				7,955,000.00	3,776,242.10
08/01/2043	6,065,000.00				6,065,000.00	2,793,204.39
	63,995,000.00	42,731,129.18	4,898,710.42	37,832,418.76	26,162,581.24	10,847,027.15

Bond Investor Point of View

Series E bond investors only lost \$ 12.05 million in today's dollars using a 3.0504063 % rate of return from their muni bond accounts.

In other words, if they also bought the refinanced CIBs, they would have to put up an additional \$12.05 million into their muni bond account at the time of refinance to make up the \$26.16 million saved by Piedmont taxpayers.

New Investment

\$ 12,050,000
\$ 12,344,059
\$ 12,720,603
\$ 13,108,633
\$ 13,508,500
\$ 13,920,564
\$ 14,345,198
\$ 14,782,784
\$ 15,233,719
\$ 15,698,410
\$ 16,177,275
\$ 16,670,748
\$ 17,179,273
\$ 17,703,311
\$ 18,243,334
\$ 18,799,830
\$ 19,373,301
\$ 19,964,265
\$ 20,573,256
\$ 21,200,824
\$ 21,847,536
\$ 22,513,974
\$ 23,200,742
\$ 23,908,459
\$ 24,637,764
\$ 25,389,316
\$ 26,163,793

Taxpayer Point of View

Present value calculations for taxpayers is purely hypothetical since future savings are not bankable today. These savings are relative to the excessive future gouging of keeping the 2013 CAB.

Investing savings as they occur might be doable but the amounts are smaller than the \$5000 bond investment limits and initially the savings are negative. This analysis doesn't make sense.

The present value calculation in column N is wildly inaccurate for taxpayers. This creative accounting is misleading.

Average Savings per Parcel (assumes 3000 parcels)

\$ (291.01)
\$ (291.01)
\$ (291.01)
\$ (452.68)
\$ (444.35)
\$ (457.68)
\$ (421.01)
\$ (416.01)
\$ (412.68)
\$ (414.35)
\$ (414.35)
\$ 1,025.65
\$ 1,077.42
\$ 1,131.09
\$ 1,188.42
\$ 1,246.24
\$ 1,309.69
\$ 1,375.16
\$ 2,651.67
\$ 2,021.67