

# Refunding+™

**Bond Structuring • Current Refunding  
Advance Refunding • Calculation of Optionless Rates**



## A Cutting-Edge Excel Tool for Debt Management

- Calculates Refunding Efficiency<sup>1</sup> to determine when to act
- Reports negative arbitrage based on escrow yield
- Extracts spot rates from 5% callable scale for proper discounting
- Incorporates current and prospective transaction fees
- Calculates combined value of call and advance refunding options
- Sets fair coupon, or price given coupon, for refunding bond

$$Efficiency = \frac{PV\ Savings}{\Delta\ Option\ Value}$$

<sup>1</sup> [“Refunding Efficiency: A Generalized Approach”](#)

### Impetus for Change in Municipal Finance

- SEC/MSRB regulations
  - Dodd-Frank certification requirements for financial advisors
  - Higher issuer standards for debt management
- See *Massachusetts’ stringent refunding guidelines*

### Single Bond Analysis

149821856		149828472		149613704		150400421		Report	
<b>Refunded</b>		<b>Call</b>		<b>Refunding</b>		<b>Call</b>		<b>PVDate</b>	11/20/2013
Dated	9/1/2008	Type	American	Dated	11/20/2013	Type	American	Savings	2,254,598.63
Maturity	9/1/2030	Delay	0	Maturity	9/1/2030	Delay	0	OptionLoss	3,532,888.41
Coupon	6.0%	Date	9/1/2018	Coupon	5.0%	Date	8/1/2020	Efficiency	63.82%
_Daycount	30_360	CallPrice	100	_Daycount	30_360	CallPrice	100	OldPV	60,401,313.97
_Frequency	Semiannual	_FirstPar		_Frequency	Semiannual	_FirstPar		NewPV	58,146,715.34
_Method	Muni	_Freq	Semiannual	_Method	Muni	_Freq	Semiannual	OldCall	5,160,494.01
_Issue		_LastPar		_Issue		_LastPar		OldAdvRef	18,251.20
_First				_First				OldOption	5,178,745.21
_Last				_Last				NewOption	1,645,856.80
_Face	44,460,000.00			_Face	48,091,139.60			NegativeArbitrage	3,510,218.47
_ExDays				_ExDays				RefundingCoupon	5.0%
_PayDay				_PayDay				RefundingFace	48,091,139.60
_Redemption				_Redemption					

### Additional Functionality

- Portfolio-based rank-ordering of refunding candidates by savings and efficiency
- Present value savings supported by schedule of cashflows, discounted at spot rates

## Who Should Get Refunding+™

**Municipal Issuers**  
Determine the right time to transact

**Financial Advisors**  
Respond to higher analytical standards

**Underwriters**  
Meet issuers’ refunding guidelines

**Portfolio Managers**  
Identify prospective refundings

**Market Activity Forecasters**  
Predict refunding activity

**For trial, please contact Radek Wyrwas ([radek@kalotay.com](mailto:radek@kalotay.com)) (212) 482-0900, press 4**