

Structuring and Marketing a Negotiated Bond Issue



Council of Development
Finance Agencies

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LEHMAN BROTHERS

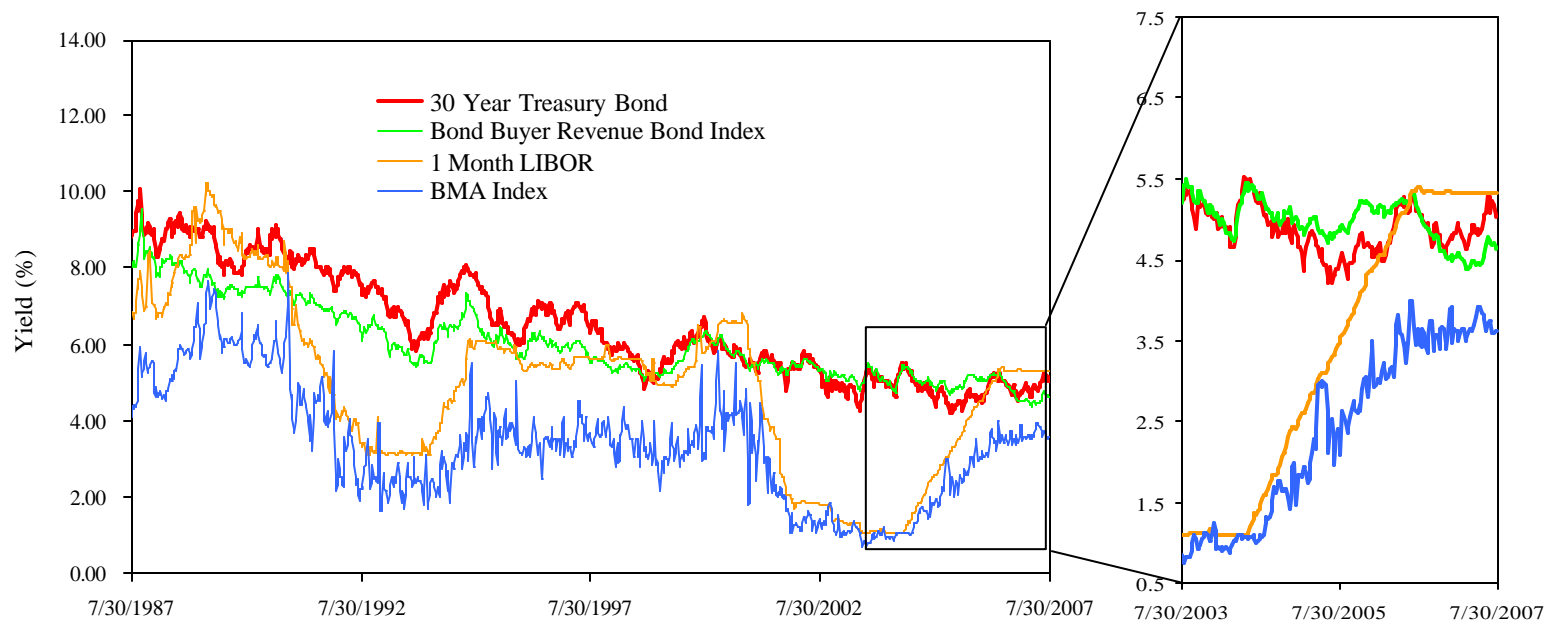
Outline of Discussion

- ☑ Market Update
- ☑ Fixed versus Variable Rate Debt
- ☑ Structuring and Sizing a Bond Issue
- ☑ Bringing a Negotiated Bond Issue to Market
- ☑ Questions and Answers

Market Update

20 Year Taxable and Tax-Exempt Interest Rate History

Twenty Year History of Taxable and Tax-Exempt Interest Rates



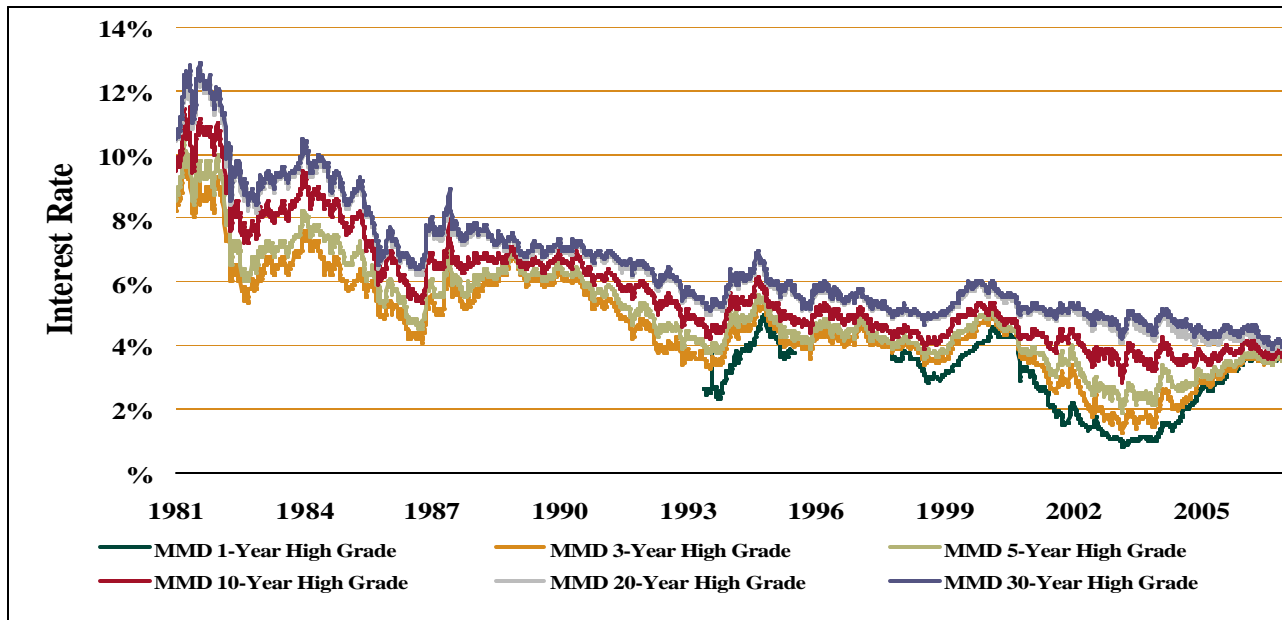
Historical Information

	Low Point	Average Since 1987	Current Rates (7/30/07)	BMA Averages	
30 Year Treasury	4.17% (6/13/2003)	6.56%	4.94%	1-Year	3.63%
Revenue Bond Index	4.38% (3/15/2007)	6.11%	4.63%	5-Year	2.18%
1 Month LIBOR	1.00% (6/25/2003)	5.05%	5.32%	10-Year	2.67%
BMA Index	0.70% (7/10/2003)	3.45%	3.61%	20-Year	3.42%

⁽¹⁾ The 10 Year Treasury Bond is currently yielding 4.76%

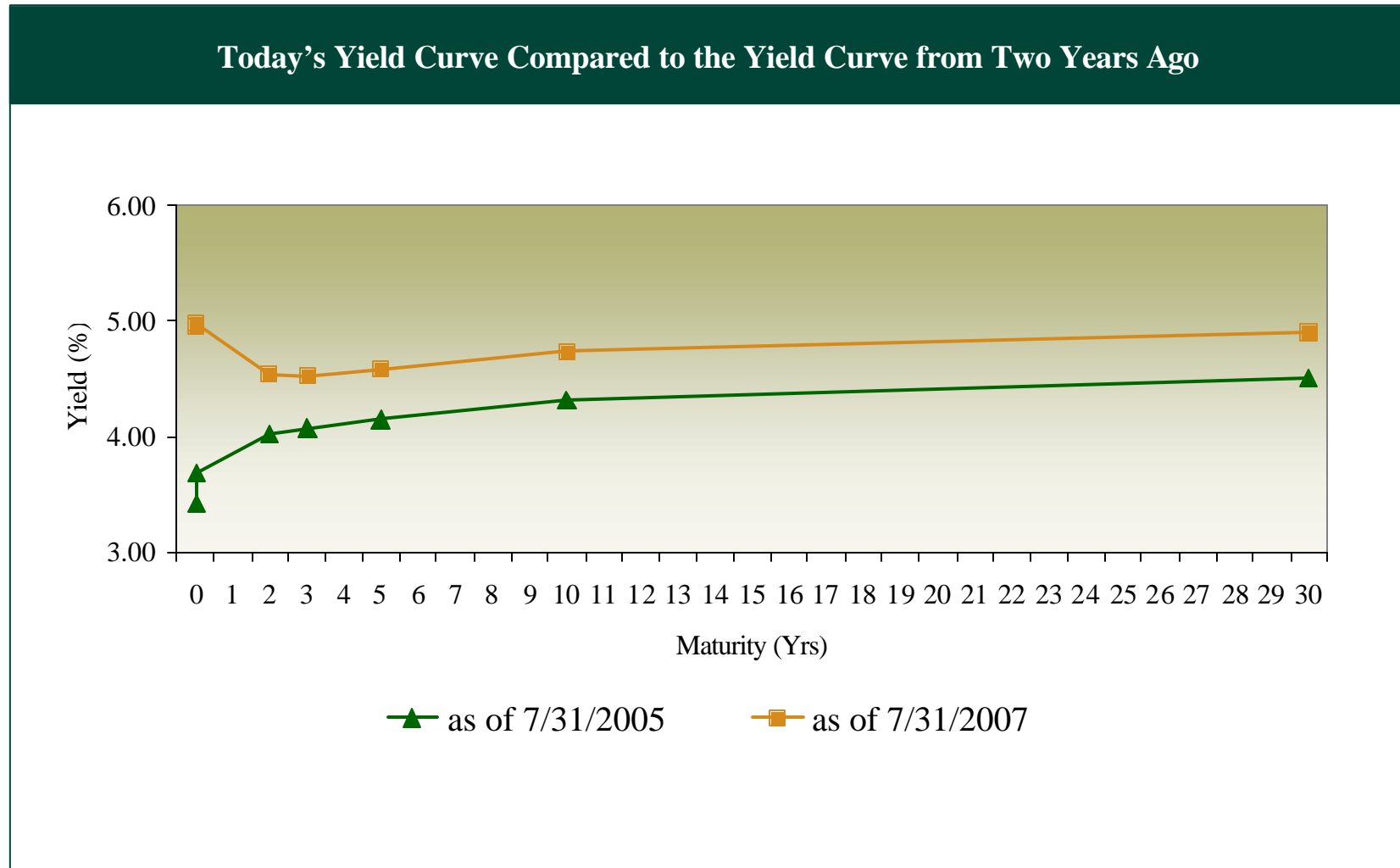
We Continue To Be In a Historically Attractive Interest Rate Environment.

While short-term rates have been rising, long-term rates remain at historically attractive levels.



	Last	Minimum	Maximum	Average
MMD 1-Yr High Grade	3.66%	0.80% on 6/17/03	6.90% on 3/31/89	3.11%
MMD 3-Yr High Grade	3.69%	1.24% on 6/13/03	10.05% on 9/9/81	4.62%
MMD 5-Yr High Grade	3.75%	1.84% on 6/13/03	10.65% on 9/9/81	5.00%
MMD 10-Yr High Grade	3.97%	2.85% on 6/13/03	11.50% on 10/27/81	5.66%
MMD 20-Yr High Grade	4.26%	3.81% on 12/1/06	12.70% on 10/27/81	6.38%
MMD 30-Yr High Grade	4.37%	3.89% on 12/1/06	12.90% on 1/11/82	6.50%

The Yield Curve Remains Flat and Inverted.

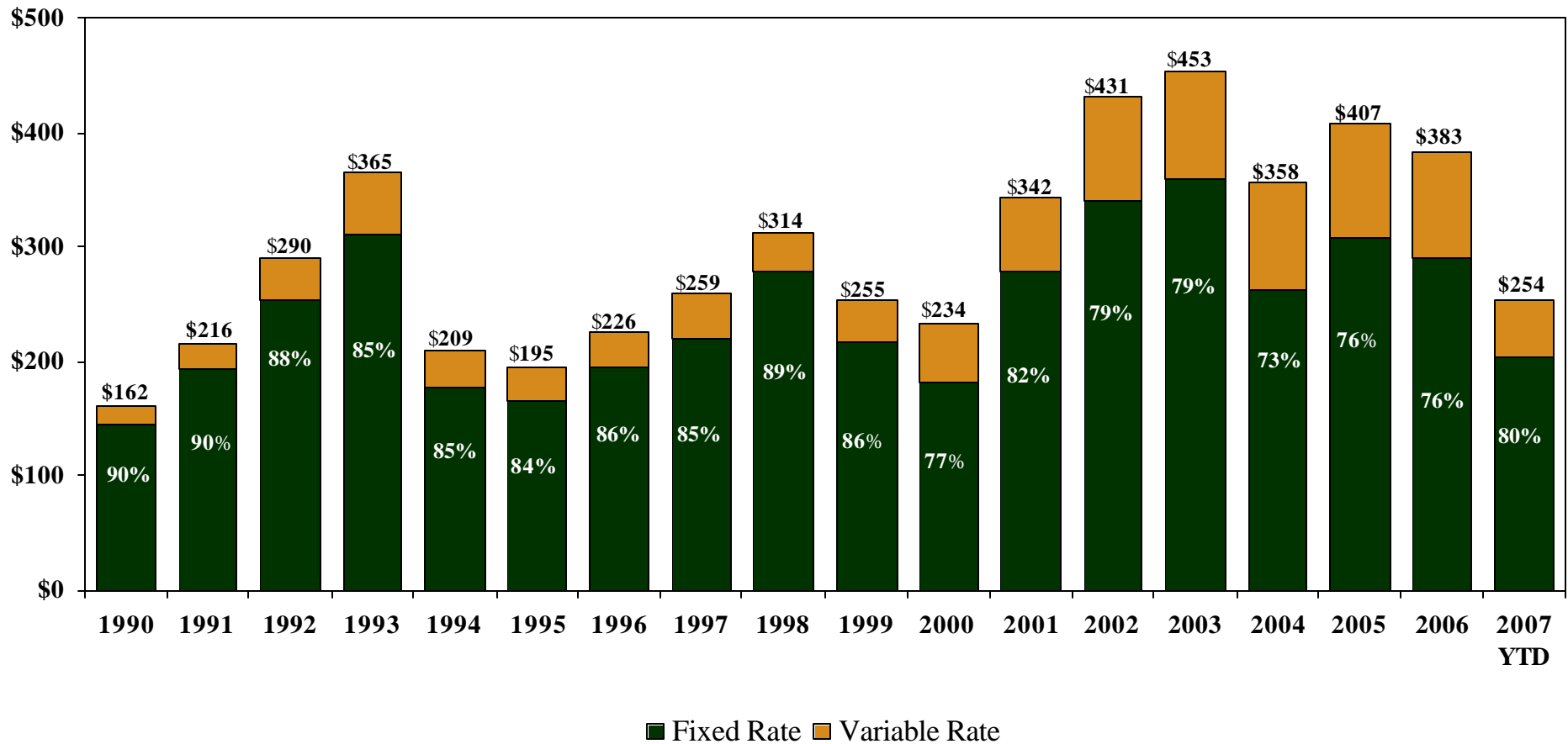


Fixed versus Variable Rate Debt

Fixed and Variable Rate Debt Issuance

Fixed versus Variable Rate Debt

Total Municipal Debt (\$Billions Par Amount Issued)



Source: Thompson Financial.

Fixed Rate Bonds

Advantages

- No Interest Rate Risk
- Budget Certainty
- No Liquidity Facility Needed
- Tax-Exempt Call Options Are Relatively Cheap and Inefficiently Priced
- Include: Bond Funds, Insurance Companies, Arbitrage Accounts, Trust Departments and Retail Investors

Disadvantages

- Higher Initial and Expected Interest Expense
- Inability to Convert to Alternative Modes
- Less Flexible Call Feature than Floaters
- Higher Issuance Costs
- Limited to One Advance Refunding
- Negative Arbitrage Needs to be Minimized on Investment of Project Funds

- The Bond Buyer Revenue Bond Index serves as a proxy for long-term tax-exempt fixed rates.
- At 4.63%, the Index still trades below its ten-year average of 5.29%, indicating that borrowers still have the opportunity to capture attractive absolute rates in the current market.
- Fixed rate financings remain the most common approach in the current market, though variable rate financings have become more common.

Variable Rate Bonds

Advantages

- Structuring Flexibility
- Lower Expected Cost of Capital
- Flexible Call Feature
- Pricing Efficiency
- Ability to Convert to Alternative Modes, Including Fixed Rates
- Ability to Earn Arbitrage on Project Funds
- Debt Portfolio Diversification
- Buyers Include: Money Market Funds, Corporations and Retail Investors

Disadvantages

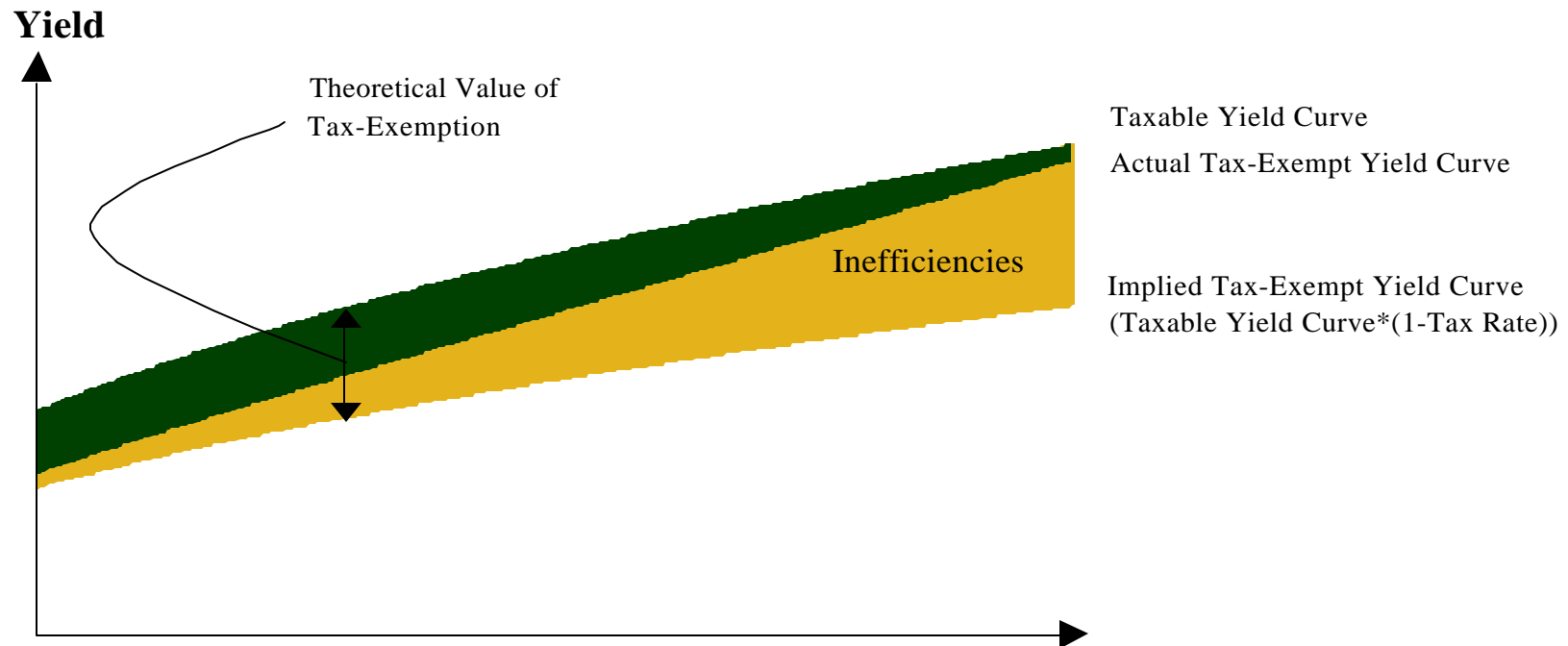
- Interest Rate Risk
- Budgeting Uncertainty
- Investors Have Right to Tender or “Put” Bonds Back to the Issuer
- Pricing of Liquidity Facility Unpredictable
- Additional Administrative Involvement

- The Securities Industry and Financial Markets Association (“SIFMA”) Index, known previously as the BMA Index, is a seven-day high grade market index composed of tax-exempt variable rate demand obligation bonds, calculated weekly. The Index acts as a market indicator that allows municipal professionals a consistent means to track market movements.
- Given the Fed’s 17 consecutive rate increases, totaling four and a quarter percentage points, to 5.25%, variable rates have increased from their historical lows of four years ago, with SIFMA most recently resetting at 3.61%. This compares to a 20-year average of 3.45%.

Relative Value

The Short End of the Tax-Exempt Yield Curve Has Traditionally Offered the Greatest Relative Value.

Benefit of Short Term Tax-Exempt Bonds

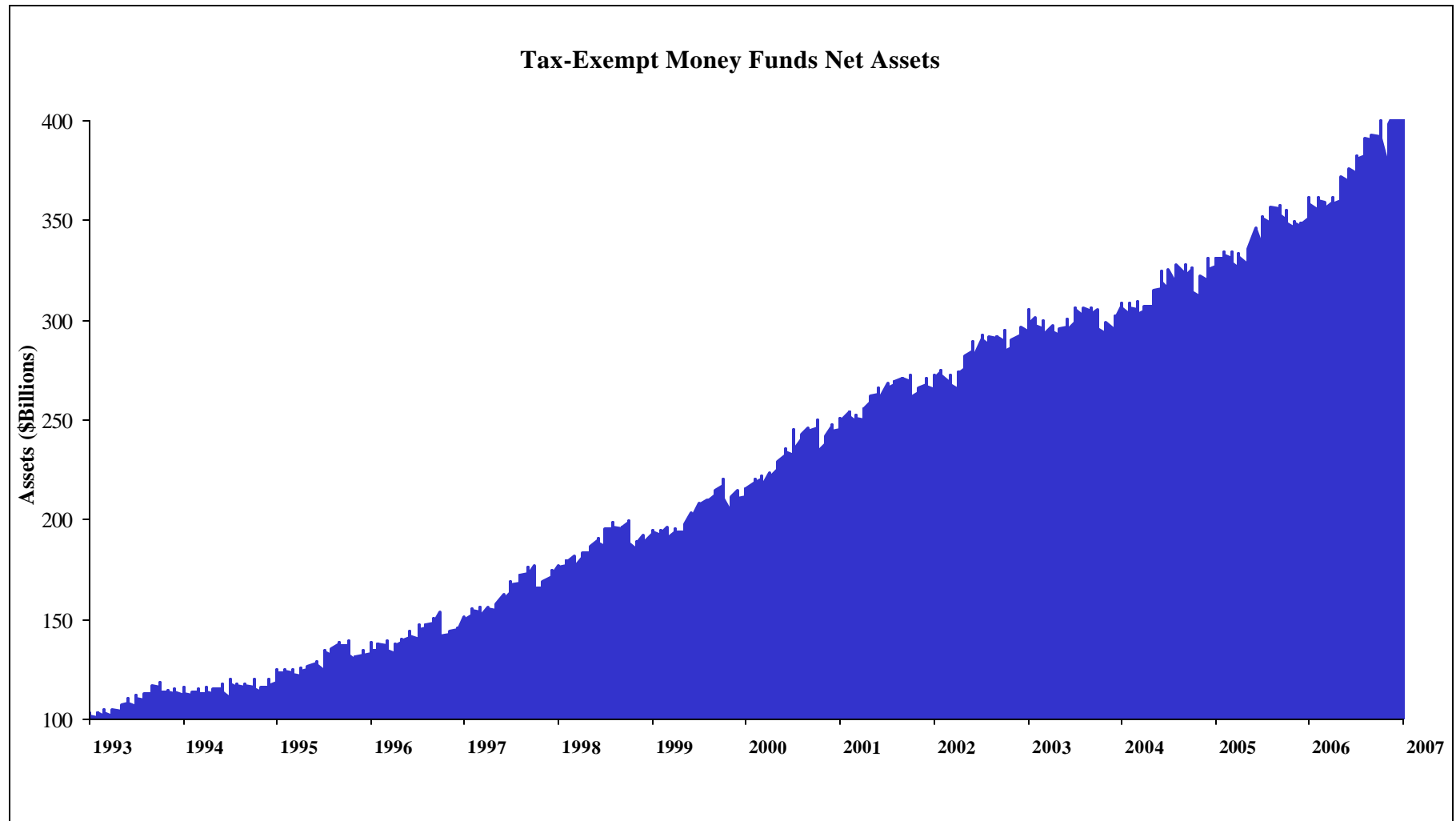


Short-Term: Efficiencies From
Money Market Fund Demand
Liquidity
Strong Demand

Long-Term: Inefficiencies From
Credit Differences
Relative Illiquidity
Tax Rate Uncertainty

Growth in National Tax-Exempt Money Market Fund Net Assets

Fixed versus Variable Rate Debt



Applications of Tax-Exempt Variable Rate Securities

There are several reasons why variable rate debt could be a permanent part of an issuer's capital program.

- **Asset-Liability Management:** Balance sheet assets invested in short-term instruments can serve as a hedge for variable rate liabilities. When variable rate assets and variable rate liabilities are matched, the volatility of net interest expense – interest income less interest cost – is minimized.
- **Flexibility:** Issuers can redeem the bonds at par at various intervals. Floating rate financing can be easily converted to a fixed rate financing.
- **Diversification of Investor Base:** Short-term tax-exempt investors include tax-exempt money funds, bank personal trust departments, tax-paying corporations, and tax-sensitive high net-worth individuals.
- **Ability to Earn Positive Arbitrage:** Variable rate issue may earn legal positive arbitrage if certain IRS spend-down provisions can be met.

Variable Rate Demand Bonds vs. Dutch Auction Securities

Variable Rate Demand Bonds (VRDBs)

Bear interest at a variable (floating) rate that resets daily, weekly, monthly, quarterly, or any integral multiple of three months.

- ◆ Investors have right to tender or “put” the bonds back to the Issuer at par
- ◆ Requires liquidity support (external or self-liquidity)
- ◆ Carry both long- and short-term credit ratings
- ◆ Generally use combination of insurance and Standby Bond Purchase Agreement (SBPA) or a Letter of Credit (LOC).
- ◆ Most common form of variable rate financings

Dutch Auction Securities (SAVRS)

Bear interest at a variable (floating) rate set through a dutch auction process held every 35 or 7 days (or any multiple thereof).

- ◆ No put option for investors
- ◆ No need for liquidity facility
- ◆ Carry only long term credit rating
- ◆ Generally carry insurance
- ◆ Typically trade at a spread to VRDBs

Profile of Variable Rate Investors

Variable Rate Demand Securities

Tier One

- ◆ **Money Market Funds** are the largest and most consistent investors in the short-term market, representing approximately 70% of the total market

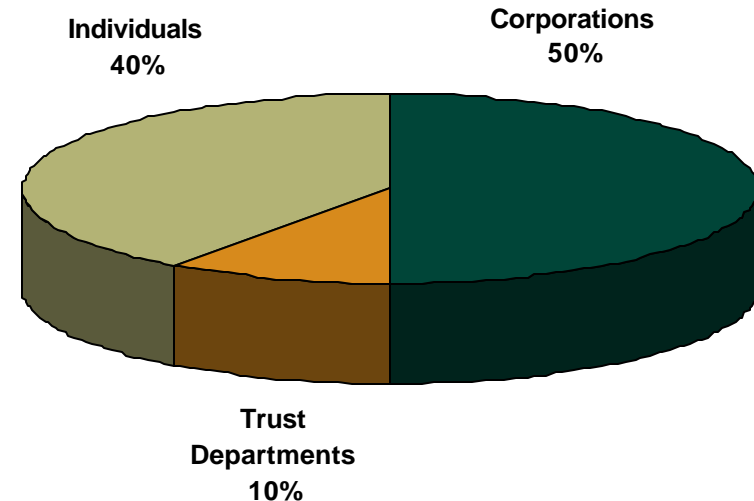
Tier Two

- ◆ **Corporations** may also be significant investors in short-term notes, representing as much as 20-25% of the total market. However, they typically are "crossover" buyers and enter the market only when yields are attractive as an alternative to taxable investments

Tier Three

- ◆ **Commercial banks, trust funds, insurance companies, and retail investors** represent approximately 5-10% of the total short-term market

Dutch Auction Securities



Structuring and Sizing a Bond Issue

Security Features

- ◆ Pledged Revenues
- ◆ Bond Covenants
- ◆ Other Security Features

Pledged Revenues

- ◆ **General Obligation (“GO”) Bonds** – Secured by a pledge of the issuer’s full faith and credit to repay bonds. The “full faith and credit” backing of a General Obligation bond implies that all sources of revenue, unless specifically excluded, will be used to pay debt service on the bonds.

- ◆ **Revenue Bonds** – Revenue bonds are payable from a specific stream of revenues, such as a user fee or dedicated tax, and are not backed by the full-faith and credit of the issuer. They are issued to finance specific enterprises or projects and are usually secured solely by revenues from those projects. Revenue bonds can generally be grouped into six categories:
 - Utilities
 - Higher Education, Healthcare and Other Not-For-Profit
 - Housing
 - Transportation
 - Industrial Development, Pollution Control, and Other Exempt Facility Bonds
 - Securitized Revenue Bonds

Bond Covenants and Other Security Features

Rate Covenants - Under a rate covenant, the issuer pledges that rates will be set high enough to meet operation and maintenance expenses, renewal and replacement expenses, and debt service. An alternative form of rate covenant requires that rates be set so as to provide a safety margin above debt service, after operation and maintenance expenses are met.

Example: *“The Board will fix, charge and collect fees so that the Revenues will at all times be sufficient in each Fiscal Year to pay the Current Expenses and to provide funds at least equal to (i) 115% of (1.15 times) the Principal and Interest Requirements....”*

Additional Bonds Test (ABT) - Protects the security or pledged revenues of existing bondholders. The additional bonds test must be met by the issuer in order to borrow additional debt secured by the same revenue source as the outstanding bonds.

Example: *“The net revenues in each of the two full Fiscal Years immediately preceding the date of issuance of such proposed Additional Bonds must be equal to at least 130% of the estimated Annual Debt Service for the year following the proposed issuance.”*

Bond Covenants and Other Security Features (cont.)

Debt Service Reserve Fund - Provides a cushion to make timely debt service payments in the event of temporary adversity. Federal law limits the amount of bond proceeds that can be used to fund the debt service reserve fund to the lesser of:

- ◆ *10% of the principal amount of the issue;*
- ◆ *Maximum annual debt service; and*
- ◆ *125% of average annual debt service on an issue*

Other Covenants - Additional covenants might include a provision for insuring the project, a review by an independent auditor, or a prohibition against the sale of the project's facilities prior to repayment of outstanding debt, among others.

Credit Enhancement

Other Security Features: Credit Enhancement

- ◆ **Credit enhancement is a means of substituting the credit of the issuer (really the security pledge) with that of a higher rated third party guarantor.**
 - Enhance the market for bonds.
 - Compare the premium or fee paid for credit enhancement to the expected interest rate savings to determine whether or not credit enhancement is cost effective.
 - Typically takes the form of bond insurance or letters of credit (LOC).

Bond Insurance

- ◆ Several well-established bond insurers.
- ◆ Premium is based on total debt service and paid up-front as a one time fee.
- ◆ In effect for life of bond issue.
- ◆ Generally used for fixed rate deals.

Letters of Credit (LOC)

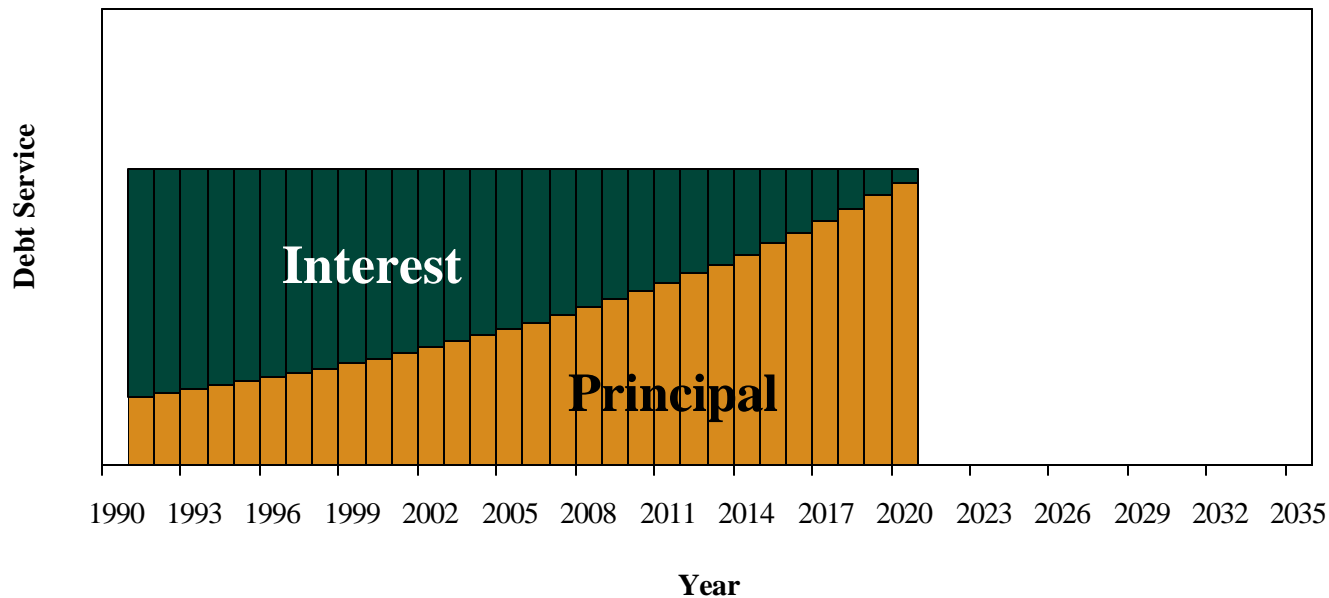
- ◆ Typically provided by commercial banks.
- ◆ Premium is based on amount of debt outstanding and paid over time.
- ◆ Most LOCs carry an initial term shorter than the term of the bonds and must be renewed or replaced at each expiration date.
- ◆ Generally used for variable rate deals.

Principal Amortization

$$\text{Debt Service} = \text{Principal} + \text{Interest Payments}$$

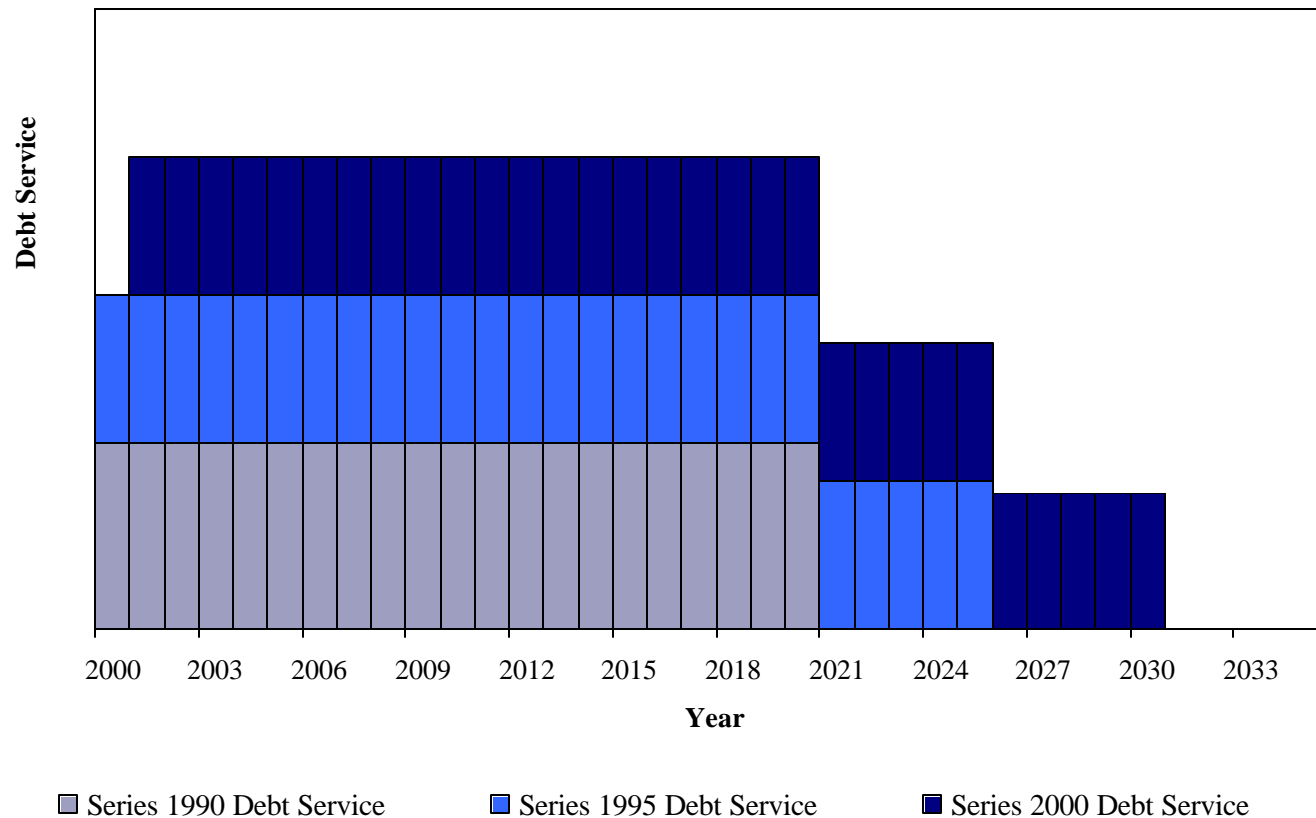
Level Debt Service – principal amortization structured such that annual debt service payments are level or the same throughout the life of a particular bond issue

Level Debt Service Structure



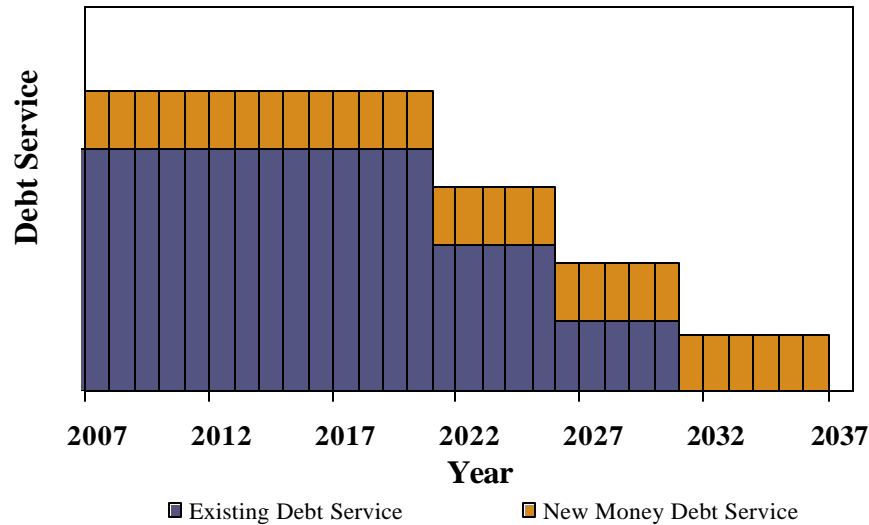
Impact of Issuing Multiple Stand-Alone Level Debt Service Issues Over Time

Multiple Stand-Alone Level Debt Service Structures

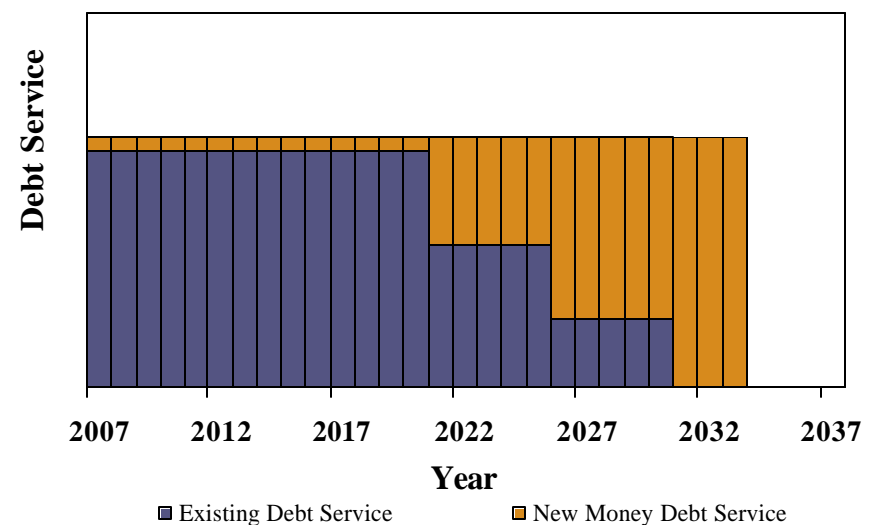


Principal Amortization Options

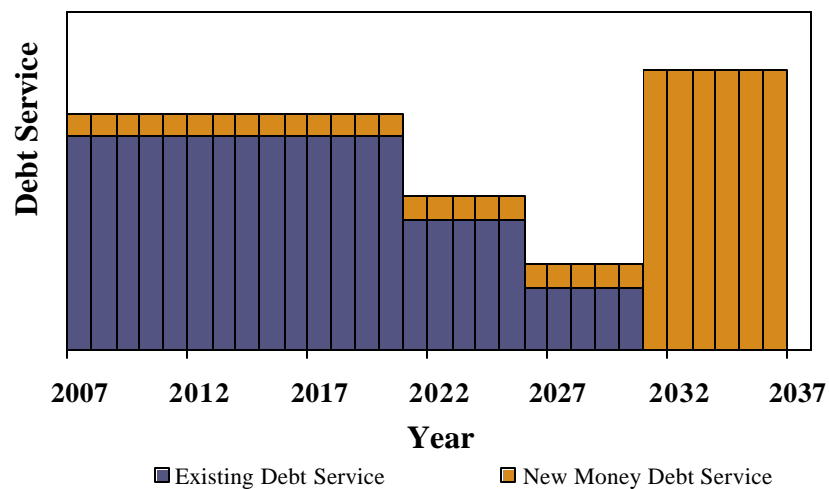
Level Debt Service Structure



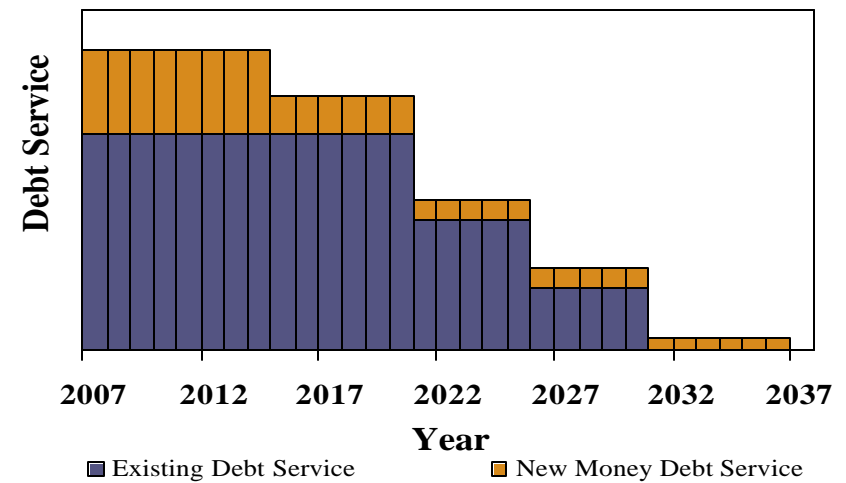
Wrapped Debt Service Structure



Deferred/Back-Loaded Debt Service Structure



Accelerated/Front-Loaded Debt Service Structure



Structural Elements

- ◆ Serial versus term bonds
- ◆ Call features
- ◆ Current interest, discount and premium bonds

Current Interest, Discount and Premium Bonds

	Yield	Coupon	Price	Par Amount Needed to Generate \$50 million in Proceeds
Discount Bond				
	>			
	4.50%	4.25%	95.92	\$52,130,000
Par Bond				
	=			
	4.50%	4.50%	100.00	\$50,000,000
Premium Bond				
	<			
	4.50%	5.00%	103.88*	\$48,135,000

* Priced to call @ 100%.

Sizing the Issue

- ◆ Sources and Uses of Funds
- ◆ Costs of Issuance

Sources and Uses of Funds

Sample Sources and Uses Table

Based on \$50 Million in Capital Financing Needs

Sources:		
Bond Proceeds		
Par Amount	\$	56,280,000
Net Premium		1,545,000
Accrued Interest		80,000
Total Sources	\$	57,905,000
Uses:		
Project Fund Deposit	\$	50,000,000
Other Fund Deposits		
Debt Service Fund (Accrued Interest)	\$	80,000
Debt Service Reserve Fund	\$	3,607,000
Capitalized Interest Fund	\$	2,750,000
Delivery Date Expenses		
Costs of Issuance	\$	195,000
Underwriter's Discount		
Takedown	\$	281,500
Management Fee	\$	55,000
Expenses	\$	30,000
Bond Insurance	\$	905,000
Other Uses of Funds		
Additional Proceeds	\$	1,500
Total Uses	\$	57,905,000

Borrower's Costs of Issuance

Sample Costs of Issuance Table

Borrower's Costs of Issuance

Rating Agency Fees

Issuer/ Authority Fee

Bond Counsel Fee

Borrower's Counsel Fee

Trustee Fees

Acceptance Fee

Annual Administration Fee

Legal Fees

Auditor's Fee

Printing and Mailing Costs

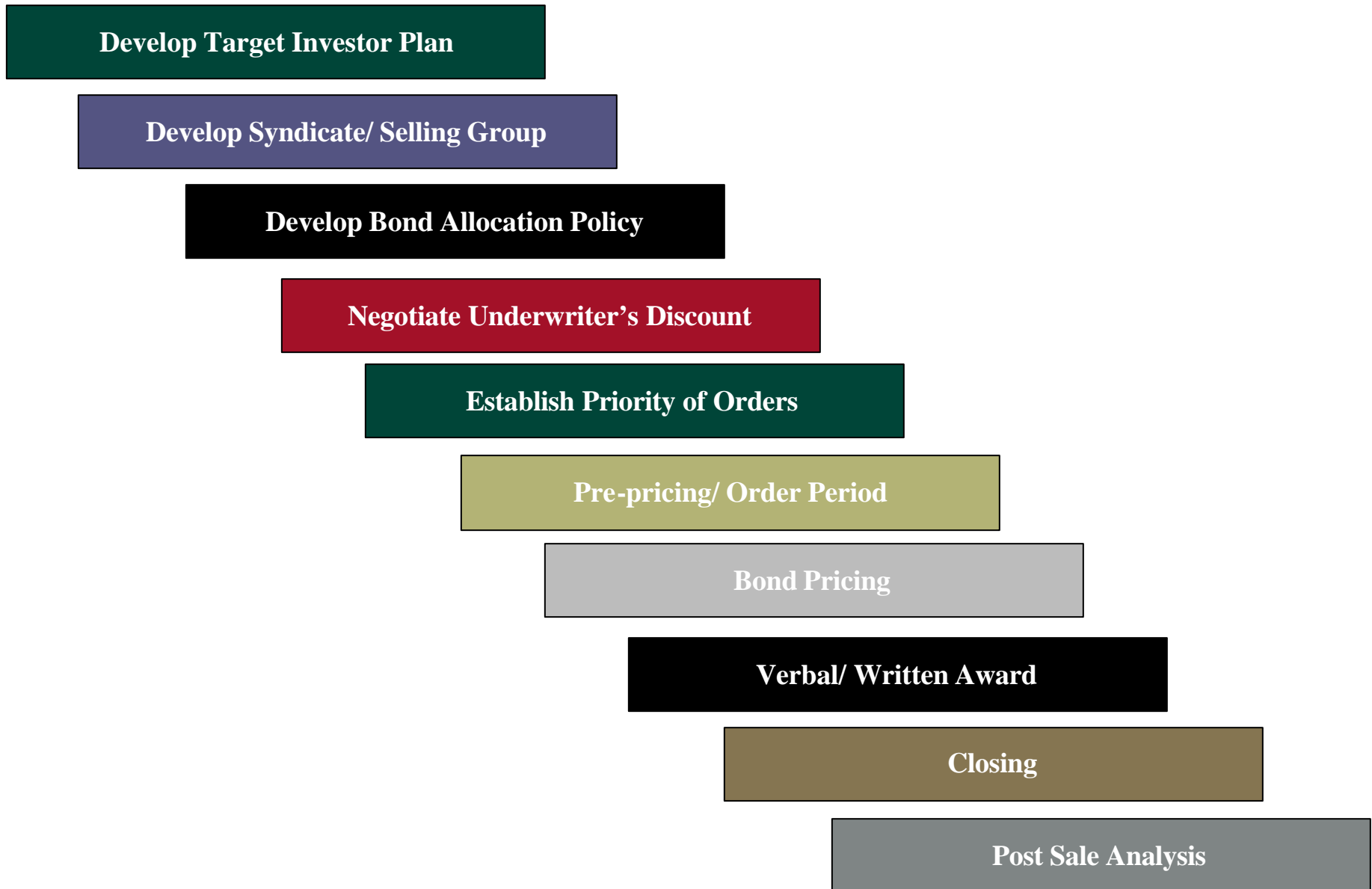
Miscellaneous and Contingency

Note: Underwriter's Counsel fee generally included in Underwriter's discount.

Bringing a Negotiated Bond Issue to Market

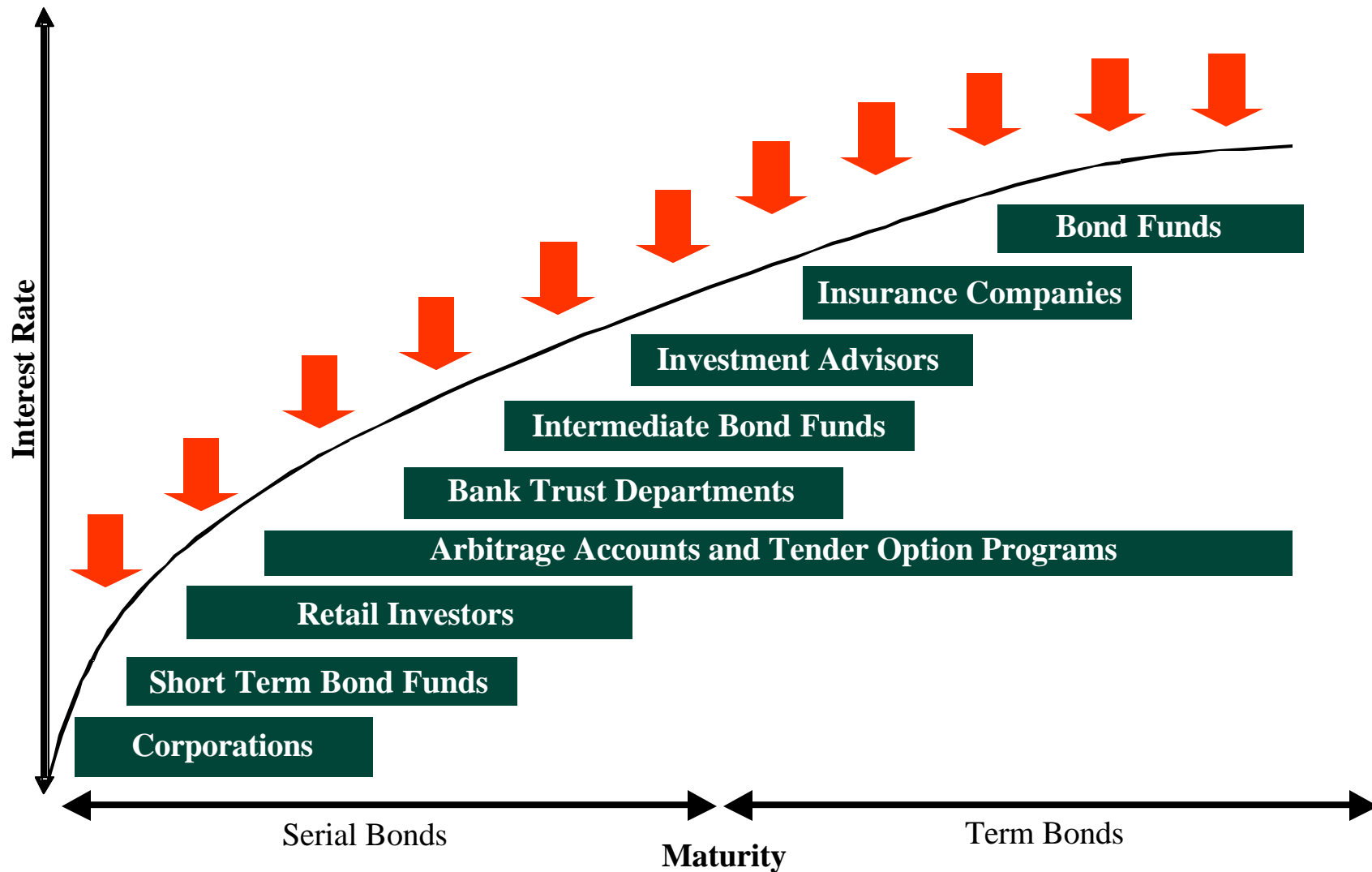
Bringing a Negotiated Issue to Market

Bringing a Negotiated Bond Issue to Market



Depending on the Maturity of the Bonds, the Underwriter will Target the Appropriate Investor Base.

Bringing a Negotiated Bond Issue to Market



Types of Orders

Net Group Orders:

- ◆ An order placed at net (public offering price) where all members of the syndicate share the profit according to their pre-determined liability percentage.

Net Designated Orders:

- ◆ Orders placed at the offering level with the profit given to the dealers that were designated by the customer. Net designated orders are the most common type of order.

Member Orders:

- ◆ These orders are placed by members of the syndicate for their own account or for sale to another dealer or investor (for example, an order placed by an individual through their retail dealer). Orders entered by member firms for their own clients receive the lowest priority since only the firm entering the order will receive the profit.

Retail Orders:

- ◆ Retail investors or bank trust departments.

Priority of Orders

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 11:26:30AM PAGE 1
 Deal code: GSTEHU0407

STATUS REPORT

Syndicate Member Order, i.e. an underwriter putting in for their own account

Institutional Order

**Negative = Oversubscribed
 More orders for this maturity than there are bonds to be sold.**

Total Orders for this Maturity

\$12,550,000
 XYZ Facilities Authority
 Revenue and Refunding Bonds, Series 2006A

MATURITY	AMT	(NS) TOTAL (S) ORDERS	MEMBER ORDERS	PRIORITY ORDERS	BALANCE	MAT
07/01/07	1,565	2,565	1,565	1,000	-1,620	07
		620	620	0		
07/01/08	1,650	2,000	2,000	0	-800	08
		450	450	0		
07/01/09	1,715	500	500	0	1,125	09
		90	90	0		
07/01/10	1,785	500	500	0	875	10
		410	410	0		
07/01/11	1,855	2,905	50	2,855	-1,215	11
		165	165	0		
07/01/12	1,950	2,200	2,200	0	-2,210	12
		1,960	1,960	0		
07/01/13	2,030	2,030	2,030	0	-1,160	13
		1,160	1,160	0		
TOTAL	12,550	12,700	8,845	3,855	2,000 LONG	
		4,855	4,855	0	-7,005 SHORT	

Total amount for sale

Retail Order

Remainder needing to be sold

Total oversubscribed



Questions and Answers

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