

Managing Ongoing Responsibilities for

Variable-Rate Financings and Swaps

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Introduction

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VRDO Overview

What is a Variable Rate Demand Obligation (VRDO) ?

- Variable Rate Demand Obligations (VRDO) are short-term, tax-exempt fixed instruments with yields that are reset on a daily, weekly, monthly, quarterly, or other periodic basis (as defined in the Trust Indenture).
- VRDOs are considered short-term securities with liquidity provided with a “put” feature that occurs with the timing of yield reset (daily, monthly, quarterly).
- VRDOs provide investors with an ability to invest in a high quality/high liquid tax-exempt instruments.
- VRDOs are utilized by a variety of issuers including state and local governments. Examples: Water, Sewers, Universities.
- Most VRDOs are supported by a liquidity provider or letter of credit (LOC) bank or Stand-by Bond Purchase Agreement (SBPA).

How VDROs work

- Bondholders tender bonds with put feature that allows for short-term rates with advance notice to tender agent.
- Trustee notifies the issuer, remarketing agent, liquidity provider, and insurer of the tender.
- Remarketing agent finds a new buyer.
- Trustee facilitates the transfer of payments and principal and interest between buyer and seller.

VDROs – Trustee role

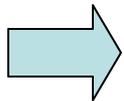
- Liaison between issuer/obligor, remarketing agents, underwriters, and Financial Advisors.
- Receives interest through webfeed and prepares calculation tables to calculate periodic interest for Debt Service.
- Draws on LOC for Debt Service funds due or requests funds from obligor (dependent on specific provisions of agreement).
- Monitors LOC maturities to ensure extensions/replacements done timely for seamless transition.
- Settles tenders through Trustee Operation Center.
- Maintains logs to reflect principal reductions of LOC and Bond debt due to redemptions/maturities.

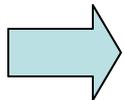
VDROs – Trustee role for failed Remarketings of Tender Bonds

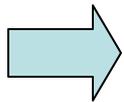
- Trustee coordinates with Liquidity Bank and draws on LOC/Liquidity Facility to fund and pay the failed tender.
- Trustee delivers bank bonds to liquidity bank.
- Trustee requests bank bond cusip.
- Coordinates with liquidity bank to deliver bank bond position

VRDOs – Trustee compliance duties

The trustee places a high value on ensuring:

 Accuracy and Compliance

 Best Practices

 An excellent standard of care

- The trustee uses a four eye policy to confirm payment schedules and amounts.
- The trustee adheres to very specific tender procedures such as timely presentation by bondholders.
- Trustee ensures daily coordination with Trustee Operations Center to confirm successful remarketings.

SWAPs -Trustee role

- Trustee role is directed by issuer/obligor
- Trustee not party to SWAP agreement
- Trustee receives periodic SWAP differential payments, which are typically kept in trust for DS interest payments
- Trustee pays periodic SWAP payment as directed



Why Do Issuers Use Variable & Synthetic (Derivative) Instruments



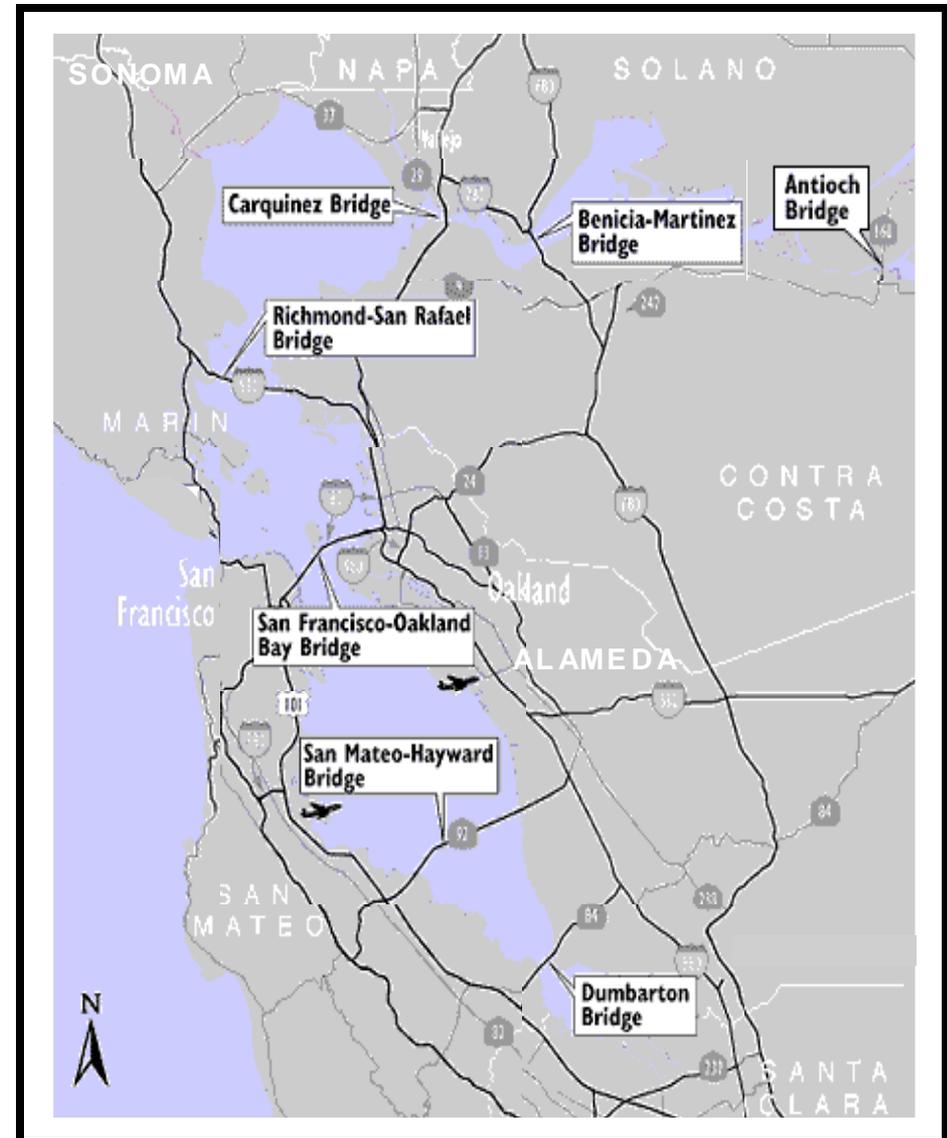
What is the MTC region?

- Nine Counties
- 7 million people
- 4 million jobs
- 101 municipalities
- 1,400 miles of highway
- 19,600 miles of streets
- 23 public transit operators
- MTC Operations
 - \$1 Billion annual transit funding
 - SAFE 2,671 call boxes
 - TransLink® \$100m “smart” card
 - BATA 7 toll bridges, 800,000 ETC accounts



BAY AREA TOLL AUTHORITY

- In 1998 BATA was created to manage the voter approved base toll and \$1.2b (now \$2.35b) construction program
- In 2004 BATA was expanded by the voters to manage a second toll dollar and additional \$1.5b transit capital funding program
- In 2005 the state legislature put BATA in charge of all tolls and the \$8.6b seismic retrofit program



What Kind Of Debt Does BATA Use?

- Fixed Rate Debt – Taxable and tax-exempt (interest is exempt from state and federal taxation) with maturities anywhere from 10 – 40 years
- Variable Rate Debt – Rate “floats” based on weekly reset
- Derivative Financing Structures
 - “Synthetic” Fixed Rate –
 - Variable rate bonds “swapped” to fixed
 - “Synthetic” Variable Rate –
 - Fixed rate bonds “swapped” to variable

Why Use Variable Rate & Swap Instruments

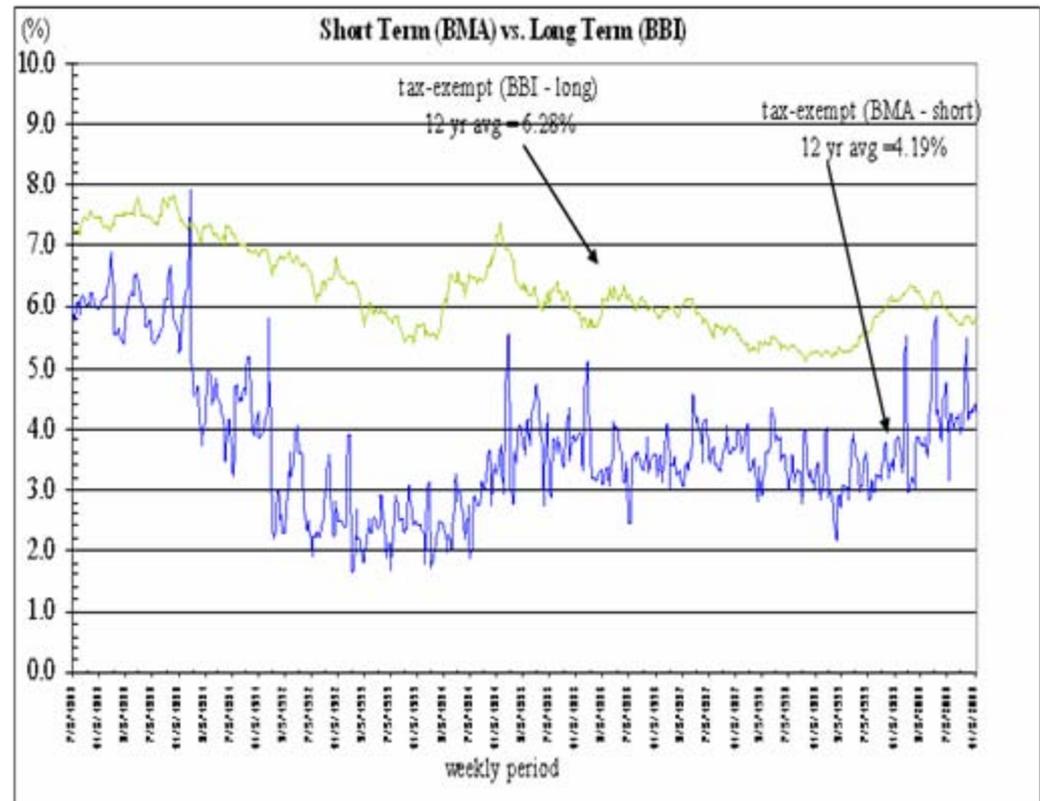
- **Issuers use variable and swap instruments to lower the overall cost of debt**
 - **VRDBs have a lower overall interest cost**
 - **Derivative swap instruments not only have a lower overall cost of interest than the traditional fixed rate equivalent but also provide more rate (cost) certainty than VRDO bonds**
- **The lower cost of debt come at a price of increased administration and overall risk**

Variable Rate Components

- **Reset periods** –
 - Daily, weekly, monthly (CP, term bonds) period when VRDB rates are reset
- **Remarketing Agent** –
 - Sets rate and sells bonds to new investors
- **Liquidity Bank** –
 - Purchases the bonds if investors “put” bonds back to remarketing agent and no new investors are found

VRDB Risks Should Be Worth Effort

- **Added administration**
 - Trustee
 - Remarketing Agent
 - Liquidity Bank
- **Liquidity bank renewal and fees**
- **Interest rate changes**



VRDB VALUE

- Even with “all-in” costs added VRDBs provide substantial savings

Average VRDO	2.69%
Costs	<u>1.50</u>
Total	4.19%

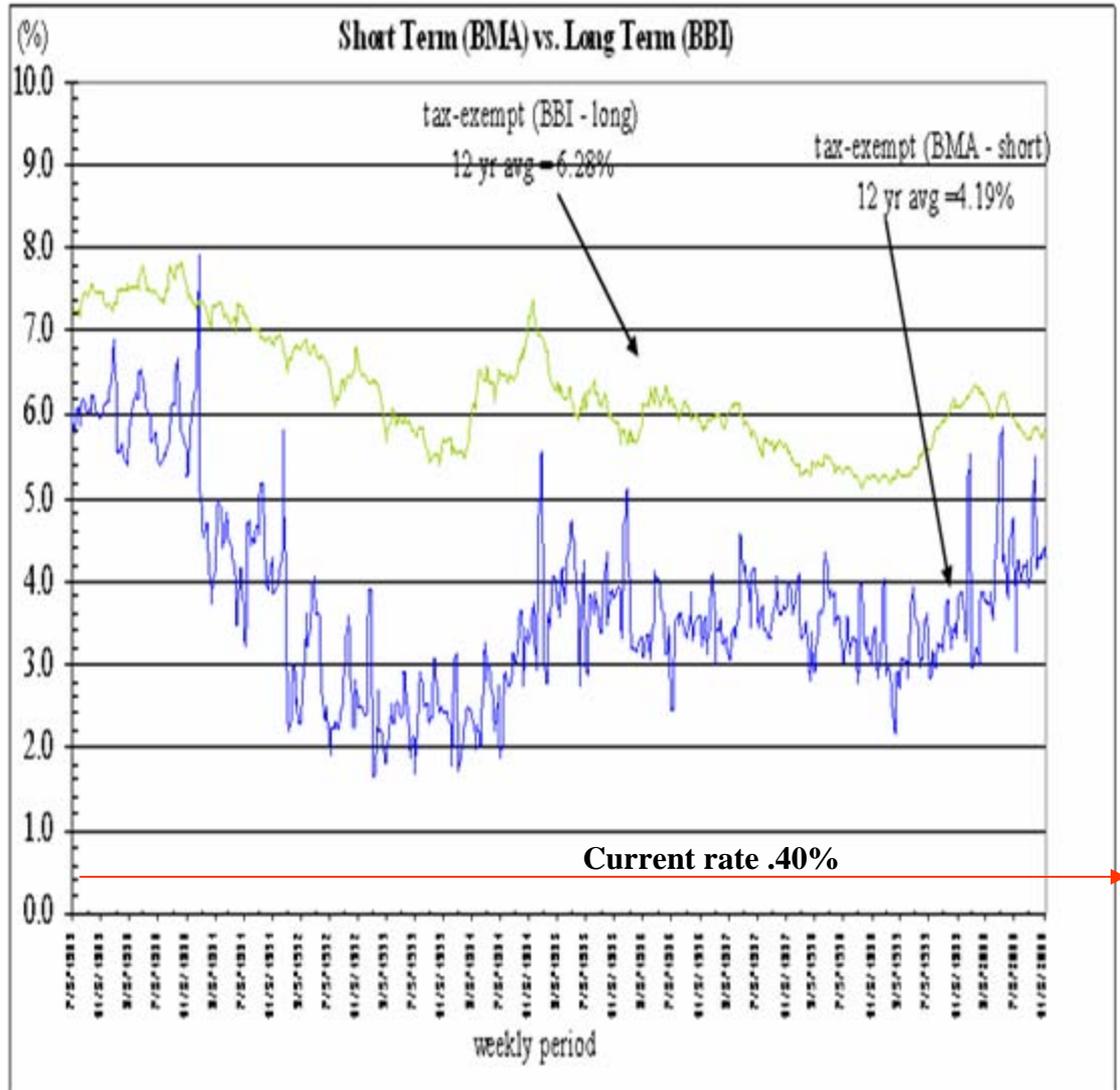
RBI index
6.28%

BATA fixed portfolio
4.82%

- On a \$2 billion portfolio the cash-flow improvement is between \$10 and \$33 million (PV between \$215mm and \$642mm)

- BATA’s current VRDO is substantially lower than historical average

– VRDO	.40%
– Costs	<u>1.35%</u>
– Total	1.75%



Derivative Financing Structures

- **Derivative financing structures are powerful, complex financial products**
- **Basic Derivative Structures**
 - Floating-to-fixed swap (fix payer / synthetic fixed rate debt)
 - Fixed-to-floating swap (fix receiver / synthetic floating rate debt)
- **Why do financial derivatives**
 - To capture significant savings from a traditional debt structure (\$\$\$)
 - To mitigate interest rate risk
- **To help overcome market obstacles, such as:**
 - Limits on advance refunding
 - Lack of liquidity
 - High interest rates
 - Issuer Obstacles (covenants)
- **Swaps should not be used as speculative derivative instruments**

Value Of BATA Swap Portfolio

- The BATA swap portfolio has generated substantial savings compared to traditional fixed rate debt
- Initially the swap/fixed rate spread was over 150 bps narrowing to 50bps when the final swap was completed in 2008
- Averaging the RBI rate at the time of financing with the effective BATA swap rate since 2001 is more than 120 bps below the RBI equivalent (3.77% vs 4.97%)



Basic Swap Terms

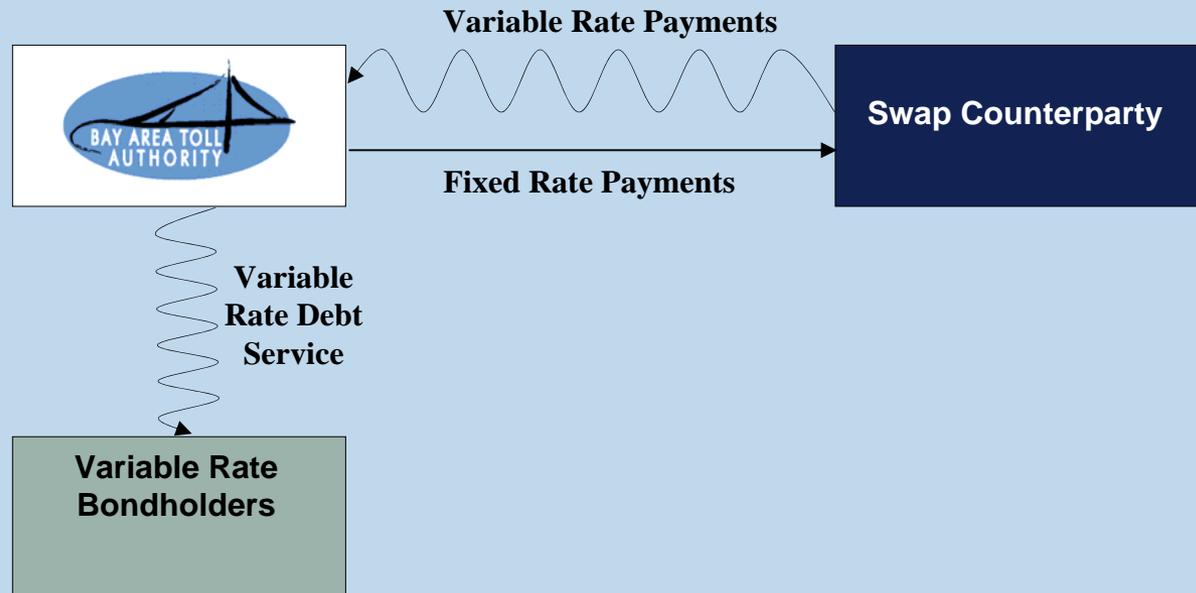
- **Swap:**
 - Is a contractual agreement between two parties to exchange cash flows
- **Derivative:**
 - Structured financial product that derives value from other than face value on bonds
- **Common Indexes**
 - **BMA/SIFMA** Index of highly rated tax exempt variable rate bonds
 - **LIBOR:** London Interoffice Banking Offering Rate Index of commercial taxable rates
- **Counterparty:**
 - Party on the other side of a trade
- **Basis Risk:**
 - Risk that the rate on the payment you receive does not offset the rate on the payment you pay on your bonds
- **Termination Risk:**
 - Risk that the counterparty may default issuer into a termination payment

WHAT IS A SWAP?

- Structured products involve a contractual exchange between BATA (the issuer) and a financial institution (counterparty)
- BATA issues variable rate debt
 - pays the counterparty a contract “fixed swap” rate
 - in return the counterparty pays BATA a payment based on a variable index
- The variable rate payments may not always match – swap payments sometimes being less than the VRDO bond payments
 - When payments from the counterparty are less than the VRDO payments the result is “basis cost”
 - “Basis cost” is added into the overall debt costs (along with fees) to get the true “all-in” cost of the swap transaction

–A swap is an agreement between Issuer and a counterparty where Issuer pays a fixed rate and the counterparty pays a variable rate index

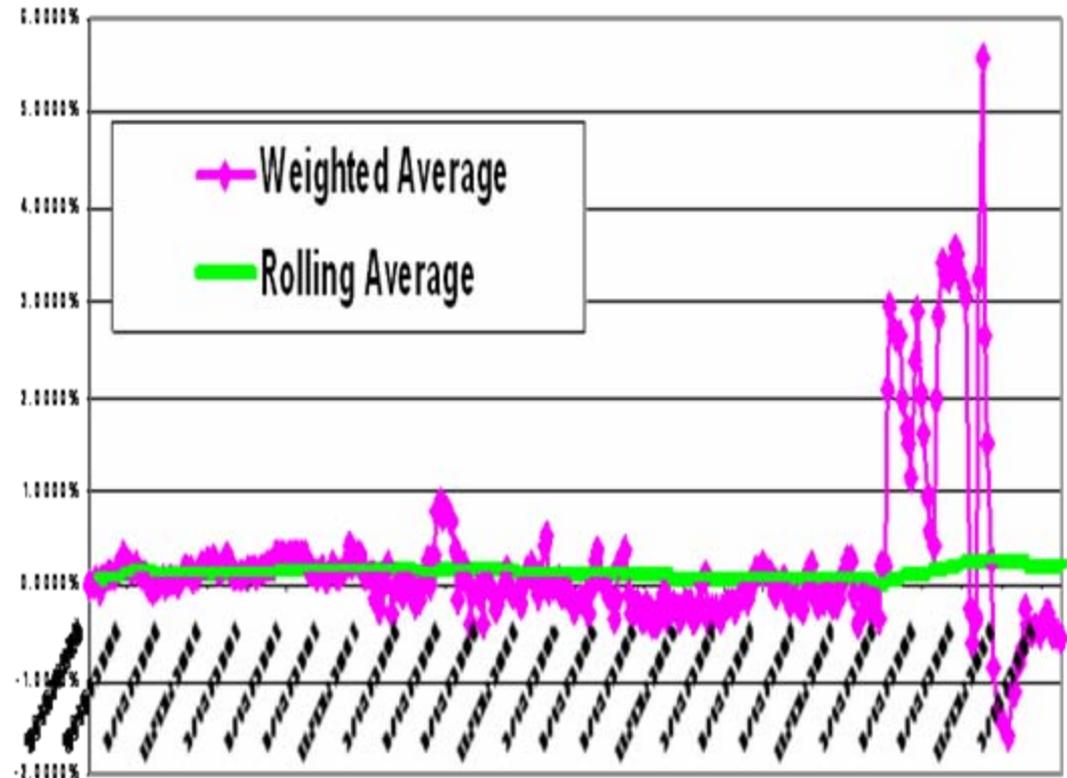
How Does a Swap Work?



Basis Risk

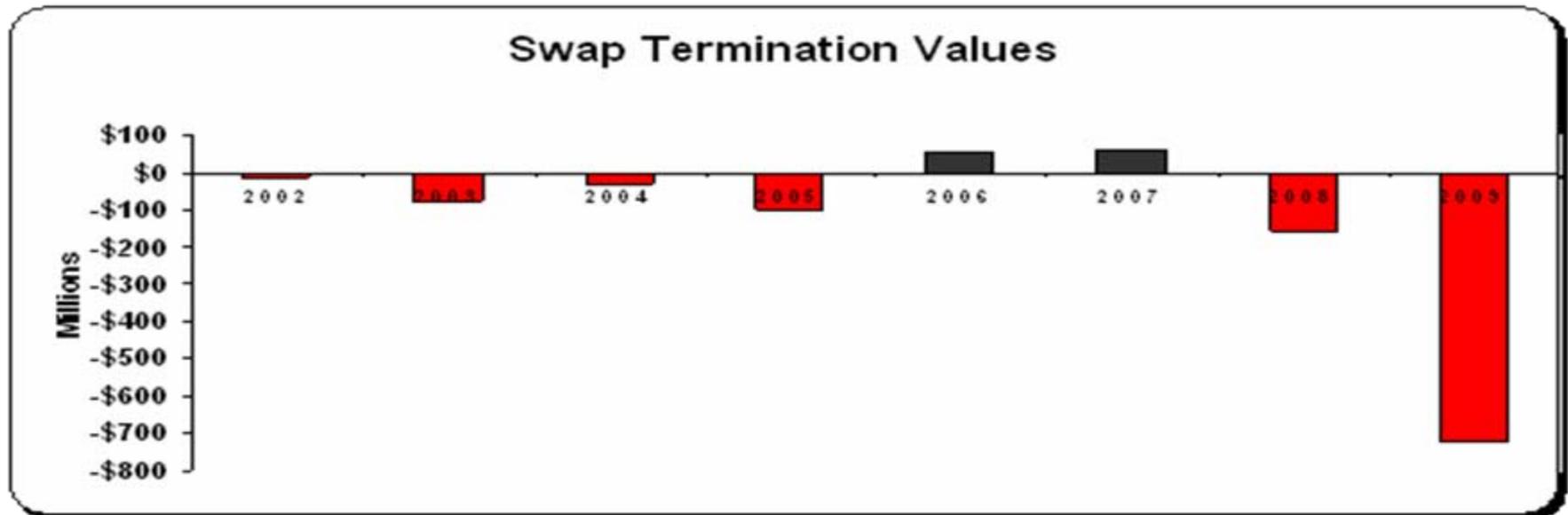
- **Basis Risk is the risk that variable payments from the counterparty will be less than the variable rate made to bondholders**
- **Basis risk is part of every swap portfolio**
- **Basis risk can be mitigated through the use of various indices**
- **Since 2001 BATA has averaged only 22 bps in basis cost (\$4.6 mm)**

BASIS COST
March 2009



Termination Risk

- **Termination risk**
 - The possibility that the counterparty default forcing the issuer into a default payment
 - Swaps have a market value that if not managed properly can result in unfortunate financial consequences such as collateral requirements or termination payments
- **Termination Management**
 - BATA has a negative swap portfolio value of \$722 million
 - BATA does not post collateral to counterparties
 - BATA does not allow counterparties termination rights
 - BATA cannot be defaulted into a termination payment



Mitigating Risks

- The value of a derivative product must be analyzed against the risk exposure.
- Trades often drop “market value” or pay “basis cost” the key is to remember the financing goal (reduced costs and rate certainty)
- In the end, the worst result (should be) either the variable or fixed rate we started with

RISK FACTOR	RISK DISCRIPTION	MITIGATION
Interest rate	Rates increase	Cap \ collar \ synthetic fixed
Embedded option	Cancellation in adverse market	Hedge, don't buy it
Termination	Termination for default Termination for option	One way (issuer) termination
Fair Value	Issuer owes if swap terminated Counter-party owes	Trade for term of financing One-way collateral requirement
Counterparty Credit risk	Counter-party downgrade Non-collateralized value Counterparty Failure	Post collateral Swap insurance Re-bid swap , swap insurance
Basis Risk	Basis for trade (68% libor) doesn't meet vrdo payments	Cost-of-funds swap Reserve for basis risk (overbudget & reserve for deficit)
Rollover risk	Adverse market when swap terminated	Term swap

When To Swap?

When the issuer has evaluated all of the risks and has determined that:

- The issuer understands the swap structure and its mechanics
- The issuer can manage the interest rate swap and debt service
- That the level of risk accepted is in proportion to the transaction size

When the issuer has a financing and transaction plan

- We are not here to “bottom fish” for rates, but to get the lowest rate commensurating to the acceptable level of risk
- If you evaluate risk thoroughly, the swap transaction can be financially rewarding to the entity and project

When you have accepted the risk of variable rate debt, the transaction should be structured so that your exit strategy will allow you to be no worse off than back to VRDB mode

What Do You Need To Know

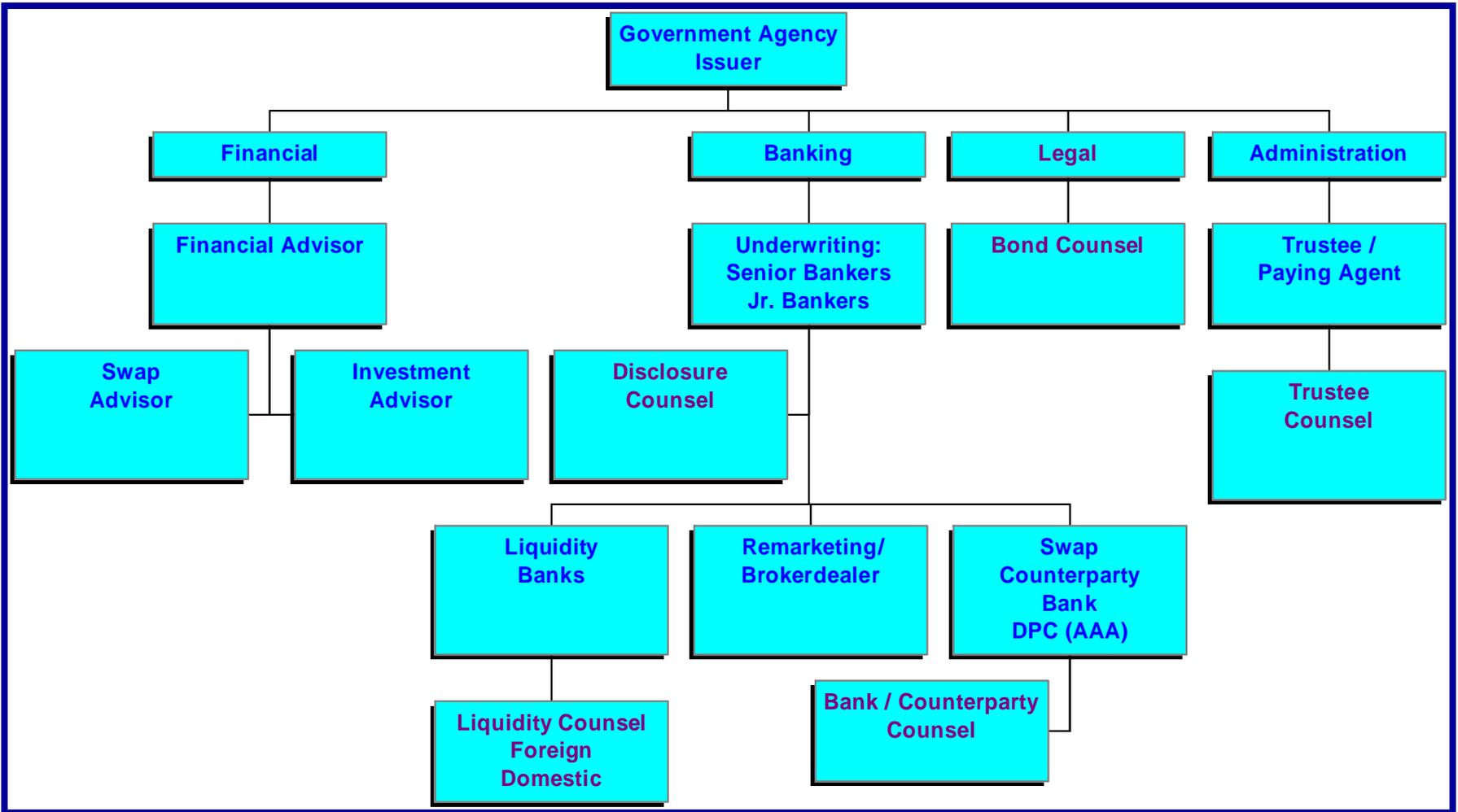
- **A swap is a complex and valuable financing tool**
 - A swap is a management tool that can improve financing efficiency and project delivery
 - A swap is not for speculation
- **Understand the transaction**
 - Do not speculate
 - Do not undertake transactions you do not understand
 - Do not try to guess the market and “cash-out” for profit
- **Stick to basic rules**
 - Consider whether bi-lateral agreements are to your best interests
- **Be prepared for the additional accounting and reporting requirements**

Participants

Generally, the more complex the transaction the higher the fees

Transaction	Banker / Underwriter	Advisors Financial Investment Swap	Legal	Trustee	Liquidity	Remarketing	Swap Counterparty
Fixed	Yes Sr. Bankers Jr. Bankers	Depends	Bond Bankers Trustee	Yes	No	No	No
Variable	Yes Sr. Bankers Jr. Bankers	FA IA	Bond Bankers Trustee Liquidity	Yes	Yes	Yes	No
Synthetic	Yes Sr. Bankers Jr. Bankers	FA IA SA	Bond Bankers Trustee Liquidity Counterparty	Yes	Yes	Yes	Yes

Financing Pyramid





What Has Changed In The Market

Liquidity :

- Lower rated issuers may have no access to liquidity
- Cost of liquidity is no longer “cheap” (15bp to 150bp)
- Less banks offer liquidity
- Lack of insurers protecting lower rated issuers and bank bonds
- Substantial resistance to negotiating contract terms

Swaps:

- Lack of counterparties
- Less highly rated counterparties
- Negative image of “bad” swap contracts
- Terminations
- Default
- Collateral calls
- Resistance to negotiating “municipal” friendly terms:
 - Termination rights
 - Require collateral posting



APPENDIX



What are a local government's responsibilities?

- Review and communicate performance of variable rate instruments
- Pay debt service and related financing fees
- Meet compliance requirements
- Meet disclosure requirements
- Monitor status of credit and liquidity
- Prepare budget projections
- Record retention

Review performance

- Track periodic resets
- Compare performance to indices
- Compare performances between remarketing agents for similar credits
- Talk to remarketing agents

Pay debt service and fees

- Use rate tracking sheet to validate invoices
- Request invoices early to avoid holiday periods
- (You can often) Negotiate with your trustee to pay monthly, instead of weekly

Meet compliance requirements

- Bond documents typically require that liquidity/credit provider be copied on any compliance reporting
- Standby Agreement or Letter of Credit may also impose obligations
- Perform calculations for arbitrage rebate
- Coverage requirements may be different for variable rate bonds

Meet disclosure requirements

- Bonds may be exempt from continuing disclosure

Monitor status of credit and liquidity

- Be aware of facility expiration dates and renewal timelines
- Periodically collect information on current fee levels
- Weigh potential lower fees against costs for switching
- Be aware of alternative facility terms

Prepare budget updates

- Goal is to maximize up-front budget capacity
- Short-term interest rates are easy, but Fed funds target is harder
- Goal is to project an average Fed funds target over a 52 week period
- Fed funds provide some insight into market
- Periodically compare actual vs. budgeted debt service
- Establish reserve for swings in market you cannot anticipate

Record retention

- Establish record retention requirements and procedures
- IRS record retention requirements
 - Term of bonds + 6 years
 - Types of records
- IRS website –
www.irs.gov/taxexemptbond/index.html

To get the advantages of certain complex debt instruments, you will need to actively manage your instruments.

These instruments are not for everyone.