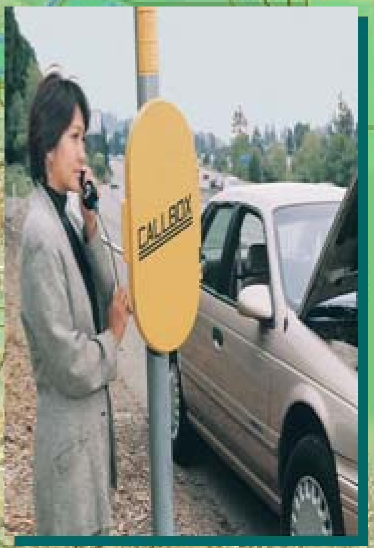
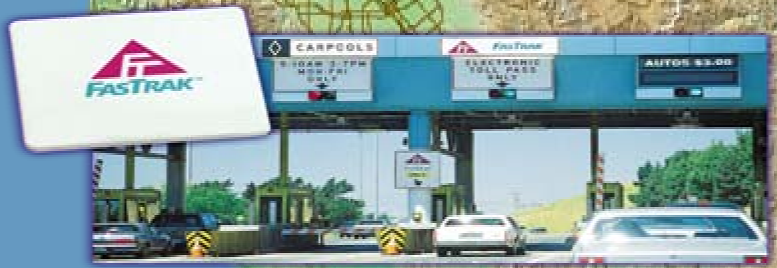
BAY AREA TOLL AUTHORITY

Why Do Issuers Use Variable & Synthetic (Derivative) Instruments

What is the MTC region?

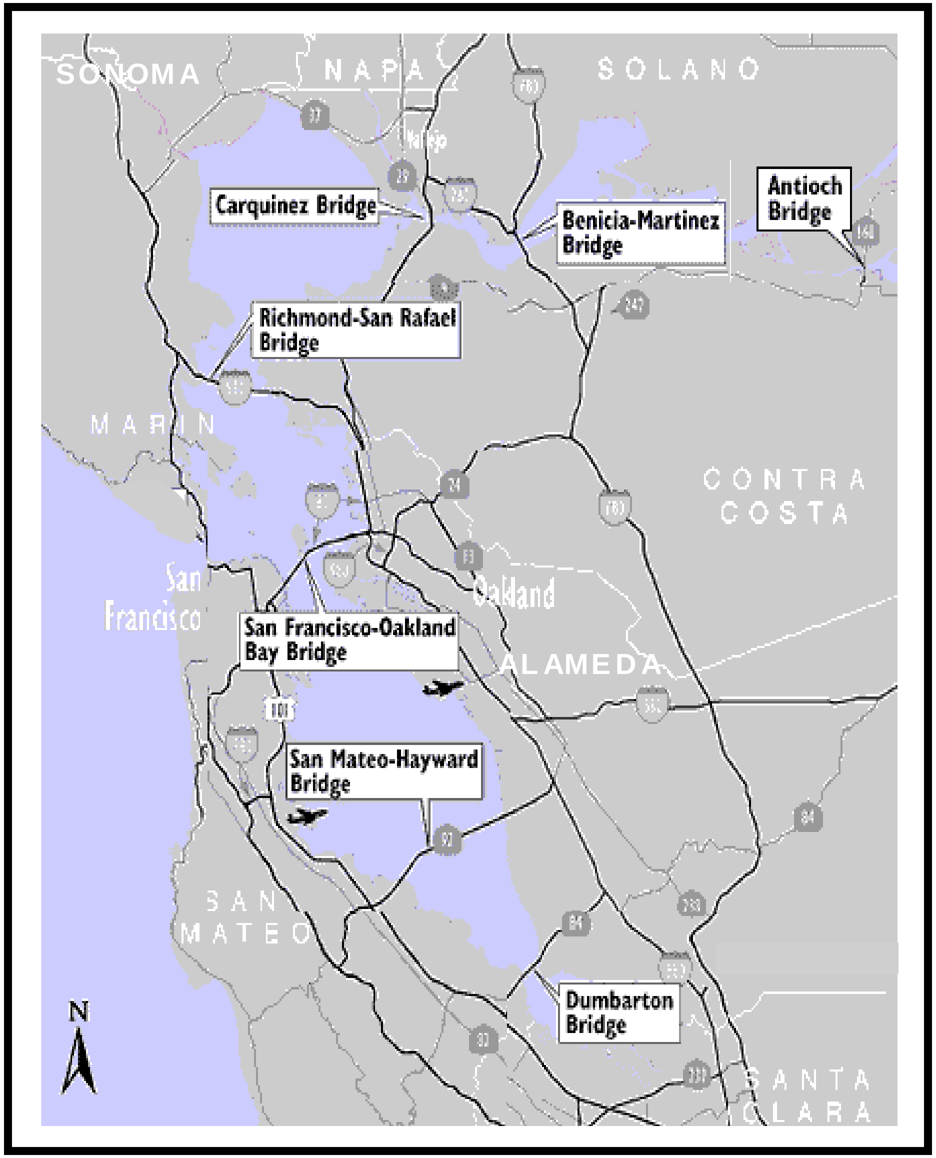
- Nine Counties
- 7 million people
- 4 million jobs
- 101 municipalities
- 1,400 miles of highway
- 19,600 miles of streets
- 23 public transit operators
- MTC Operations
    - $1 Billion annual transit funding
    - SAFE 2,671 call boxes
    - TransLink® $100m "smart" card
    - BATA 7 toll bridges,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

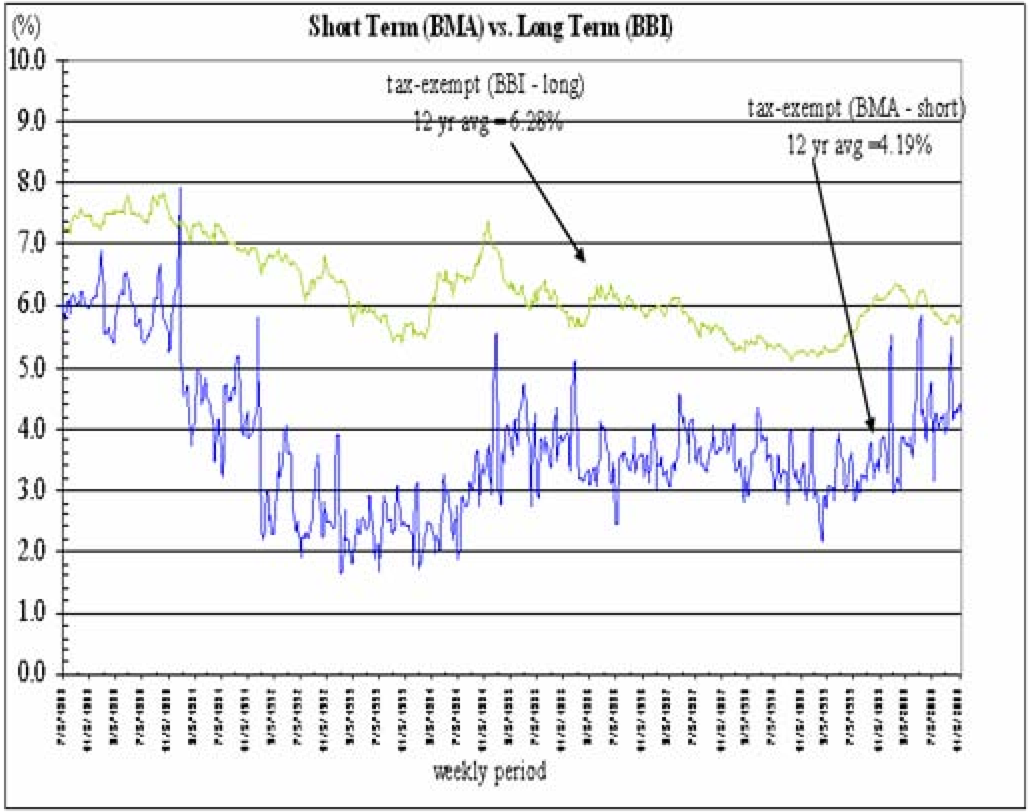
- Issuers use variable and swap instruments to lower the overall cost of debt
  - VRDBs have a lower overall interest cost
  - Derivative swap instruments not only have a lower overall cost of interest than the traditional fixed rate equivalent but also provide more rate (cost) certainty than VRDO bonds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

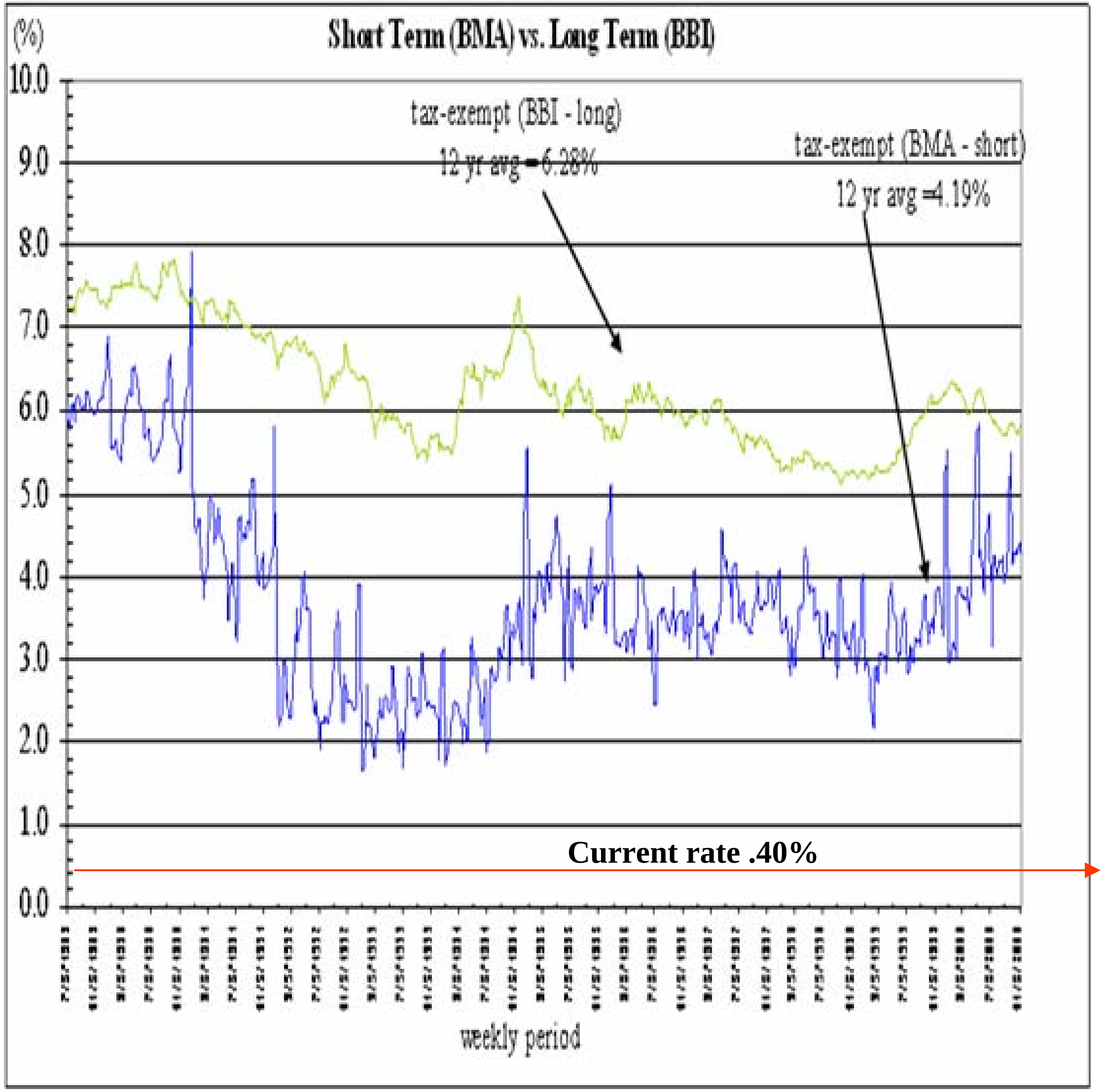
Average VRDO	2.69%
Costs	1.50
Total	%

RBI index	4.19
BATA fixed portfolio	4.82%
	6.28%

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

portfolio the improvement is

- BATA's current VRDO is substantially lower than historical average
  - VRDO .40%
  - Costs 1.35%
  - 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)

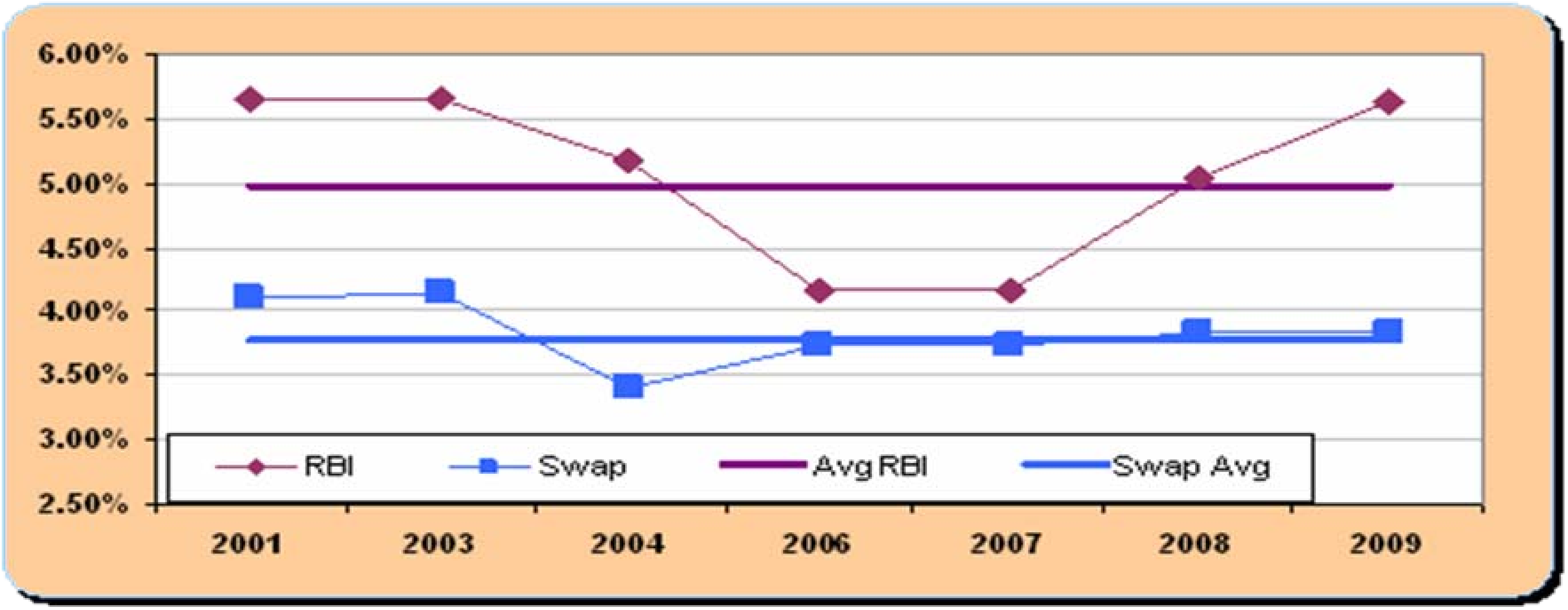
- Why do financial derivatives
  - To capture significant savings from a traditional debt structure ($$$)
  - To mitigate interest rate risk

- 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?

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

– Structured products involve a contractual exchange between BATA (the issuer) and a financial institution (counterparty)

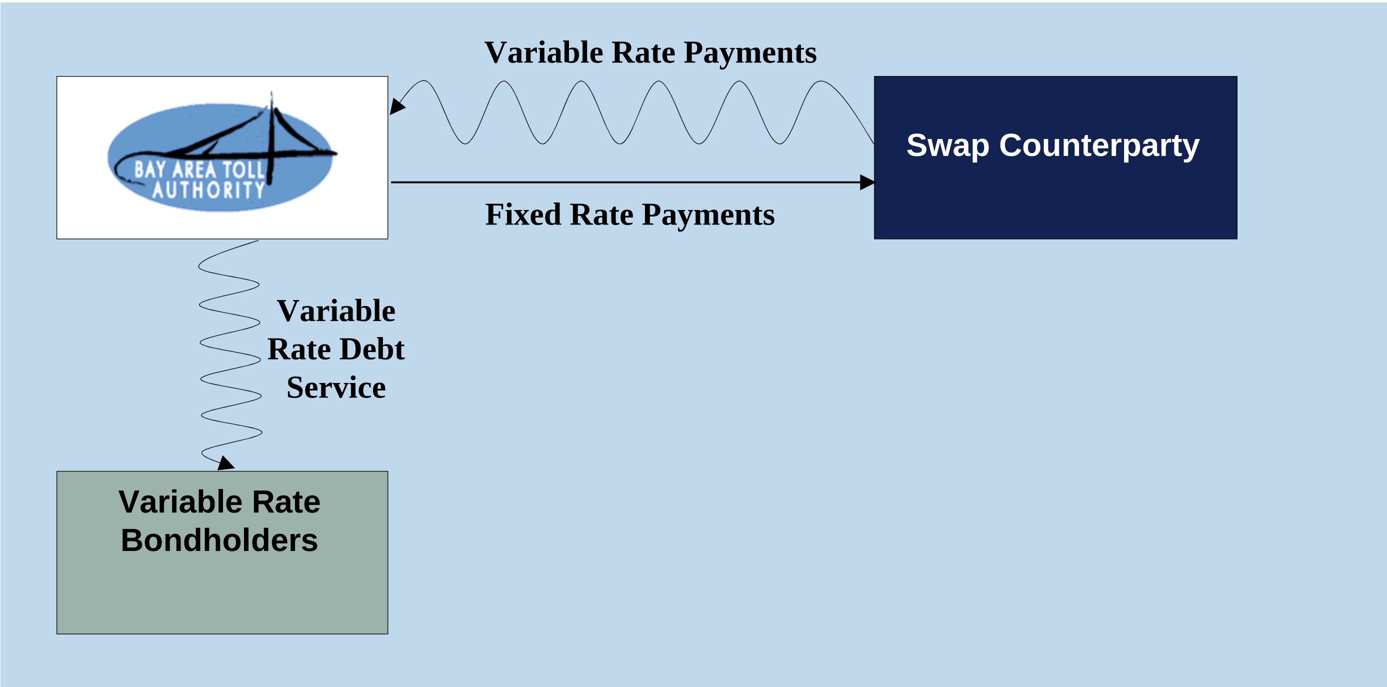
– BATA issues variable rate debt

- 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

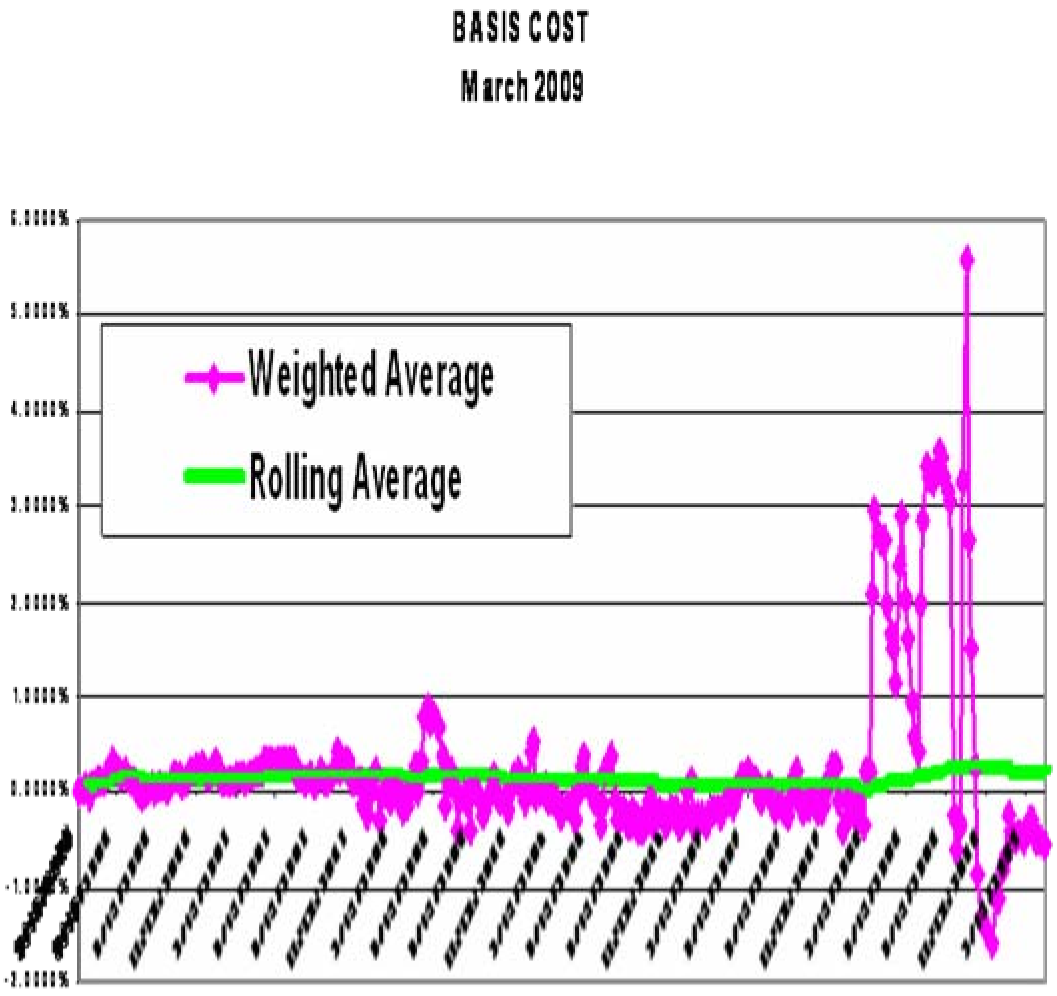
- When payments from the counterparty are less than the VRDO payments the result is "basis cost"
- "Basis cost" is added into the overall debt costs (along with fees) to get the true "all-in" cost of the swap transaction

How Does a Swap Work?



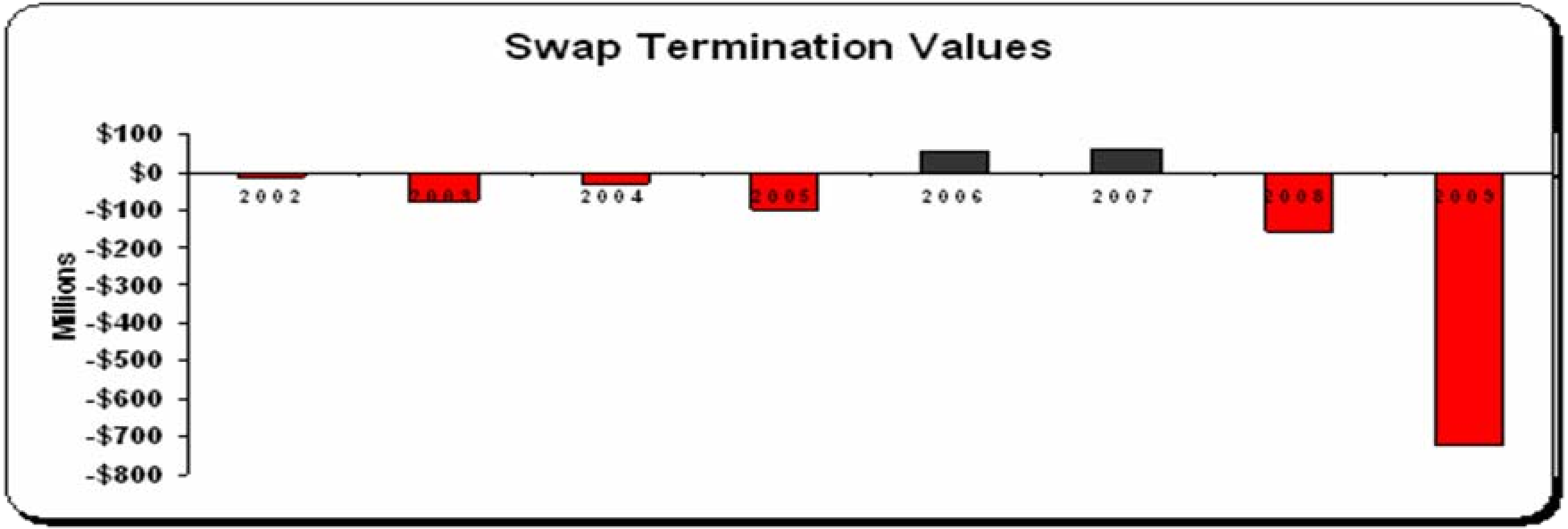
Basis Risk

- 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)



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

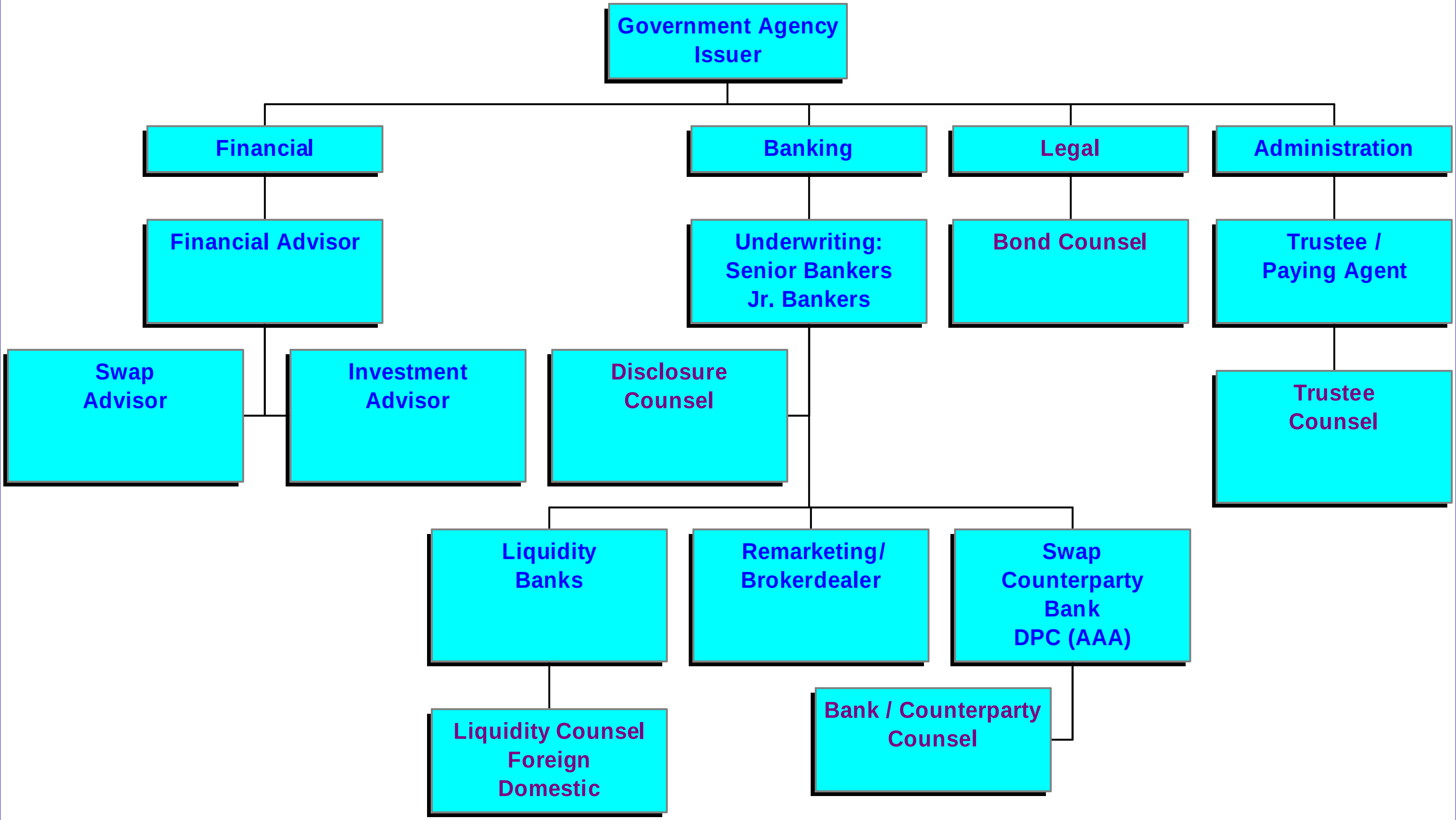
- **A swap is a complex and valuable financing tool**
  - A swap is a management tool that can improve financing efficiency and project delivery
  - A swap is not for speculation
- **Understand the transaction**
  - Do not speculate
  - Do not undertake transactions you do not understand
  - Do not try 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



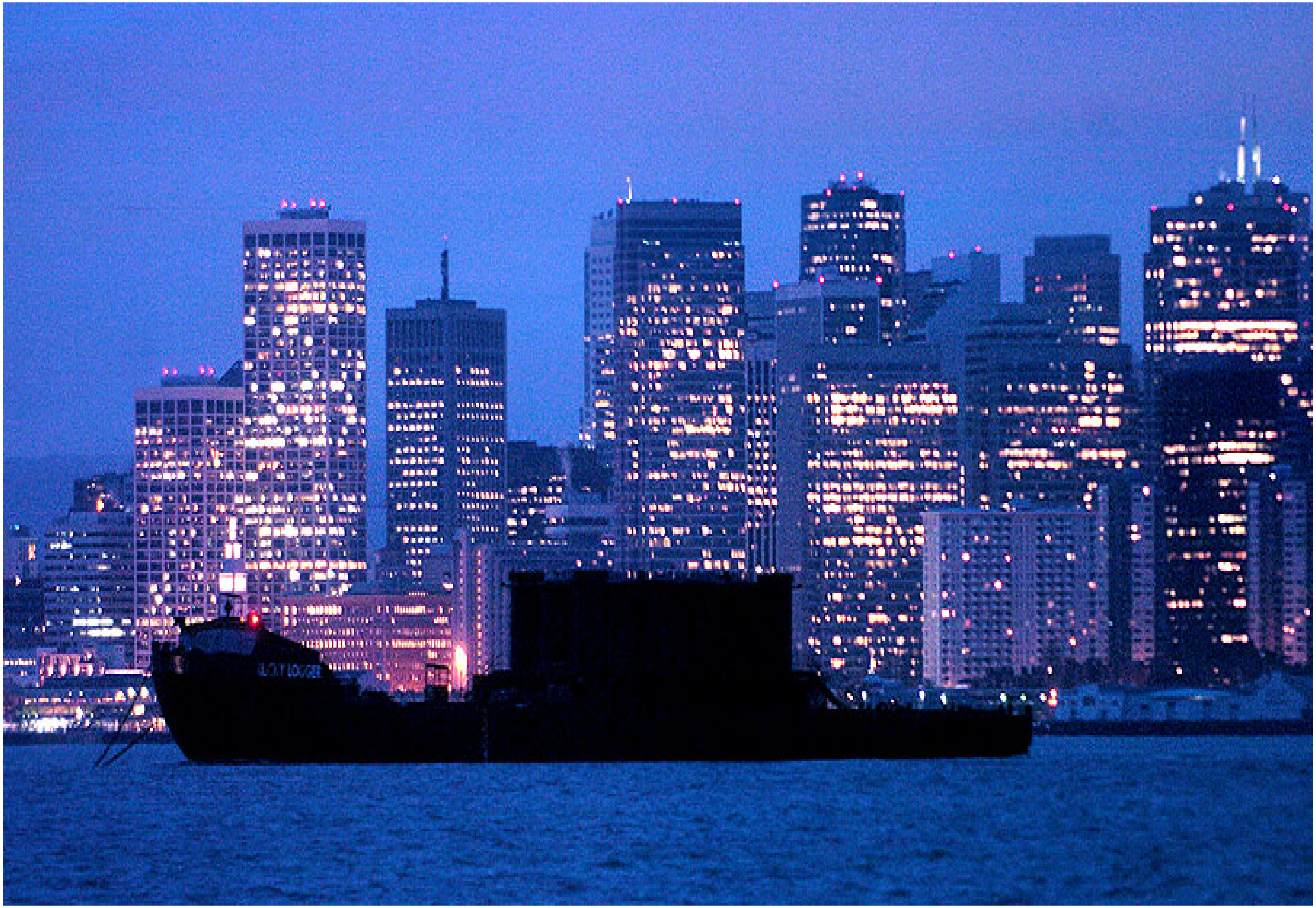
What Has Changed In The Market

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