



Taking Risk Management out of the Basement

September 19, 2007



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Introduction

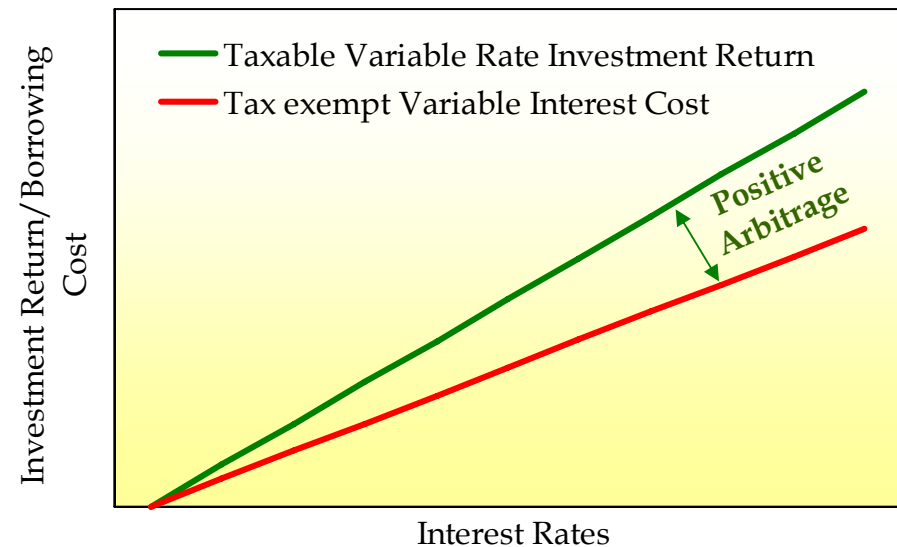
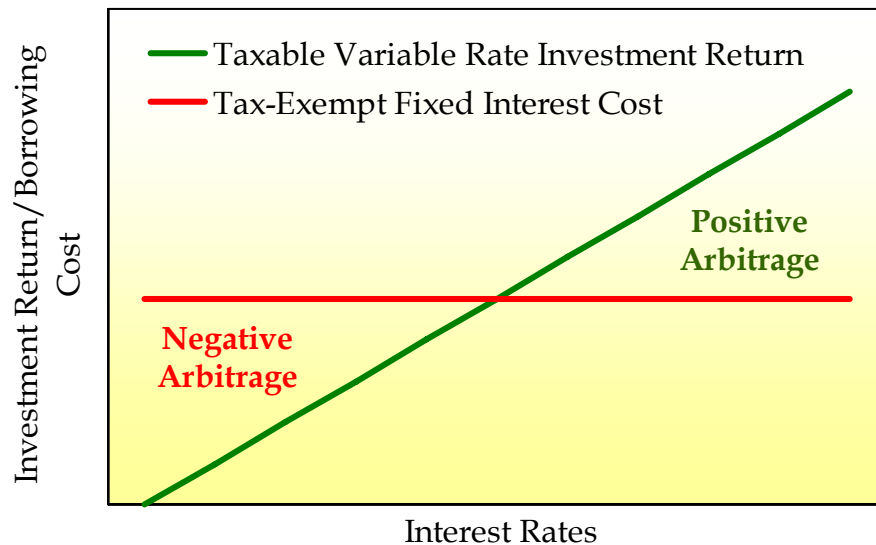
- Managing and evaluating risk is one of the major driving forces in organizational decisions made by long-term care providers.
- These risks span operations, assets and liabilities and all impact the ultimate mission of any long-term care provider.
- As market fluctuations occur, traditional methods of managing risk often prove inadequate.
- Organizations should evaluate their risks in the aggregate and recognize the impact that volatility in one area may cause to other areas.
- Interest rate swaps have become an increasingly prevalent tool to efficiently manage balance sheet risk.

Decision-Making Process

- Most decisions regarding risk are made in a vacuum:
 - Operations: Decisions based on mission versus financial viability
 - Assets: Decision based on risk versus return
 - Liabilities: Decisions based on interest rates, covenants, debt capacity

- An alternative approach is to view the risks together and come up with a strategy that reduces the overall risk profile in the aggregate rather than attempting to reduce risk at the individual silo level.

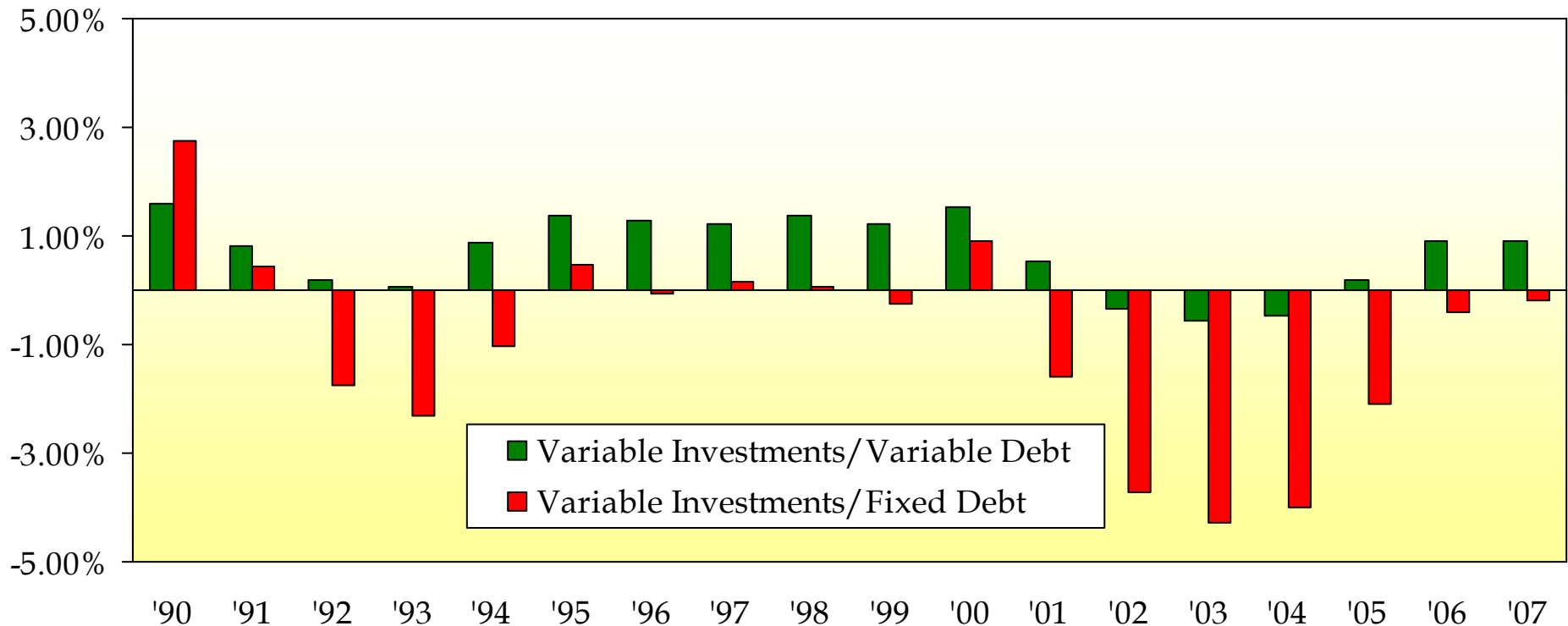
- A common misconception is that an organization has minimized its risk by investing in short-term assets and borrowing at a long-term fixed rate.
- Viewed individually, these strategies seem appropriate, but when viewed together, this strategy actually creates risk and volatility.





Asset/Liability Management

- A variable investment/variable rate debt integrated strategy has outperformed a variable investment/fixed rate debt strategy in all but one of the last 18 years.
- This data makes a strong case that an organization should always match its variable rate exposure, but this is rarely the case.

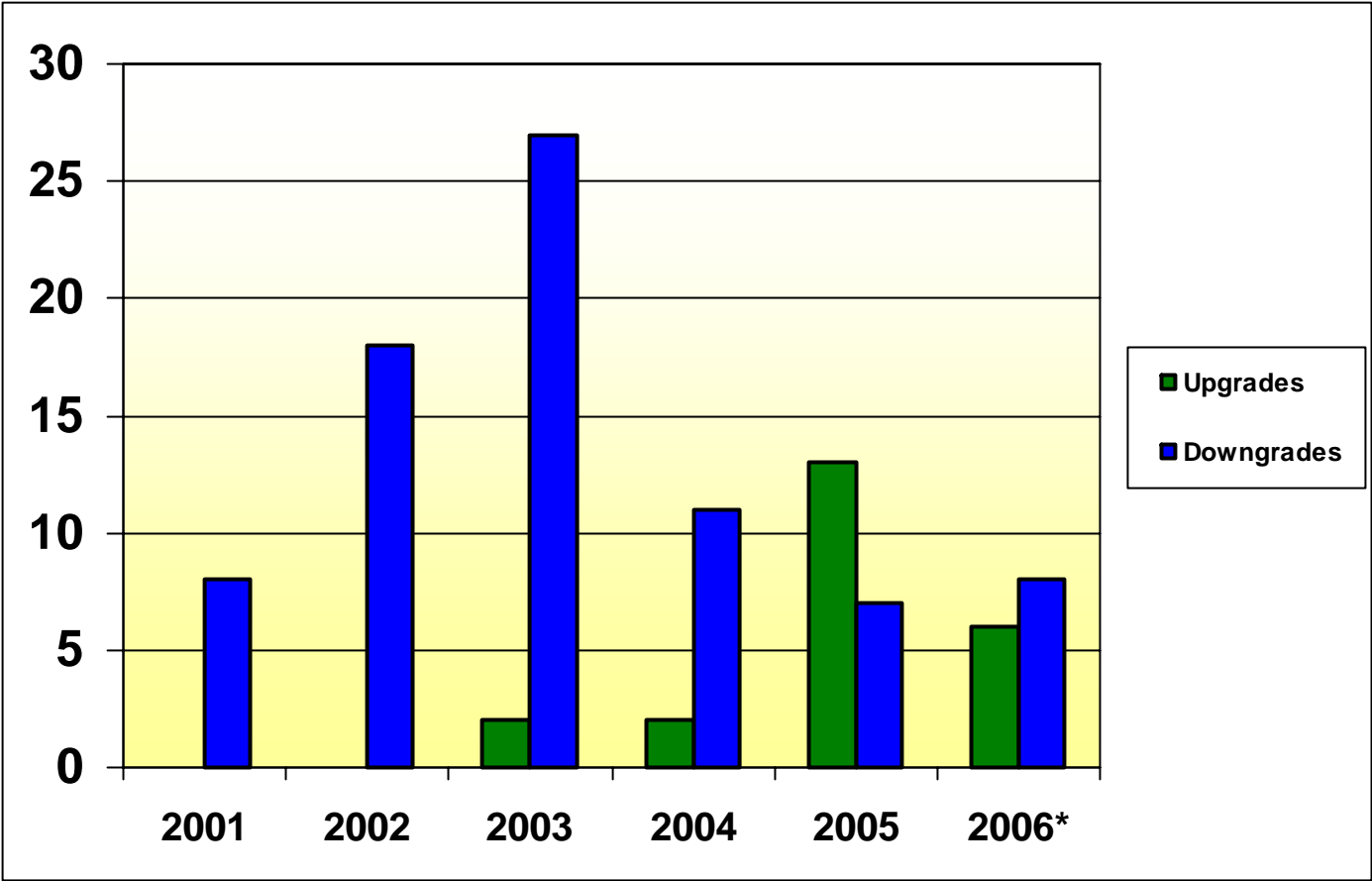


(1) Variable/Variable assumes debt cost at BMA + 0.75% and investment earnings at 1 month LIBOR

(2) Variable/Fixed assumed debt at 5.50% and investment earnings at 1 month LIBOR



Non profit Senior Living Facilities have had Financial Trouble

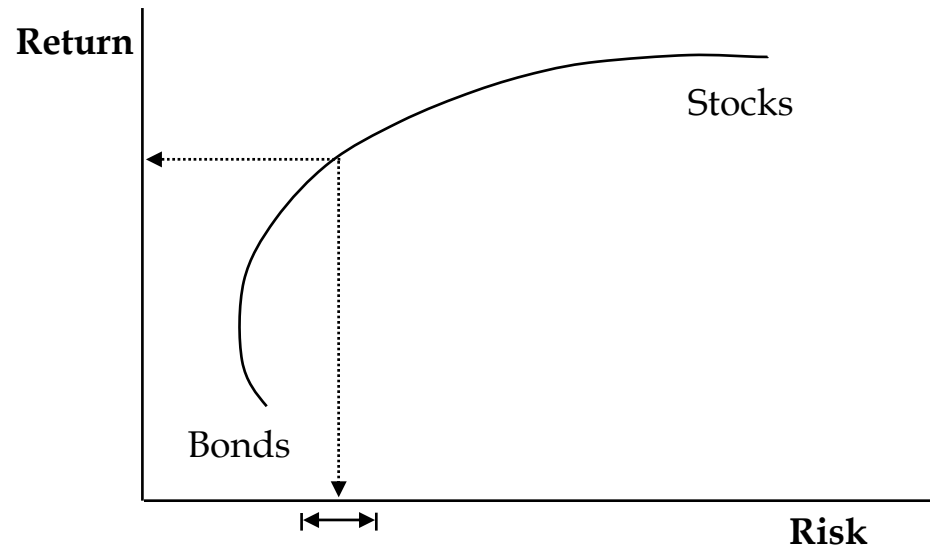


Source: Standard and Poor's and Fitch
2006 Fitch data through June 15, 2006*
2006 S&P data through October 15, 2006*



Minimizing Investment Portfolio volatility - Building An Investment Portfolio

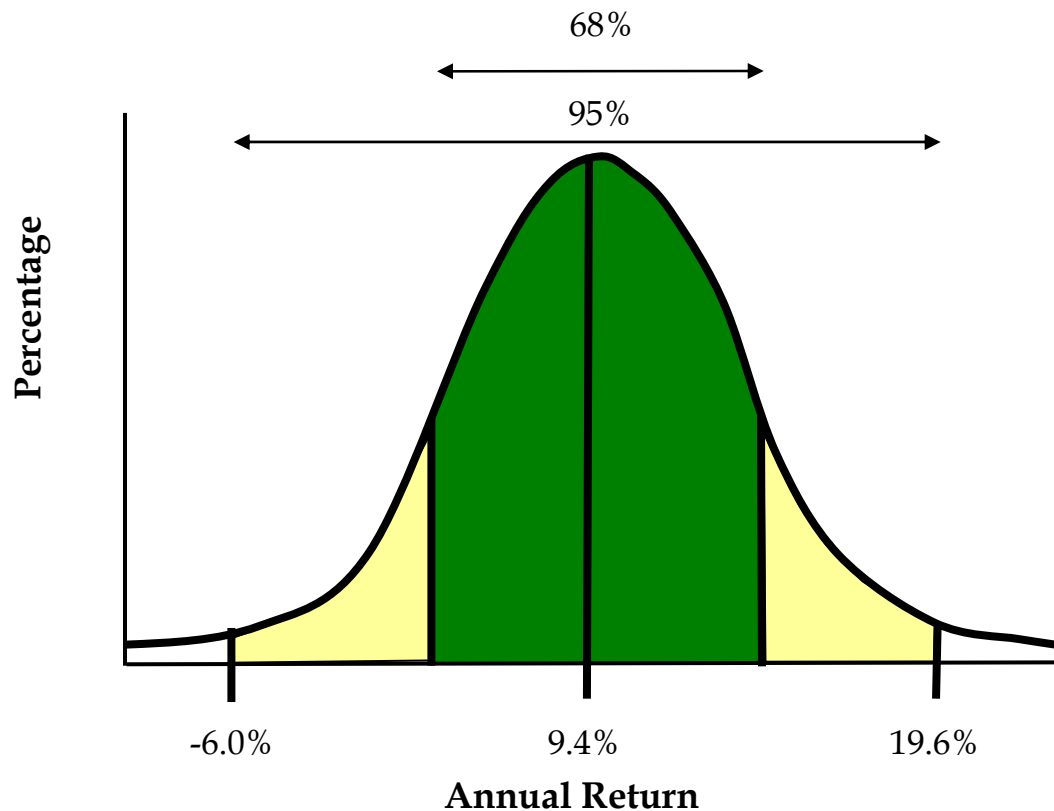
- Traditional Investment theory suggests that the risk / reward trade-off can be optimized.
- This analysis relies on historical returns, volatility, correlation data (and guesses).
- This approach tends to focus on long-term results and downplays short-term losses.
- Despite our best efforts, the assumptions will always be wrong.



	Avg. Return	Avg. Risk
Bonds	8.1%	5.1%
Stocks	13.3%	14.0%
70/30	9.4%	6.4%

What Is The Expected Outcome?

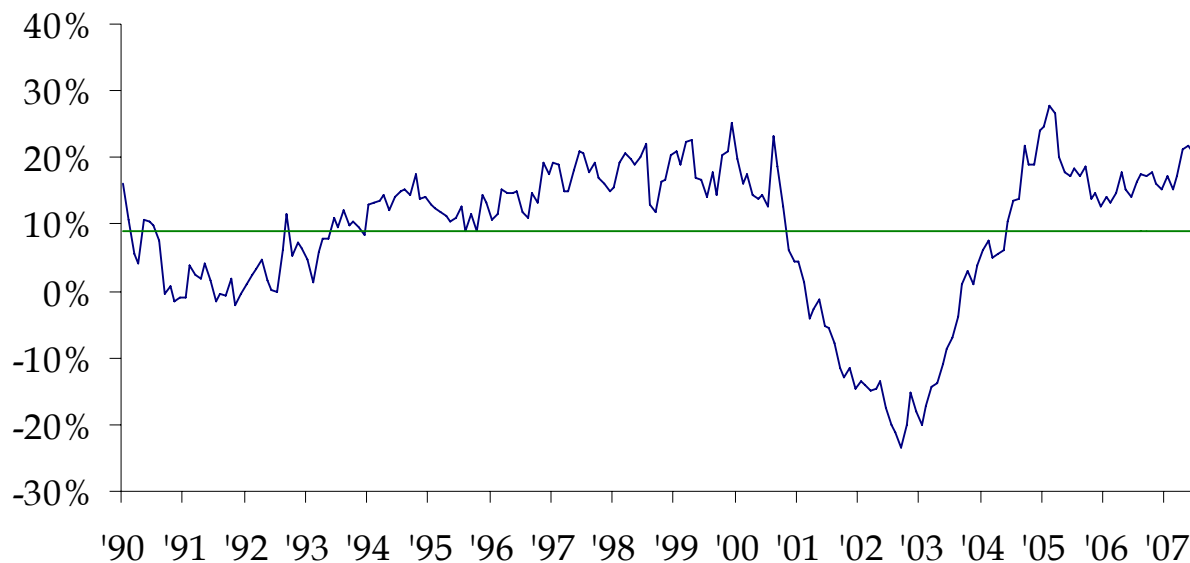
- The expected return of a 70/30 portfolio today is approximately 9.4% with a standard deviation of 6.4%
- At a 95% confidence level, annual returns range from -6.0 % to 19.6%.



Downside Investment Protected Structures

- While long-term global equity returns have been positive, below average returns have resulted in significant losses that have, at times, lasted several years.
- Cain Brothers has developed an investment solution that marries the capital preservation of fixed income securities with the potentially higher upside return of equities.

**Morgan Stanley World Equity Index
2-Year Annualized Returns 1990 - 2005**



What Are Downside Protected Investment Structures?

- Downside Investment Protected Structures (“DIPS”) are an efficient and more flexible alternative to traditional fixed income and equity investments.
- Downside Return Protection can be specified at various levels and can even incorporate a minimum return level such as BMA or Inflation.
- Upside Return Exposure can be tied to domestic and/or international equity markets, hedge funds or other indices.
- Flexible Structures are possible in various forms.
 - Zero Coupon Bond and Call Option
 - Structured Notes
 - Total Return Swap (overlay on existing investment portfolio)

Capital Planning

- The traditional method of accessing the capital markets generally occurs over a time period of several months and includes: identifying a use of funds, selecting a financing team, choosing a structure, and finally pricing the bonds.
- In essence, thirty years of debt service payments are determined by prevailing interest rates on a single morning or afternoon.
- Often a borrower has relative certainty of the timing and total capital needed well in advance of the actual financing date.
- The current market provides borrowers the opportunity to lock-in their interest rate up to three years prior to the actual financing date at a minimal premium to current interest rates.
- This is a unique opportunity to *choose* a future interest rate rather than *accept* whatever rate prevails in the future.
- This concept is applicable to both new money and refinancing transactions.
- If a borrower knows that a future project budget works at current interest rates, should that borrower accept the risk that higher future interest rates will hamper the viability of the project?

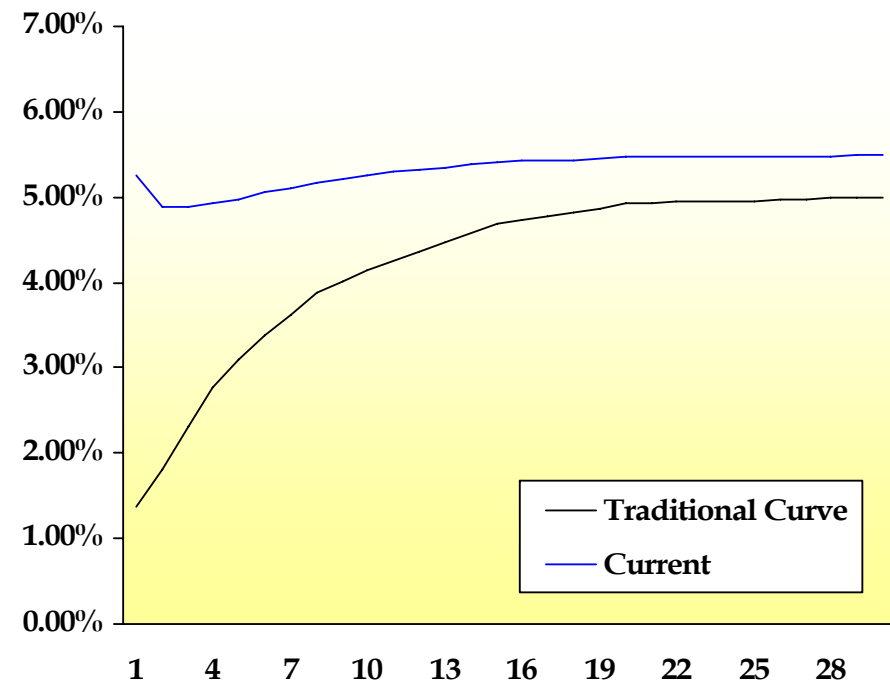
Current Interest Rate Environment

- The current interest rate environment features two important characteristics that make locking in future rates attractive for borrowers:
 1. historically low long-term fixed rates; and
 2. a flat to inverted yield curve

Historical Bond Buyer Revenue Index



Historical LIBOR Yield Curves



Introduction to Interest Rate Swaps

- Interest rate swaps are debt management instruments that allow borrowers to adjust their risk exposures without altering underlying debt instruments.
- Interest rate swaps have become extremely prevalent in tax-exempt healthcare finance as borrowers educate themselves on more sophisticated means to lower risk and reduce overall borrowing cost.



“...the benefits of derivatives...could be diminished...if the risks associated with their use are not managed effectively.”

- Alan Greenspan, March 19, 1999

“Derivatives have permitted the unbundling of financial risks. Because risks can be unbundled, individual financial instruments now can be analyzed in terms of their common underlying risk factors, and risks can be managed on a portfolio basis.”

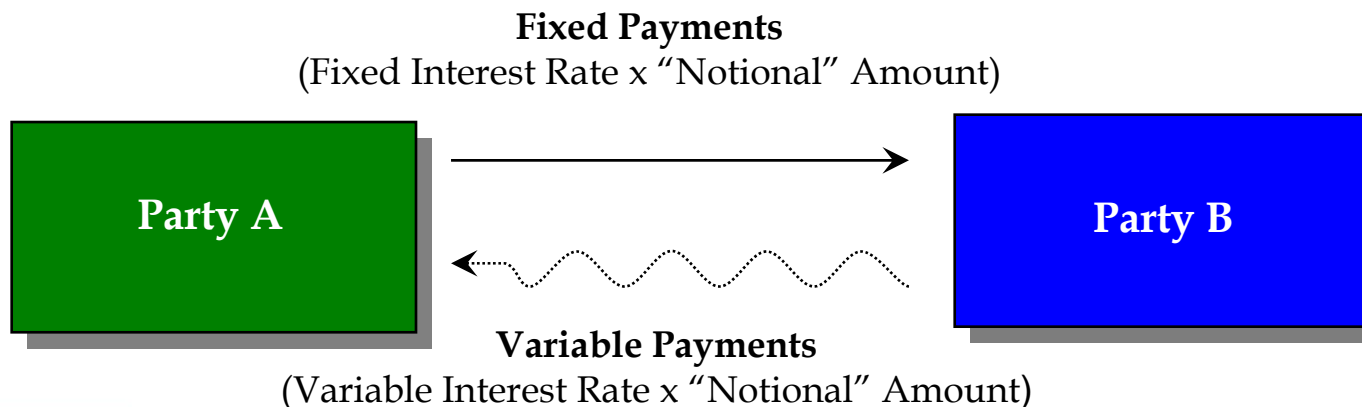
- Alan Greenspan, May 5, 2005

Background on Swap Market

- Interest rate swaps have become increasingly prevalent in the tax-exempt finance arena with Standard & Poor's estimating that over 50% of their rated tax-exempt healthcare credits have entered into at least one swap transaction.
- Size of Market
 - Interest rate and currency risk management transactions outstanding total over \$200 trillion
 - Approximately 75% of these contracts are for interest rate management
 - U.S. tax-exempt swap activity estimated at over \$500 billion
- International Swaps & Derivatives Association (ISDA)
 - Established in 1985 to identify and reduce the sources of risk in the risk management business
 - Over 670 members in 50 countries
 - Source for standardized documents and "best practices"

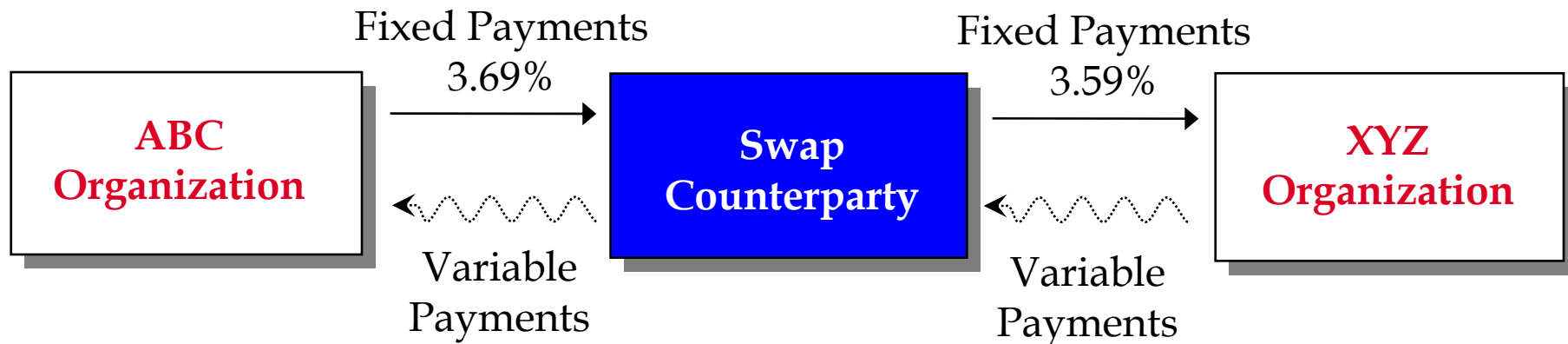
Interest Rate Swap Mechanics

- An interest rate swap is an arrangement in which two parties agree to exchange periodic interest payments, at agreed intervals, over an agreed period, but without any principal being paid.
 - Periodic interest calculated using a “notional” amount as the base, but actual principal is not exchanged in a swap contract
 - Since there is no exchange of principal, swaps are less “credit sensitive” than debt
 - Bondholders are not a party to the swap and continue to receive their bond payments
 - Periodic swap payments are settled on a “net basis”
 - Swaps accrue a market value as interest rates change, but this market value is only realized upon an early termination of the swap
 - Swaps can be priced on a “forward-starting” basis with the terms specified today, but the accruals starting at a future date



Understanding the Swap Counterparty

- Interest Rate Swap Counterparties are market makers who act as individual clearing houses and utilize a variety of hedging techniques to maintain “market neutral” swap books, earning a spread on each transaction.
- Major swap counterparties that are active in the competitive bid market for tax-exempt health care swaps include: Morgan Stanley, Lehman Brothers, Merrill Lynch, Wachovia, Goldman Sachs, UBS and other large financial institutions.





Types of Interest Rate Swaps

- Different types of swaps have different applications depending on a borrower's needs, risk profile, and the prevailing market dynamics.

Type	Description	Uses & Benefits
Fixed Pay Swap	An Organization pays a fixed rate and receives a variable rate	Creates Synthetic Fixed Rate Debt to lower a fixed rate borrowing cost and increase debt management flexibility
Fixed Receipt Swap	An Organization pays a variable rate and receives a fixed rate	Creates Synthetic Variable Rate Debt to increase variable rate exposure without taking on the risks associated with traditional variable rate debt
Basis Swap	An Organization agrees to receive a variable rate based on a % of a taxable index and pay a variable payment based on a tax-exempt index (BMA)	Shifts the risk of a change in tax rates from long-term, fixed rate, tax-exempt bond investors to An Organization to lower borrowing cost by 30 to 40 basis points
Total Return Swap	An Organization receives a fixed rate equivalent to its underlying fixed bond rate and pays a tax-exempt variable rate plus a funding spread	Allows for a Synthetic Refinancing of existing fixed rate bonds that generates savings that are generally 2 to 3 times greater than traditional refinancing structures
Constant Maturity Swap	An Organization pays a short-term rate (1 month LIBOR) and receives a % of a longer term rate (5 or 10 year LIBOR)	Takes advantage of yield curve dynamics and generates an average of 80 basis points of annual savings in traditional, upward-sloping yield curve environments
Forward-Starting Swap	A swap that is priced today, but cash flows start to accrue at a specified future date	Allows An Organization to take advantage of attractive current long-term fixed rates for future financings



Swap Risks

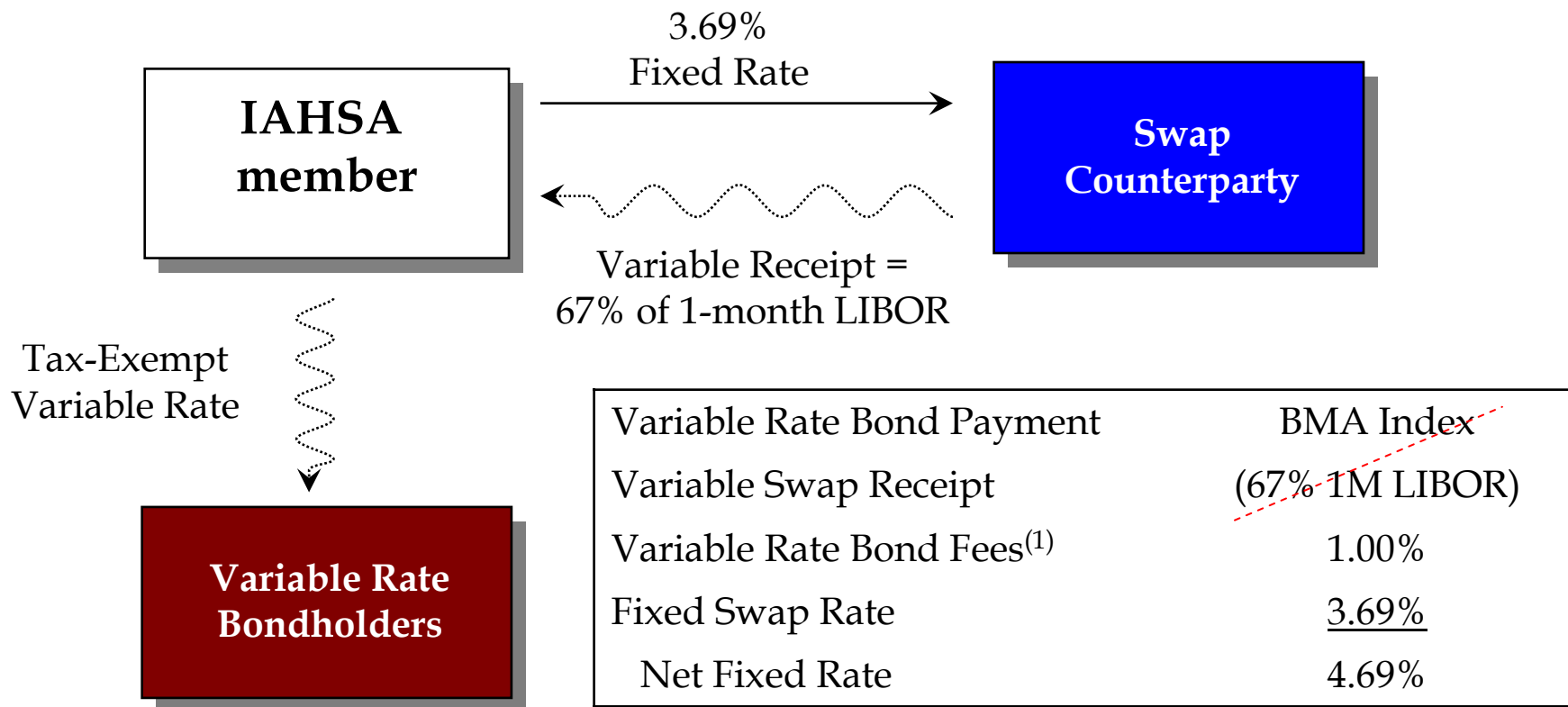
- Although swaps have inherent risks, these risks are largely mitigated by proper structuring.

Type	Risk Description	Mitigating Factors
Counterparty Risk	Swap counterparty does not fulfill its obligations as specified under the contract	Counterparty will be rated at least A1/ A+ or higher and will have collateral provisions triggered by specific ratings downgrades
Basis Risk	LIBOR-based variable rate receipt on Fixed Pay Swap does not cover BMA-based variable rate payment	BMA and LIBOR have been highly correlated historically Significantly lower fixed pay rate gives 40-50 basis points of "cushion" and implies break-even tax rate of approximately 20%
Termination Risk	Payment is due from An Organization on termination of swap	An Organization controls the decision to terminate the swap Interest rates must move in a particular direction after the pricing date to accrue a negative market value
Inability to Complete Future Financing	An Organization enters into a "forward-starting" swap anticipating a future debt issuance, but is not able to complete the future issuance and must make a termination payment	"Forward-starting" swaps should only be implemented when there is a high level of certainty regarding future debt issuance See Mitigating Factors on Termination Risk above
Accounting Risk	Market value changes in swap create negative accounting implications	Certain swaps will qualify for FAS133 hedge accounting which will allow An Organization to book the majority of any market value changes "below the line" An Organization should understand all accounting implications prior to entering into a swap



Practical Swap Applications: Synthetic Fixed Rate Debt

- Synthetic Fixed Rate Debt involves issuing underlying variable rate debt in conjunction with a Fixed Pay Swap to generate a net fixed rate to An Organization.



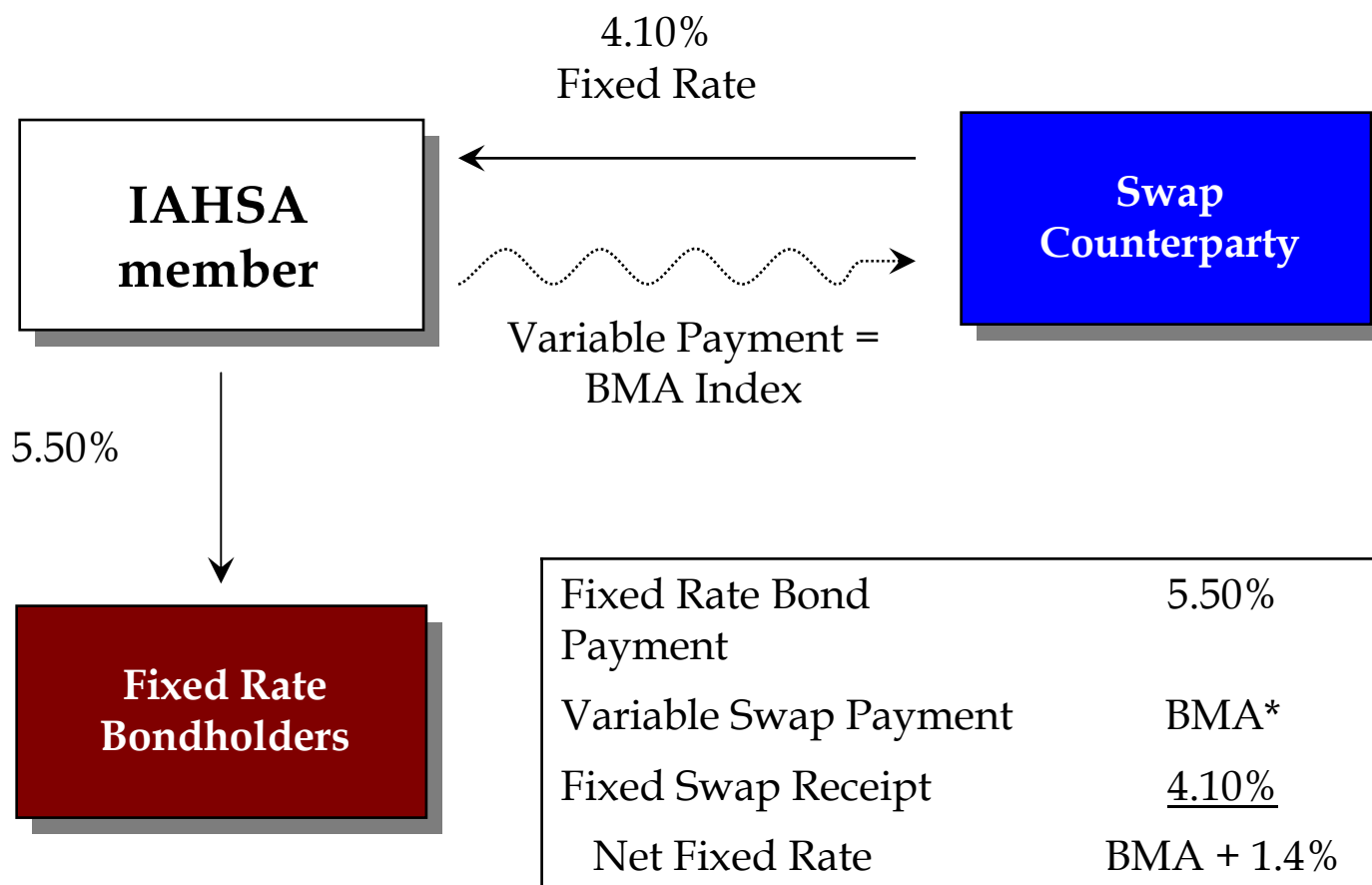
- If An Organization is comfortable with Basis Risk, but would prefer to issue fixed rate bonds, similar economics can be achieved through the implementation of a BMA/LIBOR Basis Swap.

(1) Variable Rate Bond Fees include credit enhancement fees and transaction costs.



Practical Swap Applications: Synthetic Variable Rate Debt

- Synthetic Variable Rate Debt involves issuing underlying fixed rate debt in conjunction with a Fixed Receipt Swap to generate a net variable rate to client.

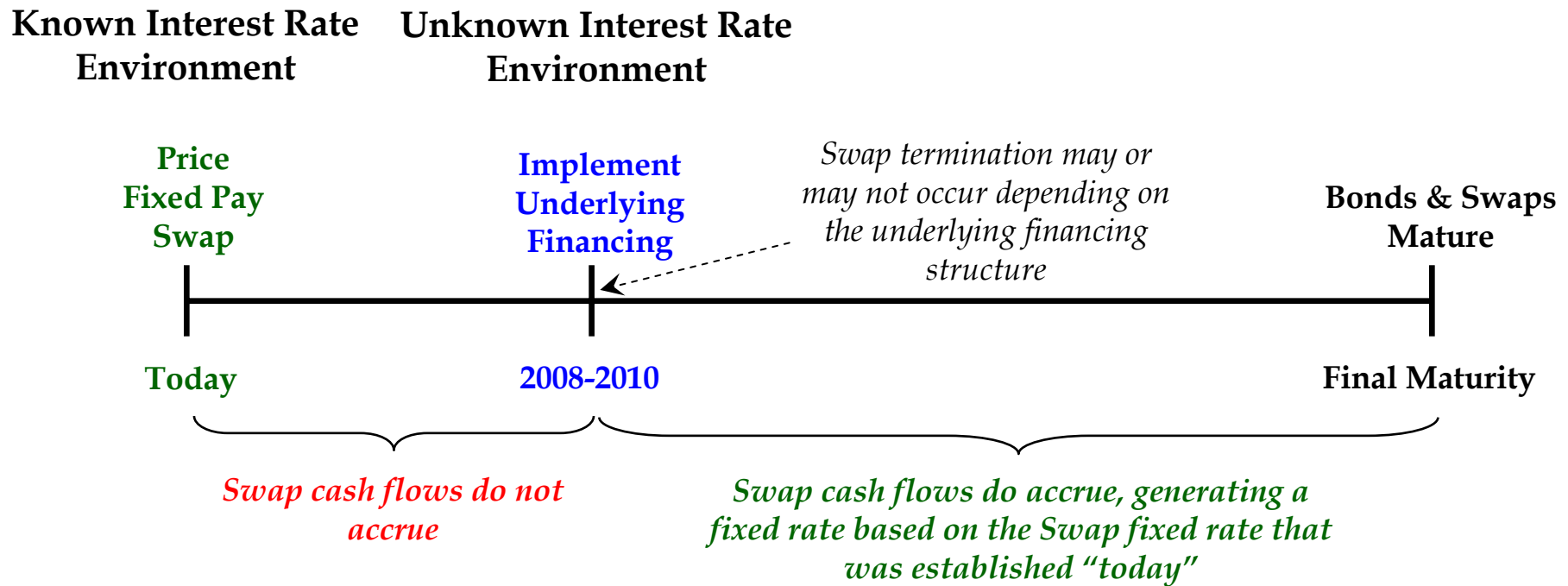


*BMA has averaged 3.67% for YTD 2007 and 2.83% for the last 15 years



Practical Swap Applications: Forward-Starting Swaps

- A borrower can lock-in a fixed rate today through the a forward-starting swap in anticipation of a financing at a future date.
- The current interest rate environment makes this extremely attractive due to the minimal difference between current starting rates and future starting rates as far as 3 years into the future.

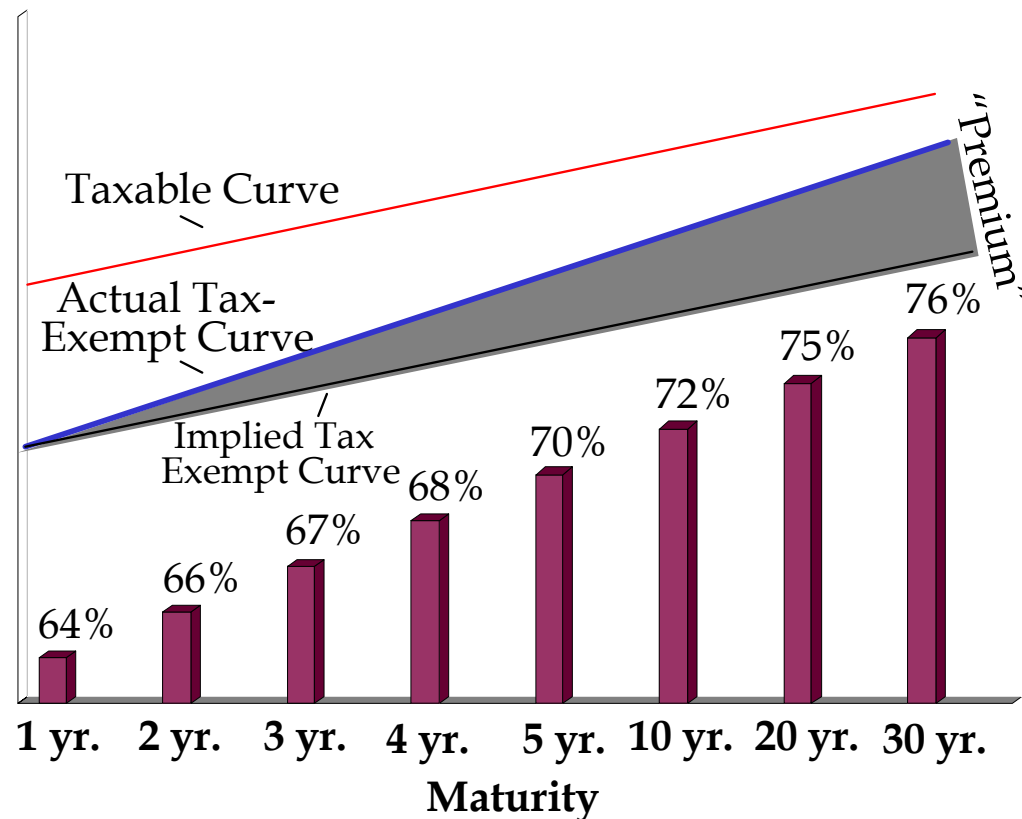


Practical Swap Applications: Forward-Starting Swap Exit Strategies

- The borrower will have a number of viable exit strategies at the call date including:
 - Issue variable rate bonds and leave the swap in place generating a Synthetic Fixed Rate structure.
 - Issue fixed rate bonds, terminate the swap at market value and adjust bond proceeds accordingly.
 - 🕒 If interest rates have risen, there will be a termination amount paid to the borrower which would decrease the total borrowing, but at a higher interest rate.
 - 🕒 If interest rates have fallen, there will be a termination amount due from the borrower, which would increase the total borrowing, but at a lower interest rate.

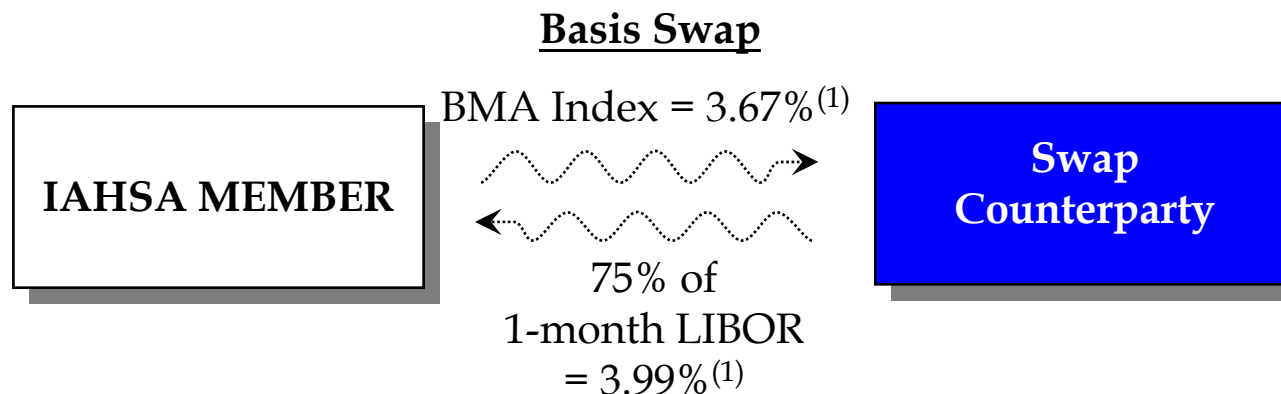
Practical Swap Applications: Basis Swaps

- Tax-exempt investors demand a rate of return that is a higher percentage of the comparable taxable investment return as they invest further out on the tax-exempt yield curve to compensate them for a risk of increased tax rates in the future.
- Borrowers can recoup this “premium” by entering into a BMA/LIBOR Basis Swap.



Practical Swap Applications: Basis Swap Mechanics

- Tax-exempt issuers across the country have structured low cost Synthetic Fixed Rate Debt by issuing variable rate bonds and hedging the variable rate exposure using a percentage of 1-month LIBOR Fixed Pay Swap.
- Borrowers with fixed rate debt can achieve a similar funding advantage by entering into a BMA/LIBOR Basis Swap.
- In the current market, a Basis Swap would generate 50 basis points of positive cash flow.
- Assuming a consistent BMA/LIBOR relationship, a Basis Swap will generate increasing cash flows as short-term interest rates increase.



(1) BMA Index and 1- month LIBOR rates represent year-to-date averages.

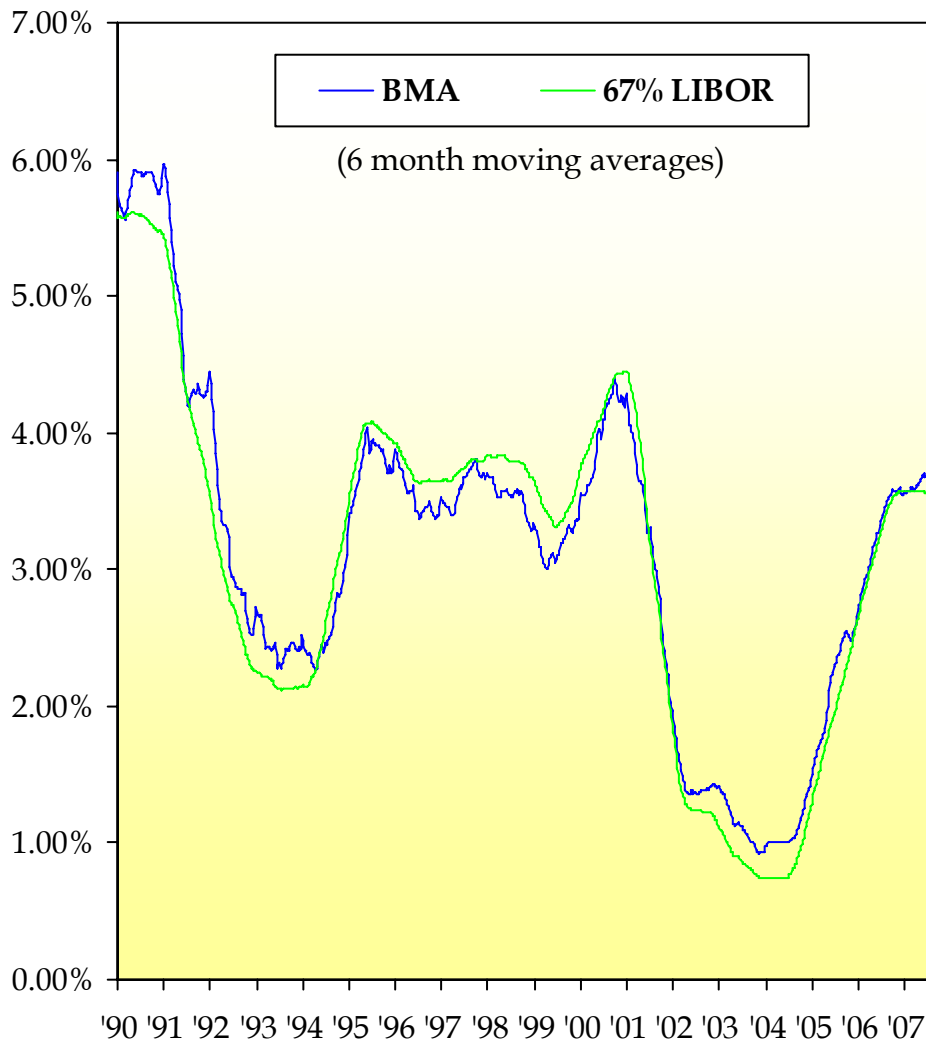
Practical Swap Applications: Understanding Basis Risk

- A borrower's primary exposure on a Basis Swap is to a significant decrease in tax rates, particularly the highest marginal corporate and individual income tax rates, currently at 35%.
- Tax-exempt investors on the short-end of the yield curve seek a tax-effective return that is equivalent to a taxable return which drives the correlation between 67% of 1-month LIBOR (a taxable rate) and the BMA Index (a tax-exempt rate).
- Tax-exempt investors on the long-end of the yield curve demand a higher tax-effective return for taking longer term risk of a change in tax rates.
- If tax rates decrease, tax-exempt interest has less relative value, causing the BMA Index to trade at a higher percentage of comparable taxable investments and increasing tax-exempt variable rate interest cost accordingly.
- Since the percentage of LIBOR receipt on a Basis Swap is fixed, this would adversely affect the economics of those transactions.
- On a current market Basis Swap, the estimated "break-even" tax rate would be 25% or 100% less the percentage of LIBOR receipt rate.



What is the Relationship between BMA and LIBOR?

Since 1990, BMA has averaged approximately 67% of 1 month LIBOR.



Period	BMA	67% LIBOR	Diff.
1990	5.91%	5.52%	(0.39%)
1991	4.37%	3.98%	(0.39%)
1992	2.81%	2.51%	(0.30%)
1993	2.37%	2.14%	(0.23%)
1994	2.84%	3.00%	0.16%
1995	3.85%	4.00%	0.15%
1996	3.43%	3.65%	0.22%
1997	3.66%	3.78%	0.12%
1998	3.44%	3.73%	0.29%
1999	3.29%	3.52%	0.23%
2000	4.12%	4.30%	0.18%
2001	2.61%	2.61%	0.00%
2002	1.38%	1.19%	(0.19%)
2003	1.03%	0.81%	(0.22%)
2004	1.23%	1.01%	(0.22%)
2005	2.46%	2.28%	(0.18%)
2006	3.45%	3.42%	(0.03%)
2007 YTD	3.67%	3.57%	(0.09%)
90 to Pres.	3.08%	3.04%	(0.04%)
CURRENT	3.95%	3.57%	0.25%

The benefit of executing a 67% LIBOR swap today is around 50 basis points.

Conclusions

- Borrowers need to view their operations and their balance sheet as dependent entities that require an integrated approach to risk management.
- Interest rate swaps have become an extremely prevalent method of adjusting and limiting risks in the arena of tax-exempt healthcare finance.
- Non-profit borrowers should educate themselves and their governance on the potential applications of interest rate derivatives as part of an overall risk management strategy.
- Less “sophisticated” borrowers should strongly consider engaging an experienced advisor that does not have an economic interest in the structuring nuances or pricing levels of any implemented derivative structures.

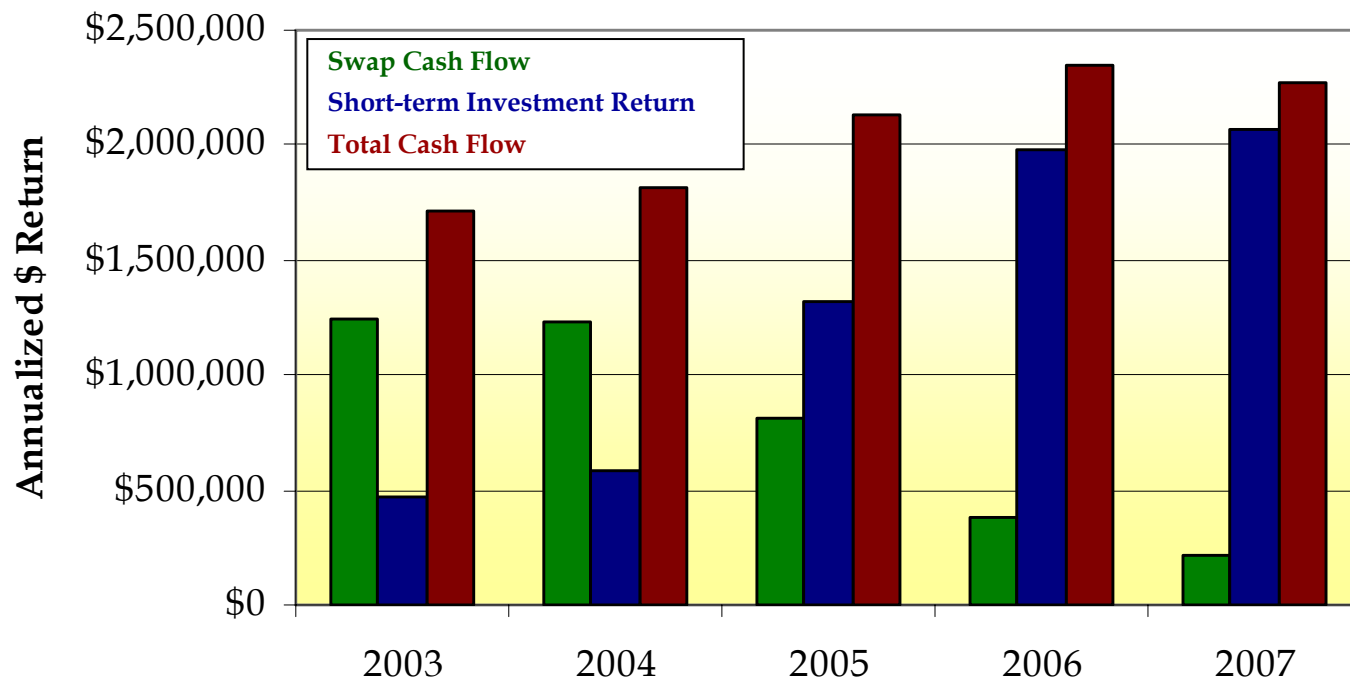
Case Studies

Case Study: Adventist Health System

- Adventist Health System (“AHS”) is a 40+ hospital system with approximately \$5 billion in annual revenues and \$7 billion in assets.
- AHS is positioned in many fast-growing markets that require significant capital investment leading AHS to adopt a risk management strategy to support its operational needs.
- Each year AHS management meets and determines what loss they can bear in their investment portfolio while still maintaining their credit rating which is essential to borrowing at attractive costs and terms to finance their growth strategy.
- Once a volatility/risk level is determined, the investment portfolio is structured to deliver the maximum return for the given volatility through a mixture of fixed income instruments and equity exposure.
- The resulting investment portfolio then becomes a factor in liability decisions such as acceptable variable rate exposure levels.
- The effective management of asset and liability risks allows AHS to overcome operational risks such as being underinvested from a facility perspective in a growth market.
- Although this strategy may seem more apt to a large multi-site hospital system, a single site long-term care provider can adopt the same strategy.

Case Study: Berkshire Health System

- In 2003, Cain Brothers identified a mismatch in BHS's assets and liabilities and proposed a swap strategy to increase BHS's variable rate exposure to better match its cash and short-term investment position.
- The strategy has served to reduce the volatility of BHS's net asset/liability position.



Case Study: Concord Hospital

- In April 2005, Cain Brothers proposed a swap strategy to Concord Hospital to lock-in the future fixed rate on a refunding of its Series 1996 Bonds that were scheduled to become callable on October 1, 2006.
- The fixed rate guaranteed that Concord would achieve approximately \$6 million in net present value savings, representing over 19% of the refunded bonds.
- Concord implemented the strategy and completed the underlying refinancing structure at the call date.

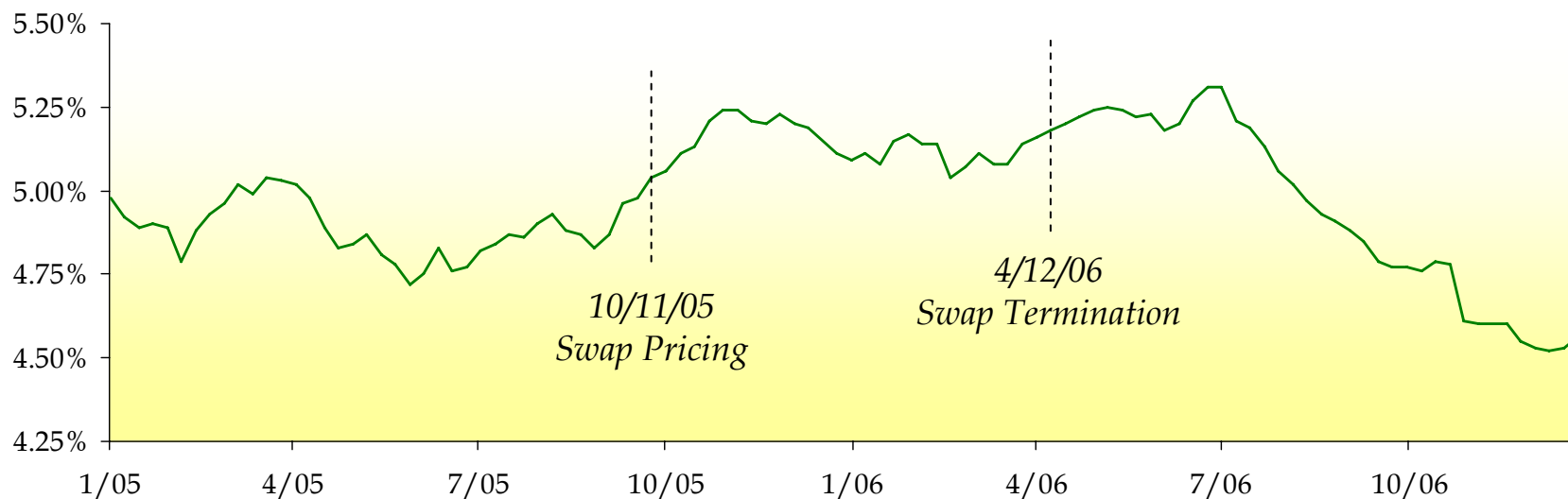
Concord Hospital Historical Swap Pricing



Case Study: Oaklawn

- In October 2005, Cain Brothers proposed a strategy to Oaklawn to lock-in its future fixed interest rate on a new money bond issue scheduled to occur in the spring of 2006.
- Oaklawn adopted the proposed swap strategy and integrated the swap as part of its bonds issue allowing any termination payment from Oaklawn to be made out of bond proceeds.
- On April 12, 2006, Oaklawn terminated the transaction and received a payment of \$1,201,000 allowing Oaklawn to decrease the size of its borrowing and offset the resulting higher fixed interest rate that existed when Oaklawn completed the financing.

Historical Bond Buyer Revenue Index



Case Study: Horizon House (2005)

Phase I: January – August 2005

- Kitchen Renovation
- Dining Room Renovation
- Temporary Relocation of Resident Services

Phase II: Sept 2005 – May 2007

- Demolish LeRoi Building and North Tower
- Construction of New Tower
- Construction of New Supported Living Center

Phase III: June 2007 – Oct 2007

- Renovate Lobby
- Renovate 2nd/3rd Floors East Wing



Case Study: Horizon House

Key Project Facts

- The Project
 - \$72 million Budget
- The Financing

	Construction Loan	Tax-Exempt Bonds
Project Costs	\$33,100,000	\$38,900,000
Debt Service Reserve Fund	3,620,000	None
Financing Costs	1,000,000	1,470,000
Funded Interest & Fees ⁽¹⁾	<u>2,280,000</u>	<u>5,200,000</u>
Total New Money	\$40,000,000	\$45,570,000
Refunding of Series 1995 Bonds ⁽²⁾	<u>N/A</u>	<u>\$11,130,000</u>
Total	<u>\$40,000,000</u>	<u>\$56,700,000</u>

⁽¹⁾ Includes interest and expenses through construction plus 6 months on “new money”

⁽²⁾ Net of Series 1995 Trustee-held Funds



Case Study: Horizon House

The Debt Structure

	Construction Loan	Tax-Exempt Bonds
Par Amount	\$40,000,000	\$56,700,000
Maturity	36 months	30 years
Source of Repayment ⁽¹⁾	Entrance Fees	Operating Cash Flow
Interest Rate	Variable	Variable
Basis for Interest Rate	LIBOR	BMA
Interest Rate at Date of Financing	4.10	2.66

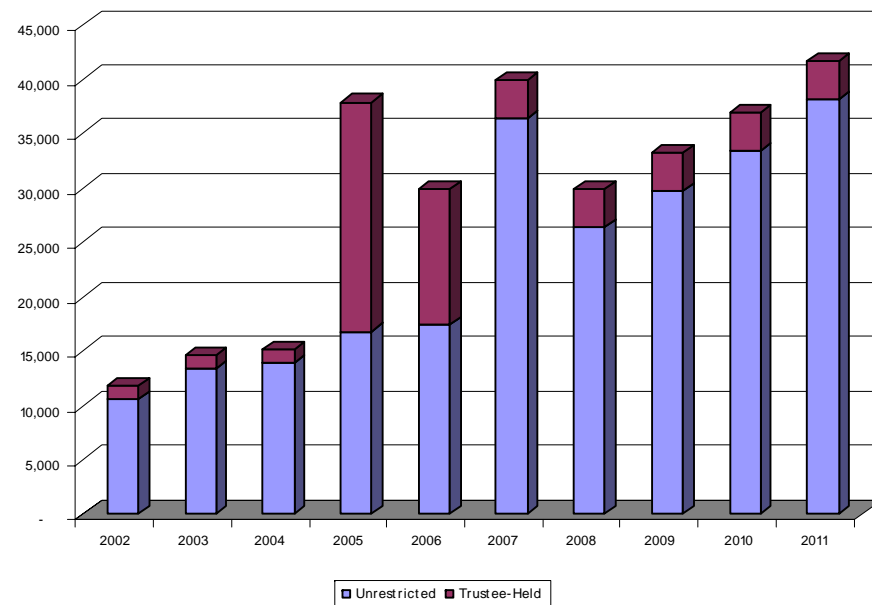
⁽¹⁾ Anticipated Entrance Fee Pool = \$44,000,000



Case Study: Horizon House

The Investment Portfolio

- Investment Policy:
 - Conservative
 - High investment grade
 - Primarily debt investments
 - Modest equity investments
- Projected Growth of Investment Portfolio
 - 2005: \$16+ million
 - 2008: \$26+ million
 - 2010: \$33+ million
- Project Schedule (Key Dates)
 - Construction completed: July 2007
 - Fill-up completed: July 2008



Analysis of Interest Rate Risk for Short-term and Long-term Debt

- \$40 million Construction Loan
 - Short-term debt - 36 month maturity
 - Purpose to fund second half of construction
 - Construction draw structure = no negative arbitrage
 - Repaid with entrance fees
 - Solution: Accept floating rate risk - no interest rate mitigation

- \$56.700 million Tax-exempt Bonds
 - Long-term debt - 30 year maturity
 - Bond structure = possible negative arbitrage
 - Repaid with operating cash flow
 - Probable refinancing once Project is stabilized
 - Board decision: Protect against potential rise in interest rates - but what type of protection and how much protection?



Case Study: Horizon House

Coordinated Analysis of Interest Rate Risk and Investment Earnings Potential

- \$56.700 million Tax-exempt Bonds
 - \$16+ million Investment Portfolio provides “natural hedge”
 - If interest rates rise, then investment earnings should also rise
 - Develop an interest rate hedging strategy for the remaining \$40 million
 - Protect 50% of the Par Amount for 7 years (anticipated date of refinancing)
 - Protect the balance for 5 years, then rely on Investment Portfolio for increased “natural hedge”

	2005	2008	2010
Series 2005 Bonds – Par Amount	\$56,700,000	\$56,540,000	\$55,085,000
Investment Portfolio (natural hedge)	<u>(16,800,000)</u>	<u>(26,400,000)</u>	<u>(33,400,000)</u>
Initial Unhedged Balance	\$39,900,000	\$30,140,000	\$21,685,000
Protect 50% of Par Amount – Long-term	\$28,350,000	\$28,270,000	\$27,543,000
Protect Remaining Balance – Short-term	\$11,550,000	\$ 1,870,000	\$ N/A



Case Study: Horizon House

Coordinated Results

- Final Solution:
 - \$28,480,000 Interest Rate Swap (BMA)
 - 10 years
 - 3.698%
 - \$11,480,000 4% Interest Rate Cap (BMA)
 - 5 years
 - Cost = \$111,000

