Alternate Debt Structures

Presentation to

Treasury Institute for Higher Education

Featured Speakers:

Kevin Walker — Vanderbilt University

John Nelson — Moody's Investors Service

Richard Bellis — Goldman Sachs

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January 29, 2006

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I. Rating Agency Approach to Alternate Debt Structures

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Moody's View on Traditional or Alternative Debt: New Innovations, One Size Does Not Fit All, All Have Some Impact on Credit

- Debt is a contractual obligation to make, or accrue, ongoing payments to an external party
- Traditional Debt: Fixed and Floating Bonds, Notes, Bank Loans & Lines, Commercial Paper, Capital Leases
- Alternative or Untraditional Debt: Operating Leases, Swaps, Non-recourse Loans, Lease-Backs, Direct Private Lending, Privatized Project Financings, Debt of Affiliated Organizations, Guarantees, Unfunded Pension & OPEB Liabilities
- All debt and alternatives to debt affect credit; impact depends on interaction with other credit factors such as cash flow, competitive position, management & governance
- New debt strategies and instruments offer creative tools for optimizing balance sheet
- Comparatively few rating downgrades in higher education & use of particular debt strategy rarely causes a rating downgrade by itself

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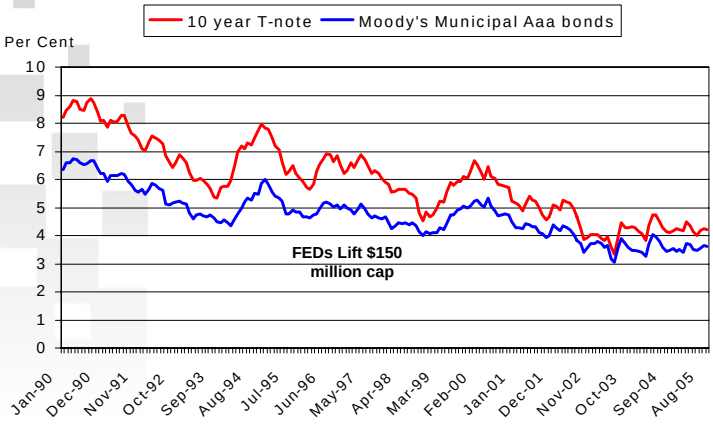
Debt Is Much Cheaper as Long Rates Fall, Promoting Increased Borrowing



Source: Moody's Economy. COM

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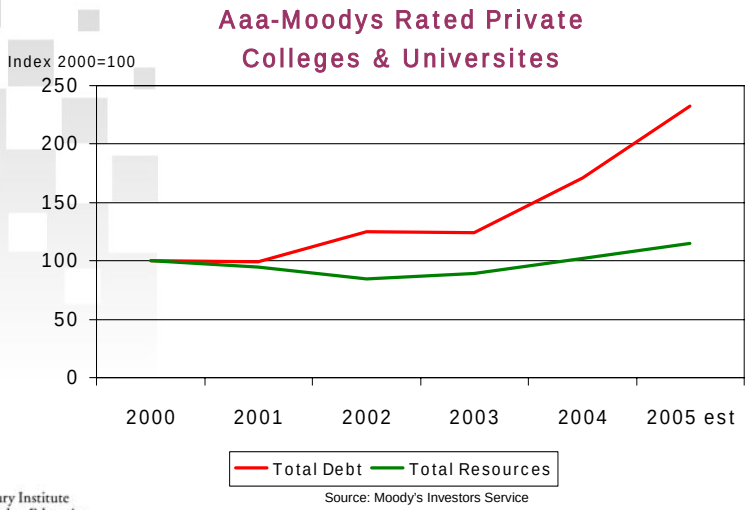
Higher Education Debt Growing... Much Faster Than Assets Among Market Leading Universities



Source: Moody's Investors Service

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II. Overview of Vanderbilt University

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Vanderbilt University

- Privately endowed, coeducational, not-for-profit, nonsectarian institution in Nashville, TN, founded in 1873
- 6,300 undergraduates, 4,800 graduate and professional students
- 2,400 full-time faculty, 15,800 staff members
- Academic medical center
- 10 schools and colleges

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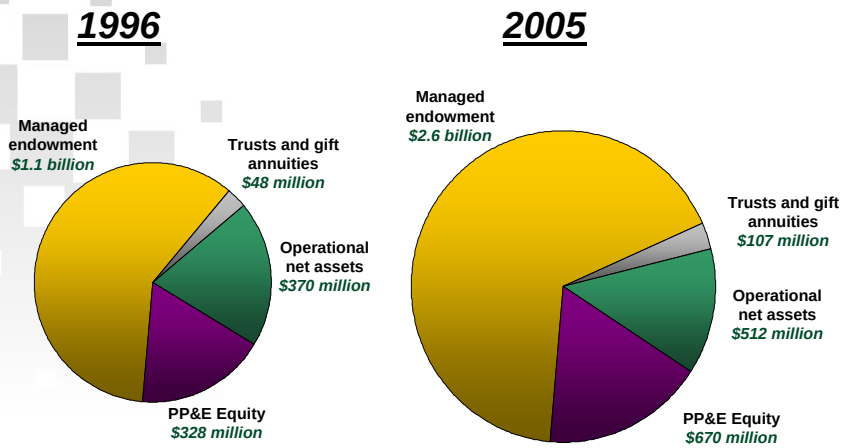
Vanderbilt's Total Net Assets



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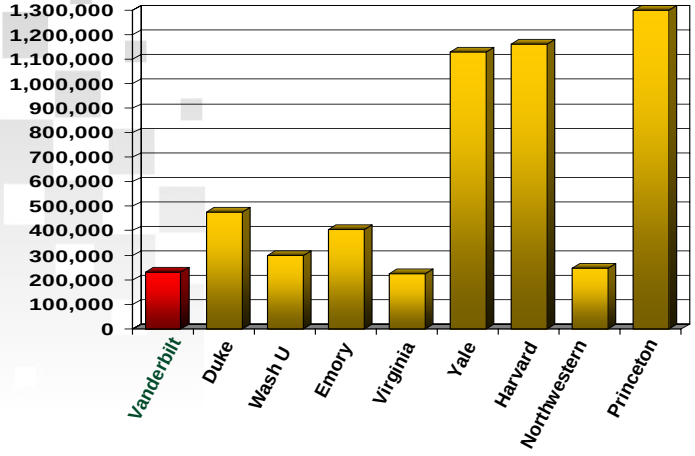
Endowment per Student



Top 25 Universities in Vanderbilt's Applicant Overlap

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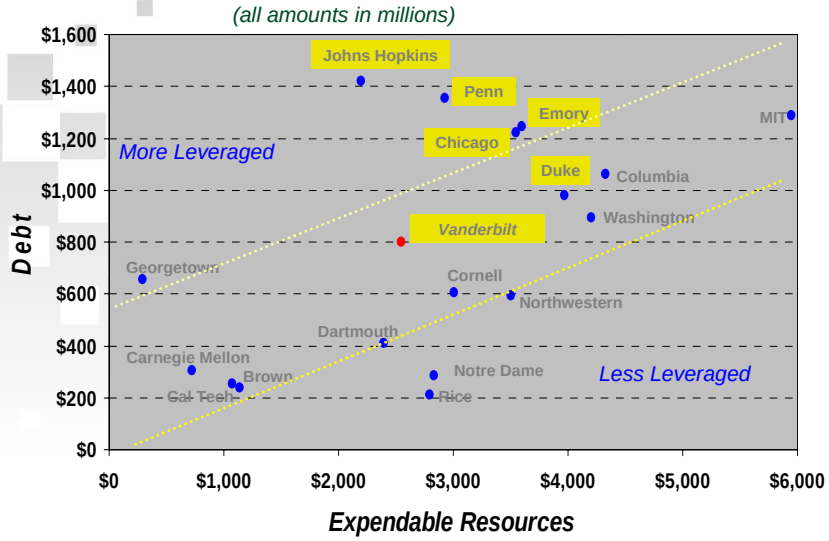
Debt Strategy Comparisons



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Vanderbilt's Debt Outstanding

- 1995 – $350 million
- 2005 – $762 million
- *~2008 – $985 million*

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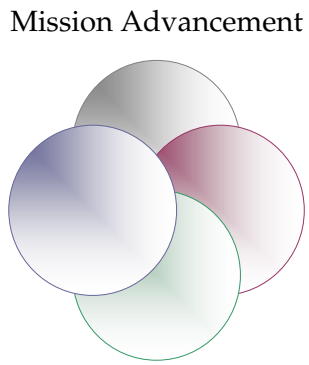
VU "Financial Equilibrium" Framework Used to Prioritize Capital Investments / Financing



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Three Governing Policies Impacting Capital Investment Planning

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The University's Debt Policy Provides Guidelines for Prudent Management of Debt

- Ensure that an appropriate mix and type of funding sources are utilized
- Ensure adequate financial strength to service existing and proposed debt for important capital projects while not compromising other required investments
- Avoid too little debt and too much debt (optimize perpetual "asset")
- Maintain a high-grade bond rating (Aa)

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Flexibility from "Financial Equilibrium triangle policies"

- Recognizes portfolio management of debt and natural hedge from asset side of balance sheet
- Formally constrains potential perceptions of otherwise insatiable capital / debt appetite (largely quantitative ratio focus)
- Allows for use of commercial paper, both tax-exempt and taxable
- Provides for management execution of interest rate swap agreements within broad constraints
- Enhances potential for improved working capital management
- At all times, maintains reserves for plant replacement exceeding the higher of (a) deferred maintenance levels or (b) 10% of accumulated depreciation on buildings
- Requires budgeted R&R funding at or above 60% of latest actual GAAP depreciation

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III. Definition of “Alternative Debt Structure”

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What is an Alternate Debt Structure ?

The concept of “Alternate Debt Structures” can assume different meanings based on portion of the term that is emphasized.

- **Alternate** Debt Structures: Capital solutions that are alternatives to conventional debt
- **Alternate Debt** Structures: Financing solutions that are alternatives to traditional fixed/floating rate debt
- **Alternate Debt Structures**: Balance sheet solutions that are centered upon achieving a “financial equilibrium”

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IV. Alternatives to Debt for Capital Financing

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Alternatives to Debt

When might you consider a “non-debt” financing alternative?

- The size and scope of the project or equipment may not be conducive for a debt issue
- The nature of the project may not be a “core” function
- Access to debt market may not be readily available

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Alternatives to Debt: What, Why & When?

- Leases
  - Either vendor or finance company supplied
  - Prompts equipment replacement/upgrades
  - Best suited for short-lived capital financing
- Privatization
  - Traditional developer-directed model
  - Often speeds project implementation
  - Works best for discreet revenue streams/enterprises
- Sale/leaseback
  - Sale of property for cash; property immediately leased back
  - Option for administrative space located on perimeter of campus
  - Unlocks appreciated value for use in mission-related projects
- Internal Bank
  - Funds available to be lent to operating units
  - Hidden economic cost is investment opportunity cost
  - Good for smaller capital projects / equipment purchases

V. Alternatives to Traditional Debt

Alternate Debt Structures

Why would a university seek alternatives to traditional debt structures?

- Access to a lower cost of funds
  - May be due to temporary efficiencies or driven by longer term market elements
- Speed / efficiency to market
- Access to credit enhancement or liquidity
- Diversification of product / investor base

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Alternate Debt Structures

Traditional Form	Alternate Form
Fixed Rate Bonds	◆ Synthetic Fixed Rate ▪ BMA-based Swap ▪ LIBOR-based Swap
Variable Rate Bonds	◆ Synthetic Variable Rate ◆ Auction Rate Securities ◆ X-Tenders
Internal Operating Cash	◆ Commercial Paper ▪ Traditional CP ▪ CP w/o Liquidity

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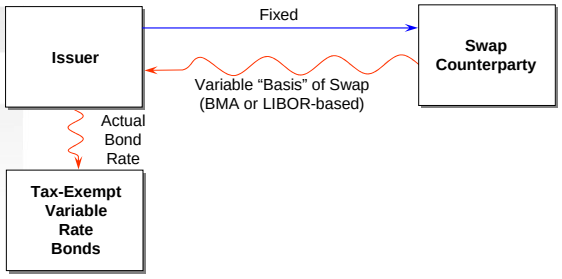
Synthetic Fixed Rate Bonds

- Underlying bonds are variable rate.
- A Swap Counterparty agrees to pay the Issuer a comparable variable rate in return for the University paying a fixed rate to the Counterparty.



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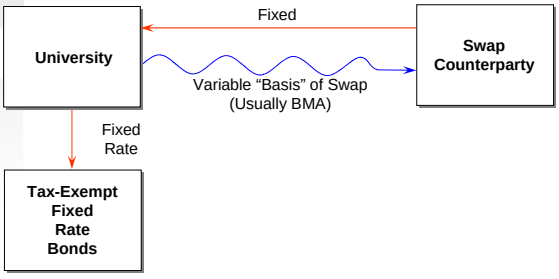
Synthetic Variable Rate Bonds

- Underlying bonds have a rate that is fixed for a defined period of time.
- A Swap Counterparty agrees to pay the University a fixed rate that offsets all or a portion of the fixed rate on the bonds in return for the University paying a variable rate to the Counterparty.



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Synthetic Rate Debt: Vanderbilt University Case Study

- In January 2005, Vanderbilt planned an issuance of $275 million in variable rate debt.
- An opportunity was identified to create synthetic variable rate debt with an all-in cost of funds equal to BMA.
  - Annual fee savings included remarketing fee and liquidity facility fee (if any).
- Synthetic variable rate debt permitted Vanderbilt to:
  - Reduce annual cost of funds
  - Access variable rates without need for liquidity
  - Diversify debt portfolio

Maturity	Par	Bond Rate	Annualized Cost of Issue
2008	$61,235,000	2.70%	.08%
2009	$64,310,000	2.88%	.06%
2010	$152,205,000	3.05%	.05%
	$277,750,000		

All-in Fixed Rate	Fixed Receiver Swap Rate	All-in Cost
2.78%	2.79%	BMA - .01%
2.94%	2.95%	BMA - .01%
3.10%	3.10%	BMA - .00%

Average Life of 3 Tranches = 4.3 years
Average Cost of Funds = BMA - .002%

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Auction Rate Securities (ARS)

- Long-term bonds with interest rate reset through a Dutch auction process
- No put option available to investors.
  - ARS are considered long-term debt.
  - The Dutch auction process results in market-provided liquidity
- Dutch auction process ensures that the lowest interest rate is achieved through a market-driven competitive process

ARS eliminate bank risks

Factor		Costs
Liquidity Costs	→	Fee Increases
Bank Covenants	→	Reduced Flexibility
Bank Credit Risk	→	Adverse Trading Impact
Renewal Risk	→	Negotiating Time

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Extendible Municipal Bonds (X-Tenders)

- Long-term (30 years) variable rate debt with an initial 13 month mandatory tender
- Monthly, investor must elect to extend the tender period or tender the bonds on the tender date
  - If extended, there is a rolling 13-month tender period
  - If not extended, university has one year to have the bonds remarketed or arrange take-out financing
- Rate on the X-Tenders is based upon a pre-determined spread over BMA
- Money fund eligible, X-Tenders offers investor diversification alternatives to VRDBs

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Extendible Bonds (X-Tenders): An Extension of Taxable X-Notes for the Municipal Market

In 1998, Extendible Medium-Term Notes (X-MTNs, now X-Notes) are created.

- Over $161 billion have been issued market-wide, $55 billion in 2005 year-to-date.
- Structure: 12-13 month nominal maturity (typically within a longer program "life") sold to money market funds
- Maturity is proactively extended at the option of investors up to one-year in advance
- X-Notes typically callable after 3- to 5-years
- Coupon: LIBOR + predetermined spread
- Advance notice of non-extension eliminates the need for a liquidity facility since it provides ample remedy period to satisfy a payment obligation

X-Notes are modified to make it applicable to tax-exempt borrowers:

- Short maturity converted to a mandatory tender (hence, "X-Tender" name) within a long nominal maturity (up to 30 years)
  - Prevent triggering a tax re-issuance; retains money fund eligibility
  - Tax issues reviewed by Arthur Miller (GS) and Richard Chirls (Orrick, Herrington & Sutcliffe)
- Bondholders submit retention notices one-year in advance of mandatory tender date
- Coupon: BMA Index + predetermined spread
- Designed as another mode within a fully multimodal indenture (VRDNs and ARS)
- Increased various options to create greater flexibility for borrower

Degree of changes did not alter money market funds' recognition of, nor desire for, the product.

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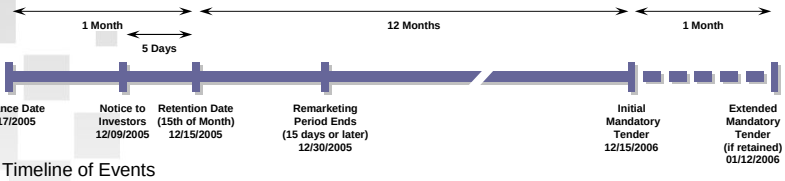
How do X-Tenders work?

- X-Tenders are structured to have an initial mandatory tender, approximately 13 months from issuance.
- Bondholders elect to retain the bonds one year in advance of this date, and thus shift mandatory tender date back one month.



- Timeline of Events
  - Mandatory tender date is set at approximately 13 months from issuance.
  - Retention Date occurs 12 months prior to mandatory tender date.
  - Reminder notice is delivered to X-Tenders owners five business days before Retention Date.
  - On Retention Date, owners choose to:
    1. retain, thus shifting the mandatory tender date one month later; or
    2. not retain, upon which the borrower enters into a one-year remedy period to pay down the bonds.
  - The remarketing agent has an additional 15 days to remarket bonds that are not retained to an investor who will retain (in this circumstance, the mandatory tender date is extended).

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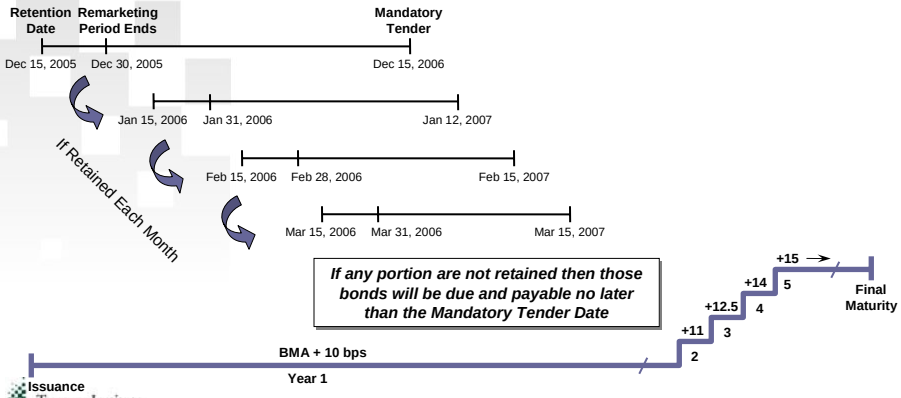
Assuming retentions, the mandatory tender date continues to shift forward each month, approaching the final maturity date.

- X-Tenders typically have a 3- to 5-year no-call period
- The weekly floating rate is based on a pre-determined spread to BMA that increases annually throughout the no-call period to provide incentive for the investor to extend.
  - Interest is payable monthly on the 15th calendar day or preceding business day.



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Ideally a committed buyer base is engaged, though many options exist in a non-extension scenario.

- In the event of a non-extension, the University has a 12 month remedy period.
- On a best efforts basis, the Remarketing Agent attempts to place bonds with investors who will continue to retain
- The non-extension scenarios to provide the University with ample options:
  - **Scenario 1:** 15-day remarketing period with new owner submitting retention notice.
  - **Scenario 2:** Bonds may be called (refinanced) or converted on any business day beginning nine months prior to the mandatory tender date.
    - Multi-modal documents provide product flexibility – ARS, VRDBs and Fixed.
    - Conversion to fixed allows access to a buyer base with greater risk tolerance. Documents allow serialization upon conversion.
    - Flexibility to convert/refinance prior to mandatory tender means the University can act when market conditions are favorable.
  - **Scenario 3:** Spread to BMA may be increased by the University (note: tax reissuance if total spread increase exceeds 25 basis points).
  - **Scenario 4:** the University may wait until mandatory tender date to act.
- Failure to pay the purchase price on a mandatory tender date will trigger an Event of Default.

Commercial Paper (CP)

- Short-term paper that is issued for varying terms (from 1 to 270 days) at interest rates that correspond to the individual terms placed
- Traditional commercial paper matures at the end of each term and may be subsequently reissued; CP Mode is subject to mandatory tender.
- Authorized size is pre-determined but issue size may be increased or decreased as needed
- Programs are typically issued with a line or letter of credit to provide liquidity to investors if paper cannot be “rolled over” to subsequent investors
- May be either taxable or tax-exempt

Extendible Municipal Commercial Paper (EMCP)

- Extendible Municipal Commercial Paper (EMCP) is similar to commercial paper and is money market eligible; however, it is sold without a backup bank liquidity facility.
- EMCP relies on inherent market liquidity and investors to provide the necessary backup to issuers.
- EMCP trades approximately 5-10 basis points higher than traditional CP – without the annual cost of a bank liquidity facility.

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Comparison of Debt Structures

	Interest Cost		Ongoing Fee	Speed	Liquidity Required	Money Fund Eligible
	Immediate	Volatility				
Fixed Rate Bonds						N/A
Synthetic Fixed Rate						
VRDB's						
ARS						
X-Tenders						
Synthetic Variable Rate						
Internal Cash						N/A
CP						
EMCP						

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VI. Alternative Strategies to Manage Debt

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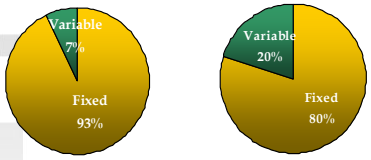
Debt Portfolio Strategy Formulation / Execution

June 2005

Fixed/Variable Allocation



Long-Term Mid-Term

	Fixed Rate	Variable Rate	Total
Underlying Debt	$311,596	$450,820	$762,416
35yr FXP Swaps @ 3.45%	$395,000	($395,000)	
Current / projected financing			
Long Term Allocation	$706,596	$55,820	$762,416
Mid-term FXR Swaps @ 3.33%	($100,000)	$100,000	
Mid Term Allocation	$606,596	$155,820	$762,416
Basis Swaps @ 81.5% of LIBOR			$500,000

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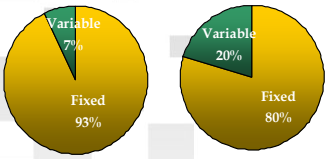
Looking ahead – assessing optimal capital allocations

June 2005

Fixed/Variable Allocation



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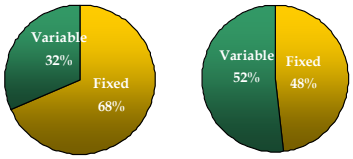
Pro-forma – December 2007

Fixed/Variable Allocation



Long-Term Mid-Term

	Fixed Rate	Variable Rate	Total
Underlying Debt	$277,656	$441,892	$719,548
35yr FXP Swaps	$395,000	($395,000)	
Current / projected financing		$265,000	
Long Term Allocation	$672,656	$311,892	$984,548
Mid-term fixed-receiver swaps	($200,000)	$200,000	
Mid Term Allocation	$472,656	$511,892	$984,548
Basis Swaps			$500,000

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Debt Portfolio Strategy

- Diversified portfolio approach, enhancing future flexibility
- "Lock in" of attractive long-term rates via long-dated (35 year) LIBOR fixed payer swaps, thus likely reducing long-term cost of capital
- Mitigation of higher short- to mid-term interest expense carrying cost via mid-term (3-5 year) fixed-receiver swaps
- Hedging of long-term exposure to rising variable rates via basis swaps
- Ongoing assessment of "stretch cases," assessing risk exposure, e.g., budgetary tolerance for "bad case" outcomes
- Clear communication as to strategy, tactics and risks

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VII. Summary Credit Thoughts on Alternate Debt Structures

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Debt & Alternatives to Debt: Broader Credit Context

- Sophisticated debt policy begins with a mission/competitive strategy, capital planning, overall balance sheet strategy & management/governance competence
- Greater efficiencies possible for complex balance sheets
- Need for more sophisticated approaches is correlated with complexity, size of assets and capital intensity of plan
- Capital Intensity and Market Competition of Higher Education have increased dramatically in last 10 years as demographics have peaked; likely to become more intense in next 10 years
- Staffing and monitoring costs to manage debt and assets have increased dramatically
- New costs should be factored into net investment returns and debt service costs

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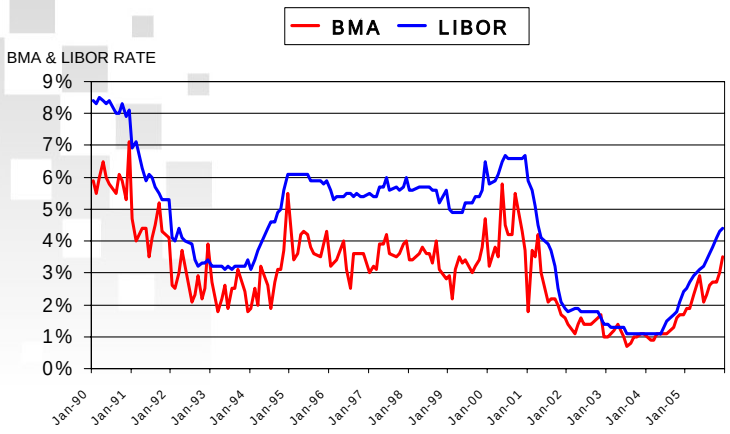
Historically Low Short-rates Drove More Variable Rate Borrowing & Use of Swaps After 2000



Source: BMA and BBA

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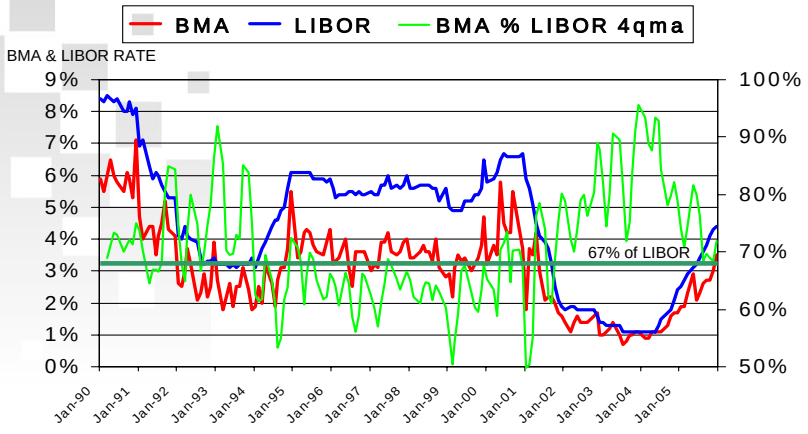
But Rising Short-rates Causing BMA % of LIBOR To Return to Previous Level; Impact on Use of Swaps?



Source: BMA and BBA

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New Debt Strategies – Risk Considerations

- Swaps, for example…
  - Basis risk
  - Tax risk for LIBOR swaps
  - Amortization Mismatch
  - Termination
  - Counterparty
  - Loss of flexibility
  - Governance oversight
  - Management ability & costs
- Biggest risk may not be Swap, but potential Put Risk on VRDO
- Simple may be better for some: natural hedge of cash for interest rate risk

Credit Summary: Debt & Alternatives to Debt

Credit Strengths:

- Lower debt service costs for small increase in risk in many cases
- Potentially added debt capacity and flexibility
- Increased learning/sophistication in managing the balance sheet to optimal levels

Credit Concerns:

- Increased staff needs or dependence on outside advisors
- Increased monitoring costs to avoid surprises and explain risks to board and external parties
- Lack of coordination with broader strategies
- New exposures to counterparties and other external parties