Introduction to Capital Financing

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and
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Course Objectives

- Overview of Capital Budgeting
- Sources of Capital
- History of Bonds
- Rationale for Borrowing
- Major Players
Capital Budgeting
Facilities and Capital Budgeting

Capital Budget

- Long term expenditures
- Buy or build assets
- Renovate assets
- Major maintenance
- Multi-year lives, such as buildings or equipment
New Construction
Capital Budgeting

Capital Improvement Plan

• Orderly and routine process

• Multi-year plan
  • Identifies all capital projects for a given period

• Dollar threshold

• Priority order

• Timing of projects

• Funds required each year of plan
## Capital Budget

<table>
<thead>
<tr>
<th>Project</th>
<th>2018-19</th>
<th>2019-20</th>
<th>2020-21</th>
<th>2021-22</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>G. O. Bonds:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Engineering Building</td>
<td>$4,000,000</td>
<td>$40,000,000</td>
<td>$4,000,000</td>
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</tr>
<tr>
<td>Arts and Sciences Renovation</td>
<td></td>
<td>$750,000</td>
<td>$7,500,000</td>
<td></td>
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<tr>
<td>HTHW Replacement</td>
<td></td>
<td></td>
<td>$300,000</td>
<td>$3,000,000</td>
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<tr>
<td><strong>Revenue Bonds:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Student Union</td>
<td>$900,000</td>
<td>$9,000,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Parking Garage</td>
<td></td>
<td></td>
<td>$750,000</td>
<td>$7,500,000</td>
</tr>
<tr>
<td><strong>Cash</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Laboratory Equipment</td>
<td>$800,000</td>
<td></td>
<td>$800,000</td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>$4,700,000</td>
<td>$39,750,000</td>
<td>$11,350,000</td>
<td>$10,500,000</td>
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</tbody>
</table>
Funding Capital Budgets

How can Capital Projects be funded?

• State appropriations
• Tuition
• Restricted Fees
• Gifts and grants
• Endowment Income
Funding Capital Budgets

Sources of Capital

• Cash
• Bank Loans
• General Obligation Bonds
• (Dedicated) Revenue Bonds
• Certificates of Participation
• Capital Leases
Bond Financing
What are Bonds?

- Debt issued for a period of one or more years
- Investors buy bonds - lend money to borrower
- Borrower repays principal amount of loan at specified times
- Borrower pays interest periodically
- Municipal bonds and corporate bonds
Types of Municipal Bonds

General Obligation (G.O.) Bonds

• Secured by a governmental agency’s pledge of tax revenues
• “Full faith and credit”
• Backed by government’s taxing power

Revenue Bonds

• Secured by specified revenue stream of an entity
• User fees, tolls, rents, services charges, license fees, special purpose tax assessments
Dutch East India Co. issues bond on Nov. 7, 1623

1812 - New York City issued 1st U.S. local government debt instrument as a “municipal bond”
Revenue Bonds

- England issued revenue bonds to raise capital for toll roads in 1770s
- In 1880s, Port of New Orleans was first U.S. “authority” to issue revenue bonds
- 1921: Port of New York and New Jersey 1st interstate authority – “Special District”
- Until 1957, used for utility projects or local public housing
- Use expanded in 1960s for purposes previously financed by G.O. bond
- Over 60% of all 2017 U.S. bond issues
<table>
<thead>
<tr>
<th>Year</th>
<th>Issuance (billion)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1996</td>
<td>$185 billion</td>
</tr>
<tr>
<td>2006</td>
<td>$386 billion</td>
</tr>
<tr>
<td>2010</td>
<td>$433 billion</td>
</tr>
<tr>
<td>2014</td>
<td>$337 billion</td>
</tr>
<tr>
<td>2016</td>
<td>$445 billion</td>
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<td>2017</td>
<td>$448 billion</td>
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</table>

$3.85 trillion outstanding

Tax Exemption

• In 1913, tax-exempt debt created by Congress

• Revenue Act of 1913 excluded interest income from municipal bond issues from some taxes

• Borrowing was not most common method of financing facilities until federal programs of 1950s
Tax-Exempt Municipal Bonds

- Over 80,000 municipal bond issuers in U.S.
- State or local governments bonds
- Public purpose projects
  - Governmental
  - Non-Profit organization
- Interest to investor exempt from some income taxes
  - Federal Income Tax
  - State Income Tax
- Includes higher education bonds
• Increased dramatically in 1980s

• Before then...
  
  • Private institutions relied on fund raising
  
  • Public institutions relied on state appropriations
  
  • Larger, better endowed, more sophisticated institutions issued debt
1980: Higher ed issued debt = $1.05 billion

1999: Approx. $14.5 billion issued

2014: Univ of California System had outstanding debt = $14.5 billion

2017: Higher Ed issued $70.4 billion debt

“Higher education is the new frontier for the bond market”

www.worldfinance.com
# Higher Education Bond Issues

<table>
<thead>
<tr>
<th>Year</th>
<th># Issues</th>
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</thead>
<tbody>
<tr>
<td>1980</td>
<td>65</td>
</tr>
<tr>
<td>2014</td>
<td>496</td>
</tr>
<tr>
<td>2015</td>
<td>657</td>
</tr>
<tr>
<td>2016</td>
<td>698</td>
</tr>
<tr>
<td>2017</td>
<td>685</td>
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</tbody>
</table>

*The Bond Buyer*
Muted growth potential

- Competition straining tuition rates
- International student enrollment trending down due to uncertainty over studying in U. S.
- Increasing personnel costs and rising pension liabilities = lower margins
- Excise tax on some investment earnings at some smaller institutions may reduce financial aid
- Expect comprehensive schools with diverse revenues streams to perform best
Colleges and Universities have a good track record for creditworthiness.

Generally have not defaulted.

In 2015, the first higher ed institution rated by Moody’s defaulted.

From 1970 to 2016, the municipal bond default rate was 0.09%.

The higher ed default rate was 0.04%.
Why Borrow?

State Institutions

• State appropriations insufficient or not available
  • Scarce state funds
  • Capital outlay priority system
  • Debt limits
  • Auxiliary enterprises are usually not funded by state
Why Borrow?

- Capital projects = $$$
  - Difficult to fund with cash on hand
  - Construction inflation
- Competing campus needs
- Gifts

Promises of gifts
- Capital campaigns
- Multi-year pledges
Rationale:

Have future users help pay for project

- Asset will last for many years
- Payments over time allocate costs to future periods/future users
Cold Cash
or
Funded over time?
Why Borrow?

- What if you had the cash?
- Should you spend it in one or two years?
- When does it make sense to do so?
Why Borrow?

Financial Leverage

• Opportunity costs
  • Your $ vs. OPM

• If investments earn more than “all in” cost of borrowing, advantageous to borrow
  • “all in” is interest expense plus other transaction costs
Why Borrow?

Arbitrage

- If earning 6% on invested funds
- If “all in” cost of borrowing is 5%
- Advantageous to borrow and keep investments working
- Net result is earn 1% per year
Municipal Bond Financing
Major Players

- Issuer
- Borrower
- Lender/Bondholder
- Trustee
- Investment Banker/Underwriter
- Financial Advisor
- Credit Enhancer (AKA “Credit Provider”)

• Institution’s corporate entity if authorized by law (e.g. LSU Board)

• Debt Issuing Authority
  • Public Trust
  • Governmental Issuing Authority
  • Issues bonds for project then loans proceeds to borrower
  • Compensated at closing and annual fee

• Special Purpose Non-Profit Corporation

• “63-20” Governmentally Sponsored Corp
Borrower

- The actual user of bond proceeds
- Institution that will own facility
- Borrows bond proceeds from Issuer
- Provides revenues to issuer for repayment of debt
  - Revenues usually assigned directly to Trustee
Lenders/Bondholders

- Financial institutions
- State issuing/financing agencies
  - Pooled issues
  - Reimbursement contracts
- Institutional investors
  - Insurance companies
  - Large corporations
- Retail
  - Mom & Pop
  - Affinity
  - $1,000 - $5,000 increments
Trustee

- Bank trust department
- Holds funds in trust for bondholders
  - Represents bondholders over life of bonds
  - Maintains funds/accounts
    - Project/Construction Funds
    - Principal & Interest Funds
    - Debt Service Reserve Funds
- Approves requisitions/invoices
- Compensated at closing and also annual fee
Trustee

- Registrar/Record keeper
  - Federal law requires registration of names and address of bondholders
  - Tax Information to IRS
  - Records of Purchases and Sales
- Paying agent
  - Interest and principal payments
Investment Banker/Underwriter

• Provides advice on structure of issue
• Purchases bonds
• Sells bonds to investors
• Manages bidding for competitive sale
• May manage investment of bond proceeds
Financial Advisor (‘‘FA’’)

• Borrower’s representative
• Investment banker
• Initial analytical work
• Manages competitive or negotiated process
• Extremely useful if issuer/borrower is inexperienced
Credit Enhancer

- Guarantor
- Bond Insurer
- Letter of Credit ("LOC") provider
What do all these lawyers do???

- Institution’s counsel
- Bond counsel
- Underwriter’s counsel
- Trustee’s counsel
- Issuer’s counsel
- Credit Enhancer’s counsel
Specialists in bond transactions

Legal opinion

- Certifies Issue meets tax-exempt rules
- Legal, valid and binding obligation
  - Legal authority
  - Ensures procedures necessary to make commitments binding have been followed
Bond Counsel Selection

- Select through RFP process
- Retain experienced counsel who knows institution well
- Require listing in “The Bond Buyer’s Municipal Market Place Directory”

AKA the “Red Book”
Documents, Documents and More Documents!
Closing Documents

• Trust Indenture
• Loan Agreement and Assignment of Revenues
• Tax Regulatory Agreement
• Official Statement (“OS”)
• Bond Purchase Agreement (“BPA”)
• Mortgage and Security Agreement
• Continuing Disclosure Agreement
• And many more!
Basic Terminology
Costs of Issuance (“COI”)

- Underwriter’s spread & expenses
- Legal fees
- Financial advisor fees
- Rating agency fees
- Trustee/Paying Agent fee
- Issuer expenses
• Security against temporary failure to make P&I payments
• Often one year of debt service
  • Max annual debt service (MADS)
• Can be funded out of bond proceeds
• If use it, must replenish it
• Surety bond
Capitalized Interest ("CapI")

- Borrow early interest payments
- Buys time before project revenues are generated to pay debt service
  - Construction period
  - Project normalization/stabilization
- One or two years
- Increases bond par value
Sources and Uses Example

**Sources**

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Par amount (Principal)</td>
<td>$27,000,000</td>
</tr>
<tr>
<td>Less: Underwriter’s discount</td>
<td>($138,000)</td>
</tr>
<tr>
<td>Total Sources</td>
<td>$26,862,000</td>
</tr>
</tbody>
</table>

**Uses**

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project (Construction) Fund</td>
<td>$22,085,150</td>
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<tr>
<td>Capitalized Interest Fund</td>
<td>1,450,000</td>
</tr>
<tr>
<td>Costs of Issuance</td>
<td>726,850</td>
</tr>
<tr>
<td>Debt Service Reserve Fund</td>
<td>2,600,000</td>
</tr>
<tr>
<td>Total Uses</td>
<td>$26,862,000</td>
</tr>
</tbody>
</table>

Note that only 85% of par value goes into project
Bond Closing

- Culmination of the purchase and sale transaction
- Legal opinions are delivered
- Documents are assembled and signed
- Bonds “delivered”
- Funds are wired to Borrower (Trustee)
PAY DAY!!!! PAY DAY!!!! PAY DAY!!!!