Welcome to Today’s NACUBO Webcast

Our program will begin shortly with a brief introduction on how to use the desktop interface.
Understanding the Institutional Impact of the Current Economic Climate

December 2, 2008
Moderator and Panelists

• **J. Michael Gower,** Vice President and CFO, Yeshiva University
• **Stephen T. Golding,** Executive Vice President, Cornell University
• **Michael Strauss,** Chief Economist and Chief Operating Officer, Commonfund
• **Linda Fan,** Managing Director, Prager, Sealy & Co., Inc.
• **John Nelson,** Managing Director, Moody's
We are faced with the Perfect Financial Storm:

- No part of the balance sheet is immune
- Institutional liquidity is strained
- Endowments face unprecedented decline
- Credit market contractions compromise debt strategies
We are faced with the Perfect Financial Storm:

- States are reducing in-year and multi-year budgets
- Fundraising support is in precipitous decline
- Endowments see an unprecedented drop
- There is a real decline in research funding
Historical operating assumptions have undergone significant dislocation

- Endowment spending policy
- Debt portfolio construction
- Credit markets
- Liquidity
- Access to capital
Political pressure to stay mission-centric is not receding:

- Teaching and service
- Technology development
- Community-based economic engine
- Promoting accessibility
Political pressure to manage costs while remaining accessible is increasing:

- Strains on financial aid
- Tuition increases are scrutinized
- Demands for transparency on spending
The current financial crisis is …

testing the boundaries between governance and management:

- The role of trustee leadership
- The role of trustee committees
- Trustees and management working together
- Financial reporting and disclosure
- Transparency
Goal of this session:

To help you come out of the current financial predicament stronger than you were going into it.
How??

• To help you think about how to meet the challenges
• To make sure we are collectively asking the tough questions
• To recognize that we must find institution-specific solutions
• To share different approaches
• To identify external sources to help you think through the issues
Polling Question #1

What is your role/perspective on campus:

a) CFO/Business Office Staff
b) Chief Investment Officer
c) Board Member/Trustee
d) Other
Consensus World GDP Forecasts

Commonfund Estimates where significant different from IMF

<table>
<thead>
<tr>
<th>Year</th>
<th>U.S.</th>
<th>Japan</th>
<th>UK</th>
<th>Euro area</th>
<th>Brazil</th>
<th>Russia</th>
<th>India</th>
<th>China</th>
<th>BRICs</th>
<th>Developed markets</th>
<th>Emerging markets</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008</td>
<td>1.0%</td>
<td>0.5%</td>
<td>0.5%</td>
<td>5.0%</td>
<td>9.0%</td>
<td>8.0%</td>
<td>1.0%</td>
<td>6.2%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2009</td>
<td>-0.5%</td>
<td>-0.2%</td>
<td>-1.2%</td>
<td>3.5%</td>
<td>7.5%</td>
<td>6.0%</td>
<td>-0.5%</td>
<td>4.5%</td>
<td></td>
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</tr>
</tbody>
</table>

Source: IMF, ISI – October 2008
U.S. Real GDP

Source: BEA
Employment: January 1986 – October 2008

- Black Monday: October 19, 1987
- S&L Crisis: 1990
- Mexican Debt Crisis: 1995
- Russia/LTCM: 1998
- NASDAQ Collapse: 2000
- Credit Crisis: 2007 – 2008

Source: BLS
Housing Price Appreciation … Depreciation

6.8% Price Decline from October 1989 to April 1991

22.0% Price Decline from June 2006 to August 2008

Inflation | Has Peaked
January 2003 – September 2008

Source: BLS

[Graph showing inflation rates for PPI (YoY), PPI ex Food & Energy (YoY), CPI (YoY), and CPI ex Food & Energy (YoY) from January 2003 to September 2008.]

Percent (%)

PPI (YoY)
PPI ex Food & Energy (YoY)
CPI (YoY)
CPI ex Food & Energy (YoY)

Source: BLS
Non-Farm Unit Labor Costs Help to Keep PCE Costs Modest

Year-to-Year Changes 3/31/1960 - 9/30/2008

Core PCE vs Nonfarm Unit Labor Costs (Year-to-Year Changes)

Quarterly Data 3/31/1960 - 9/30/2008

- Nonfarm Labor Costs (Smoothed)
  9/30/2008 = 1.0%

- Core Personal Consumption Expenditures Price Index
  9/30/2008 = 2.5%

Correlation Coefficient = 0.88

Source: Ned Davis Research
World Population

Source: U.S. Census Bureau
Financial Conditions Index

Source: The Bloomberg Financial Conditions Index. The index combines yield spreads and indices from the money markets, equity markets, and bond markets into a normalized index. The values of this index are z-scores, which represent the # of standard deviations that current financial conditions lie above/below the average from 1992 – Nov 14, 2008.
S&P 500 | Historical Downturns

Years to Recovery | Peak to trough "drawdown" | Percent change in 12 months following trough
--- | --- | ---
1972-1975 (33 months) | 32.0% | -46.2%
1980-1983 (32 months) | 51.8% | -23.8%
1987-1988 (15 months) | 18.8% | -30.2%
1990-1991 (17 months) | 29.1% | -15.8%
2000-2003 (37 months) | 22.2% | -46.3%
2007-10/10/2008 (11 months) | ? | -41.96%

Source: Bloomberg
Polling Question #2

What area is of greatest concern to your institution at this time?

a) Liquidity
b) Enrollment
c) Fundraising
d) Debt service costs
e) Cuts in state funding
f) Endowment decline
Impact on Tax-Exempt Market

- Prior to 9/10-9/17:
  - Treasury conservatorship of Fannie Mae and Freddie Mac announced
  - Merrill and Bank of America merger announced
  - Lehman files for Chapter 11 and Barclay’s buys Lehman’s investment banking assets
  - Shares of Reserve Primary fund falls below $1 due to Lehman exposure
Impact on Tax-Exempt Market

9/18/-10/1
- Government announces $85 billion 2-year loan to AIG
- Investors pull approximately $24 billion from tax-exempt money market funds
- Goldman Sachs and Morgan Stanley announce they will become bank holding companies
- House votes down first $700 billion federal bailout plan
- Largest point drop in the Dow Jones (778 points) after bailout plan fails in the House
Impact on Tax-Exempt Market

- **10/2-10/14**
- JPMorgan acquires Washington Mutual in a government brokered deal
- Senate and House pass revised bailout plan
- 30-year Treasuries fall below 4%
- Federal Reserve and five other central banks cut interest rates on a coordinated basis
- US government announces plan to invest $250 billion in nine US banks
- FDIC insurance expanded
- Fed announces details on CPFF (Commercial Paper Funding Facility)
### Impact on Tax-Exempt Market

<table>
<thead>
<tr>
<th>Date</th>
<th>9/3/08</th>
<th>9/10/08</th>
<th>9/17/08</th>
<th>9/24/08</th>
<th>10/1/08</th>
<th>10/8/08</th>
<th>10/15/08</th>
<th>10/22/08</th>
<th>10/29/08</th>
<th>11/5/08</th>
<th>11/12/08</th>
<th>11/19/08</th>
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</thead>
<tbody>
<tr>
<td>SIFMA</td>
<td>1.63%</td>
<td>4.71%</td>
<td>7.96%</td>
<td>5.74%</td>
<td>3.45%</td>
<td>1.63%</td>
<td>1.82%</td>
<td>1.82%</td>
<td>1.82%</td>
<td>1.63%</td>
<td>1.63%</td>
<td>1.63%</td>
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<tr>
<td>30-year MMD</td>
<td></td>
<td></td>
<td></td>
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- **10/14-10/29**
  - Dow experiences worst one-day percentage decline since 1987 on 10/15
  - Hedge fund withdrawals may hit 25% by year end
  - The Federal Reserve cuts interest rates 50 bps to 1%

As of 11/19:
- SIFMA: 5.00%
- 30-year MMD: 1.12%
Impact on Tax-Exempt Market

- **10/30-11/19**
  - $700 billion bailout plan shifts from buying troubled mortgage assets to direct capital injections into financial institutions
  - Auto industry requests government assistance to avoid bankruptcy
  - CPI falls 1% from Sept. to Oct., the steepest one month decline in the 61 year history of the index
  - Jobless claims approach highest level since 1982
  - S&P 500 falls below 750 and Dow drops below 7500
# Impact on Debt Portfolio

<table>
<thead>
<tr>
<th>Current Market Conditions</th>
<th>Impact on Debt Portfolio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Downgrades of Insurers and Banks</td>
<td>• Higher costs on variable rate debt</td>
</tr>
<tr>
<td></td>
<td>• Secondary market disclosure on downgrades</td>
</tr>
<tr>
<td>Increased Cost/Scarcity of Bank Liquidity Facilities</td>
<td>• Increase in all-in-cost of VRDBs and operating lines</td>
</tr>
<tr>
<td>Credit Market “Freeze”</td>
<td>• Increase in long-term fixed rate bond rates</td>
</tr>
<tr>
<td>Investor Concerns about Credit</td>
<td>• Need for more investor education</td>
</tr>
<tr>
<td></td>
<td>• Wider credit spreads</td>
</tr>
<tr>
<td>Dislocation of Bond/Swap Markets</td>
<td>• Higher negative market-to-market of swaps</td>
</tr>
<tr>
<td></td>
<td>• Collateral posting may be required</td>
</tr>
</tbody>
</table>
## Impact on Debt Portfolio

<table>
<thead>
<tr>
<th>Current Market Conditions</th>
<th>Impact on Debt Portfolio</th>
</tr>
</thead>
</table>
| **Lower Endowment Market Values** | • Bond/credit covenants may be in jeopardy  
• Unrestricted net assets will be substantially reduced |
| **Pressures on Broker/Dealers** | • Higher fees, less willing to inventory bonds, may reduce commitment to municipal business  
• Downgrades on counterparties, remarketing agents |
| **Decrease in Fundraising, Endowment Earnings** | • Pressure on liquidity |
General Impact of Current Economic Climate on Higher Ed Budgets

Percentages are shown from Moody’s 2007 Medians; publics on top line, privates on bottom for small and large institutions.

More Financial Aid Needed; Decreases in Discretionary Spending
- Equity Markets
- State Revenues
- Unemployment
- Federal Deficit

Decreased State Appropriations
Fewer Federal, State and Private Grants
Market Value of Endowment Down
Decrease in Annual Giving
Decrease in Capital Gifts

<table>
<thead>
<tr>
<th>Tuition &amp; Auxiliaries</th>
<th>State Support</th>
<th>Grants &amp; Contracts</th>
<th>Investment Income</th>
<th>Gifts &amp; Other</th>
<th>Capital Campaigns</th>
</tr>
</thead>
<tbody>
<tr>
<td>26% 72%</td>
<td>32 % --</td>
<td>14% 1-5%</td>
<td>2% 6-10%</td>
<td>3% 8-11%</td>
<td></td>
</tr>
</tbody>
</table>
Polling Question #3

At your institution, what is the biggest challenge you face due to the current economic climate?

a) Dealing with uncertainty  
b) Communicating the issues  
c) Developing solutions  
d) Working with stakeholders  
e) Other
Debt Management Strategies

- Review existing debt structure
  - Understand portfolio risks (e.g. put, liquidity, counterparty)
  - Bank line of credit expiration dates
  - Bond and bank covenants
  - Establish debt portfolio monitoring system
  - Review swap portfolio and documents, if any, and MTMs and collateral thresholds

- Governance/Management issues
  - Evaluate liquidity needs holistically
  - Consider relationships institutionally to maximize benefits
  - Diversify and manage relationships with financial partners
  - Communicate with senior management and Trustees
Debt Management Strategies

- External communications
  - Be proactive with investors and rating agencies

- Establish liquidity bridges
  - Potential issues with capital calls/diminished payout
  - Midyear state budget cuts
  - Gifts and timing of pledges
Potential Opportunities

- Streamline operations and improve efficiency
  - Opportunistic budget reductions
  - Revisions to capital plans
    - Assumptions
    - Timing

- Re-evaluate spending rule impact
  - Rule vs proactive management
  - Early cuts vs later
Potential Opportunities

- Improve communication across institution (e.g. schools, functions)
- Better align asset and liability sides of the balance sheet
- Improve Board-management relations to enable faster and more nimble decision making
Polling Question #4

What is your institution’s bond rating?

- a) Baa
- b) A
- c) Aa
- d) Aaa
- e) Not rated yet
The Long & Short of It: Treasury & Debt Management is Key

• **Short-Term Challenges**

  • Capital Market Freeze
    – Variable rate disruptions
    – Swap losses
    – Tighter bank capital
    – Higher fixed rates

  • Liquidity Squeeze
    – Commonfund ST fund
    – Reduced distributions from hedge funds & other investments
    – Higher than expected debt costs
    – Lower annual fund receipts
The Long & Short of It:
A CFO’s Job Just Got a Lot Harder

Longer Term Challenges

• Tuition Pricing Elasticity
  – Deep, long recession
  – Shift to lower-cost options
  – Student borrowing costs

• Credit Now at a Premium
  – Demand for ratings rising
  – Demand for better disclosure rising
  – Cost of debt higher

• Investment Losses
  – Lower endowment spending
  – Lower projected returns
  – Impact on large donors
  – Impact on student aid

• Capital Program Rethinking
  – Invest while others defer?
  – What is strategically critical?
  – Linked w/ asset/debt policy?
Credit Spreads Widen Amid Thawing in Short Term Market

How Tight Will Capital Market Access Be for Colleges?

Source: Moody’s
Risks of Variable Rate Debt
No Longer Hidden*

Many College & University CFOs Outsourced Key Decisions

Renewal/Rollover Risk
Rating Triggers
Financial Covenants
Bank Bond Payments
Swap Coll/ Terminations

Frequency & Severity of Risk is Greater

*See Moody’s 2004 publication:
--"Hidden Risks of Variable Rate Debt"
Rating Discussions: What is Moody’s Looking For?

• Full Disclosure
  – Municipal market information is fragmented and hard to assess
  – Higher education accounting: opaque
  – Higher ed has a great business model, but undercuts its own credibility with investors by poor disclosure habits
Rating Discussions: What is Moody’s Looking For?

• Senior Leadership Involvement
  – Strong President/CFO team can allay concerns about leverage & other risks
  – Board discussion more important
  – Frank discussion of risks and strategies to mitigate
  – Absence of senior contact is red flag
Rating Discussions:
What is Moody’s Looking For?

• Make Your Own Decisions
  – Using consultants for advice is usually a best practice
  – But know your documents in detail
  – Outsourcing debt/investment decisions is a red flag
Endowment Losses: How Big an Impact?

Even Substantial Declines in FY2008 and FY2009 Unlikely To Erase Gains

Median Cash and Investments

<table>
<thead>
<tr>
<th>Year</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>FY2008 Projected (Down 10%)</th>
<th>FY2009: Additional 30% Decline</th>
</tr>
</thead>
<tbody>
<tr>
<td>Value</td>
<td>$152,615</td>
<td>$176,670</td>
<td>$195,050</td>
<td>$214,634</td>
<td>$251,913</td>
<td>$226,722</td>
<td>$158,705</td>
</tr>
</tbody>
</table>

Source: Moody’s
Credit Outlook: Not all Negative

- Large endowment losses: tough, but not fatal blow for colleges and universities
  - ~90% of students attend schools w/ < $100K per student
  - 4 year enrollments & up-front payments give time to adjust
  - Public & lower cost private colleges gain in recession

- But less selective, high cost colleges with weak debt structure are @ risk
  - New strategies needed- diversification of programs; student markets, banks, swap counterparties, investments
  - Increased rating downgrades likely for those with poor control over decisions

Source: Moody’s
Questions?
Next Steps….

• Be sure you have visited the NACUBO website for more resources and information at:
  • http://www.nacubo.org/economy
Thank you!

Contact information:

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John Nelson: John.Nelson@moodys.com
Michael Strauss: MStrauss@cfund.org
Thank You For Your Participation

Please complete the online evaluation