Moody’s Rates Universities Around the World

» **30 credit analysts** bring sector and regional expertise to ratings

» **800 rated organizations**, including: universities, philanthropic foundations, social service providers, membership organizations, and cultural institutions

» Over **$250 billion of rated debt**

**United States**
- >520 public & private four-year universities
- >200 two-year colleges
- 100 not-for-profit organizations
- 40 private K-12 schools

**Canada**
- 9 public universities
  - Ratings from Aa1-A3

**England**
- 8 public universities
  - 1 not-for-profit organization
  - Ratings from Aaa-Aa2

**Australia**
- 2 public universities
  - Ratings from Aa1-Aa2

**Singapore**
- 2 public universities
  - Both rated Aaa

**Mexico**
- 1 public university
  - Rated Baa3

**Spain**
- 1 public university
  - Based on a guaranty by a regional government
US Higher Education & Not-For-Profits Outlooks
Sector Outlooks Driven by Revenue Projections

Outlook Horizon: 12-18 months

Key Indicator: Modest real revenue growth in a low inflationary environment

US Higher Education
Stable
• Increases in net tuition revenue and state funding with increased investment income and steady philanthropy

Community Colleges
Stable
• Stabilizing net tuition revenue, and continued increases in state government funding and tax revenue

Not-for-Profits
Stable
• Endowment spending to support operations with total cash and investments reaching a new peak

Independent Schools
Stable
• Persistent demand, demonstrated pricing power, and sustained philanthropy
US Higher Education Outlook
US Higher Education Outlook is Stable
Outlook revised in July 2015 from negative

What could change outlook to negative?

» A move to below 3% annual revenue growth, our current sector adjusted inflationary measure

What could change outlook to positive?

» Projected annual revenue growth above 5%

Aggregated operating revenue, a key indicator for our outlook, will grow at or above 3% over the next 12-18 months

» All revenue streams expected to grow modestly

» Ongoing expense discipline will contribute to steady operating performance

» Reserves will remain stable, with continued strategic capital investment
## All Revenue Streams Expected to Grow, Albeit at Differing Rates

<table>
<thead>
<tr>
<th>Revenue Stream</th>
<th>Expected Growth Over Next 12-18 Months</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student Charges</td>
<td>2-3%</td>
</tr>
<tr>
<td>State Funding</td>
<td>2-4%</td>
</tr>
<tr>
<td>Patient Care</td>
<td>4-6%</td>
</tr>
<tr>
<td>Research</td>
<td>2-4%</td>
</tr>
<tr>
<td>Endowment Income</td>
<td>4-5%</td>
</tr>
<tr>
<td>Gifts</td>
<td>3-4%</td>
</tr>
</tbody>
</table>

*Source: Moody’s Investors Service*
Sector-Wide Revenue is Diversified

Publics benefit from state support; privates have more investment income

Public Universities Derive an Aggregate 20% of Funding from their States

- State and Local Funding 20%
- Investment Income 4%
- Grants and Contracts 17%
- Patient Care 19%
- Student Charges 31%
- Other 9%

Private Universities Have a Higher Exposure to Investment Income

- State and Local Funding 20%
- Investment Income 13%
- Grants and Contracts 14%
- Patient Care 25%
- Student Charges 36%
- Other 12%

* % of Operating Revenue in FY 2016 (projected)

Source: Moody's Investors Service
Student Charges
Global Demand for Higher Education is Expanding Rapidly

Percent of 25-64 Year Olds Attaining Tertiary Education

Source: OECD, Education at a Glance 2015
# Influences on Willingness to Pay Tuition

<table>
<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>Change in Household Net Worth</td>
<td>6.6%</td>
<td>-0.7%</td>
<td>-15.8%</td>
<td>9.2%</td>
<td>13.4%</td>
<td>5.16%</td>
<td>8.81%</td>
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<tr>
<td>Change in Median Sales Price of Existing Single-Family Homes</td>
<td>5.4%</td>
<td>7.6%</td>
<td>-9.2%</td>
<td>6.5%</td>
<td>11.4%</td>
<td>5.79%</td>
<td>6.49%</td>
</tr>
<tr>
<td>Unemployment Rate</td>
<td>6.9%</td>
<td>5.8%</td>
<td>5.8%</td>
<td>8.1%</td>
<td>7.4%</td>
<td>6.15%</td>
<td>5.19%</td>
</tr>
</tbody>
</table>

*Sources: U.S. Board of Governors of the Federal Reserve System (FRB): Z.1 Flow of Funds, Moody's Analytics*
More Public Universities Confront Constrained Net Tuition Revenue Growth

Percent of Public Universities by Change in Net Tuition Revenue

Source: Moody's Investors Service
Low Net Tuition Revenue Growth is New Normal for Private Universities

Percent of Private Universities by Change in Net Tuition Revenue

Source: Moody's Investors Service
Forty-Four Percent of Private Universities Discount Tuition by More Than Half

Median First Year Discount Rate for Fall 2015

Universities with First Year Discount Rates Over 50%

Source: Moody's Investors Service
Smaller Regional Public Universities and Small Private Universities Have Weakest Revenue Growth

Public Universities Arrayed by Operating Revenue Size ($ Millions) and Annual Revenue Growth FY 2014

Private Universities Arrayed by Operating Revenue Size ($ Millions) and Annual Revenue Growth FY 2014

Source: Moody's Investors Service
Wealthier Universities Less Reliant on Net Tuition Revenue

Fiscal Year 2014 Medians

Source: Moody's Investors Service
Flat High School Graduates Over Next Several Years
Projected High School Graduates (Base period: 2002 = 100)

Source: WICHE, Moody’s Economy.com
Graduate Enrollment Growing for Large Universities, but Declining for Small Schools

Graduate Enrollment Growing for Large Universities, but Declining for Small Schools

Source: Moody’s Investors Service
International Student Enrollment has Increased Dramatically in the US and Globally

Number of Students Enrolled Outside Their Country of Citizenship

Millions of International Students in the United States

Source: OECD, Education at a Glance 2015

High Numbers of Employees Globally Participate in Employer-Sponsored Education

Percentage of Employed 25-64 Year-Olds Participating in Employer-Sponsored Education, by Occupation, 2012

Sources: OECD, Education at a Glance 2015; Survey of Adult Skills and Adult Education Survey
Online Education Augments Higher Education Enrollment

Online Enrollment Growth Increases While Total Enrollment Stagnates

Public Sector Provides Majority of Online Education
Market Share by Online Enrollment Type

State Funding
State Support on the Rise in FY 2016

Source: Grapevine
Wide Disparity in Funding Levels from State To State

Funding Still Below Levels Five Years Ago
% increase 2009-2014

Source: Illinois State University-Grapevine Data
Many States Implementing Performance-Based Funding

In place at 2-year institutions
In place at 4-year institutions
In transition

No performance-based funding
In place at 2- and 4-year institutions

Source: National Conference of State Legislatures, July 2015
Patient Care Revenue
AMC Universities Benefit From Hospital Relationships

» Financial transfers support medical schools’ faculty recruitment, research, and capital investment
» Enhance research competitiveness
» Revenue diversifier
» Not immune from challenges, universities will protect core

Healthcare Exposure Increases Rapidly at AMC Universities
(Growth of healthcare-related revenue from FY 2007-2014)*

*Estimated data for AMC universities with >20% patient care revenue exposure in FY 2007

Source: Moody’s Investors Service
Research Revenue
Federal Research Grants Remain Flat With Moderate Lift in 2014 and 2015

Source: National Institutes of Health; National Science Foundation

*Excludes ARRA Supplemental Appropriation **R01-Equivalent
Endowment Income & Gifts
Cash and Investments are Well Above Pre-Recession Levels

Median Cash and Investments for Public and Private Universities ($ Millions)

Source: Moody’s Investors Service
Reserves Will Remain Stable, With Continued Strategic Capital Investment

Recent Strong Balance Sheet Growth and Giving Offset Near-Term Market Volatility

Total Aggregated Higher Education Sector Cash and Investments ($ Billions), reported by Fiscal Year

Source: Moody’s Investors Service
Gifts Have Rebounded

Private University Median Total Gift Revenue vs. Russell 2000

Source: Moody’s Investors Service

US Higher Education and Not-for-Profits Update
Expense Controls
Ongoing Expense Discipline Contributes to Operating Performance Stability

Between 15% and 20% of Universities will Need to Cut Costs to Maintain Operating Stability

Percentage of Universities Reducing Expenses over Prior Year

Source: Moody’s Investors Service; Moody’s Investors Service estimate
College Consolidations and Closures Are Credit Positive in an Increasingly Competitive Sector

Tuition Discounting Rates at Small Private Universities with Under $100 Million in Operating Revenue

Source: Moody's Investors Service
# US Higher Education and Not-for-Profits Team

<table>
<thead>
<tr>
<th>Managers</th>
<th>Analysts</th>
<th>Main Number: 212.553.0300</th>
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<tbody>
<tr>
<td><strong>Managing Director</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kendra Smith x 4807</td>
<td>Eriq Alexander x 4418</td>
<td>Christopher McMahon x 7409</td>
</tr>
<tr>
<td>Eva Bogaty</td>
<td>415.274.1765</td>
<td>Erin Ortiz x 4603</td>
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<tr>
<td><strong>Global Team Manager</strong></td>
<td></td>
<td></td>
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<tr>
<td>Christopher Collins x 7124</td>
<td>Mary Kay Cooney x 7815</td>
<td>Andrew Pfluger x 7487</td>
</tr>
<tr>
<td>Susan Fitzgerald x 6832</td>
<td>Dennis Gephardt x 7209</td>
<td>David Schlachter x 4453</td>
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<tr>
<td><strong>US Co-Team Managers</strong></td>
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</tr>
<tr>
<td>Karen Kedem x 3614</td>
<td>Matthew Kuchtyak x 6930</td>
<td>Pranav Sharma x 7164</td>
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<tr>
<td>Edie Behr x 0566</td>
<td>Kimberly Tuby x 6899</td>
<td>Joshua Levine x 4826</td>
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<tr>
<td></td>
<td></td>
<td>Diane Viacava x 4734</td>
</tr>
<tr>
<td><strong>Team Assistant</strong></td>
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<tr>
<td>Devika Ramdat x 4953</td>
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