Financial & Strategic Challenges for Higher Education in the New Economy

October 5, 2014
Global Higher Education & Not-For-Profit Team Ratings

» Over 231 public universities, with over $121 billion of rated debt
  » Median rating of A1 by number of institutions, Aa2 weighted by rated debt

» More than 282 private colleges and universities, with nearly $86 billion of rated debt
  » Median rating of A2 by number of institutions, Aa2 weighted by rated debt

» Around 20 non-US public universities
  » Median rating of Aa2 by number of institutions

» 68 community colleges, with over $3 billion of rated revenue-backed debt
  » Median rating of A2 by number of institutions, A1 weighted by rated debt
  » Tax-backed debt rated by local governments team

» 111 not-for-profit institutions, with over $13 billion of rated debt
  » Median rating of A1 by number of institutions, median rating of Aa2 weighted by rated debt

» 38 independent K-12 schools, with over $1 billion of rated debt
  » Median rating of A1 by number of institutions, Aa3 weighted by rated debt

Source: Moody's as of June 30, 2014
US Higher Education Outlook
Outlook for US Higher Ed is Negative

Outlook Horizon: 12-18 months

Key Drivers
1. Tuition revenue pressured, cost containment more challenging
2. State funding slowly growing, but uneven across and within states
3. Fierce competition for research
4. Evolving regulatory environment and increased public scrutiny

Green Shoots of Stability
1. Fundamental demand for higher education is high
2. Improved household balance sheets increase willingness to invest in higher education
3. Declining unemployment rate for 25-34 year olds and earnings differential highlight higher education investment returns
4. Equity market returns bolster fundraising and investment income
What could change our outlook to stable?

Revenue Trends of Most Private Universities are Leveling Off

Weak Revenue Trends for Most Public Universities

A stable outlook could be supported by most having decent prospects to achieve 3% or better operating revenue CAGR (3 year).

Source: Moody's Municipal Financial Ratio Analysis
* Indicates projections
US Privates: Constrained Debt and Revenue, Growing Wealth

Source: Moody's Investors Service as of July 2014
US Publics: Debt Increases Even with Constrained Revenue

Source: Moody's Investors Service as of July 2014
Quest for Cost Efficiency

Source: Moody's Investors Service
Efficiency Efforts & Partnerships Pursued

» **Shared services** pursued by large, research intensive universities with economies of scale (University of Michigan, Yale University, University of California- Berkley, Ohio State University Comprehensive Cancer Center and Moffitt Cancer Center)

» **Consortia** to create purchasing power (insurance, supplies, etc.)

» **Programmatic partners** to leverage academic strengths and focus scarce resources on areas of distinction

» **Co-location** to cater to key source of students (community college and regional public university, community college and military base, etc.)

» **Privatized student housing** gaining in scale and piquing private university interest
Unfunded Pension Liabilities Vary Widely, Worst Burdens Concentrated in a Few States

Highest and lowest state pension liabilities
Based on three-year average ANPL to 2012 Governmental Revenues

- Illinois: 258.4%
- Connecticut: 201.2%
- Kentucky: 170.4%
- Hawaii: 155.4%
- Louisiana: 153.7%
- Iowa: 20.9%
- Tennessee: 19.8%
- New York: 16.1%
- Wisconsin: 11.0%
- Nebraska: 8.8%
Student Demand

The Market Evolves:
Changes to Demand and Delivery
Changing Business Models Heighten Competition

» Gradually moving away from on-site in-person model

» Greater flexibility is beneficial for students but adds complexity to the landscape

» Will always likely be demand for the traditional model with technology complementing the classroom experience
Community Colleges Enroll Nearly 40% of Undergraduates

(total enrollment of 18,236,340 in fall 2012)

Source: National Center for Education Statistics, December 2013
Flat High School Graduates Over Next Several Years
Projected High School Graduates (Base period: 2002 = 100)

Source: WICHE, Moody's Economy.com
International Student Market Increasingly Competitive

Distribution of Foreign Students 2012

4.5 Million Students Worldwide

- United States, 16.4%
- United Kingdom, 12.6%
- Germany, 6.3%
- France, 6.0%
- Australia, 5.5%
- Other OECD countries, 28.7%
- Other non-OECD countries, 24.6%

Market Share is changing (% of transnational enrollment)

Source: Education at a Glance 2014, OECD Indicators and Australian Education International
Barbell Enrollment Growth Projected: Grad and Associate

Competition remains strong at undergraduate level

Source: US Department of Education
Community College Enrollment Countercyclical to Economy

Online Enrollment Expands Requiring New Investment

Total and Online Enrollment in Degree-granting Postsecondary Institutions

Source: Babson Survey Research Group - "Grade Change: Tracking Online Education in the United States"
Emerging Strengths and Challenges of Online Learning for Higher Education Sector

**Strengths & Opportunities**
- Global brand awareness/reputation
- Enrollment growth and geographic diversification
- Scheduling flexibility
- New revenue opportunities
- Typically lower cost of delivery per student
- Improved education collaboration through creation of consortia
- Increased data on learning methods
- Political good will/reduced federal scrutiny

**Challenges & Risks**
- Increased competition, particularly for those that compete on price or location
- For MOOCs, high attrition
- Brand dilution if content is poor
- Uncertain longer-term learning outcomes
- Past stigma of distance learning
- Industry consolidation leaving out weaker colleges
Governmental Policy

Regulatory Risks

Increased Public Scrutiny
Regulatory Risks Continue for Sector

» **Performance funding** measures both already in place and proposed in various states will widen the credit gap of stronger and weaker public universities.

» Expected reauthorization of **Higher Education Act** in coming year could alter how the federal government administers some $180 billion per year in federal student aid and tax benefits for the sector.

» **White House ratings** initiatives could be new vehicle for federal accountability measuring universities on access, affordability and outcomes.

» **Increased scrutiny** on multiple fronts, including Title IX, increases compliance costs.
Increased State Funding, Often With Limits on Tuition

- Wide disparity in funding levels from state to state
- States have multiple funding priorities, higher education funding unlikely to be robust in the foreseeable future
- Overall revenue growth constrained due to tuition limits, regional publics most affected

**FY2014 Funding Up in Many States**

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<th>% increase from 2013</th>
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**Funding Still Below Levels Five Years Ago**

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<th>% increase 2009-2014</th>
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Note: The data is unadjusted for inflation
Source: Illinois State University-Grapevine Data
Many States Implementing Performance-Based Funding

Source: National Conference of State Legislatures, 3-5-2014
Competency Based Learning Gaining Some Traction

- Academic credit for demonstrating academic competence through a combination of assessment and documentation of experience
- Reduces time to completion and cost of a degree
- Multiple institutions now incorporate competency based learning:
  - Northern Arizona University: Degrees in computer information technology, liberal arts and small business administration for a flat fee of $2,500 for six months of unlimited credits and self-paced learning
  - Texas Affordable Baccalaureate Degree: Collaboration between Texas Higher Education Coordinating Board, South Texas College, and Texas A&M Commerce
  - Western Governors University: Flat rate of $2,890 for six months of unlimited competency units
- Can be a mix of in-person and online learning
Revenue

Heightened Competition for Other Revenue
Federally Sponsored Research Stagnating After Years of Strong Growth

Source: National Science Foundation
2014 is Moody's Estimate
Note: ARRA = American Recovery and Reinvestment Act of 2009

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Financial Aid Grants Begin to Stagnate

Growth of Various Grants Dollars in 2012 dollars ($ billions)

Source: College Board, Trends in Student Aid 2013

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Intensifying Competition for Research Funding

New Grant Proposal Success Rate for National Institutes of Health

On a nominal basis 38% of private and public universities recognized grant and contract revenue in fiscal 2013 below fiscal 2009 and prospects for meaningful growth remain limited for most.

Source: NIH Research Reporting Tool
Wealthiest Universities Garner Growing Share of Gifts

Percentage of Total Gift Revenue, by Endowment Size, Private Universities, 2003

- TC&I > $1 billion: 61.8%
- TC&I between $500 million and $1 billion: 15.2%
- TC&I between $100 million and $500 million: 19.8%
- TC&I less than $100 million: 3.1%

Percentage of Total Gift Revenue, by Endowment Size, Private Universities, 2013

- TC&I > $1 billion: 67.0%
- TC&I between $500 million and $1 billion: 2.5%
- TC&I between $100 million and $500 million: 16.6%
- TC&I less than $100 million: 13.9%

Source: Moody's Investors Service
Healthcare Exposure Increases at AMC Universities

Growth of healthcare-related revenue from FY 2007-2013*

*Data for the 37 AMC universities with >20% patient care exposure

Source: Moody’s Investors Service
Academic Medical Centers Under Pressure to Change

- Declining grants
- Pressure to commercialize
- Private grants = lower indirect cost recovery

- Research
  - Faculty practice plan divides time among clinical and teaching
  - Pressure on graduate medical education funding

- Teaching
  - Competitive market
  - Pressure on reimbursement rates
  - Impact of healthcare reform

- Financial Transfers
  - Pressure to increase “Dean’s Tax”
  - Negotiation of transfers can create tension between hospital and university.

- Clinical Enterprise
  - Competitive market
  - Pressure on reimbursement rates
  - Impact of healthcare reform

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The "Green Shoots"
Growing Earnings Disparity Drives Long-Term Demand
Difference in median annual earnings of college and high school graduates at the ages of 25 to 32 (2012 dollars)

Employment Outlook for Recent Grads Slowly Improving

Average Unemployment Rate (%): 24 to 34 Year Olds

Source: Bureau of Labor Statistics
Household Balance Sheets Are Recovering

Household Debt to Personal Disposable Income (%)

Source: Moody's Investors Service
Bull Market Run in Equities Aids Gift Revenue Outlook

Gift Revenues Highly Correlated with Market Returns

Asset recovery will also increase endowment support for operations with the median private university seeing year-over-year increases in 6% range for fiscal years 2014 and 2015.

Source: Moody’s Investors Service
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<thead>
<tr>
<th>Name</th>
<th>Title</th>
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<tbody>
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