

## RATING METHODOLOGY

# U.S. Not-for-Profit Private and Public Higher Education

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**Summary**

This rating methodology explains Moody's approach to assessing credit risk for U.S. public and not-for-profit private colleges and universities. It provides a reference tool that can be used when evaluating credit profiles for U.S. higher education institutions, helping investors, colleges and universities, and other interested market participants understand how key quantitative and qualitative characteristics affect rating outcomes. The report provides a detailed guide to the main analytical factors and ratios that drive ratings in this sector, although it does not include an exhaustive discussion of every ratio or sub-factor that might be relevant when evaluating an individual organization's unique credit attributes. Related sectors not covered in this report include community colleges,<sup>1</sup> universities outside of the United States,<sup>2</sup> and for-profit education providers.<sup>3</sup>

Highlights of this report include:

- » The combination of public and private higher education into a single methodology
- » The introduction of a scorecard with a weighted quantitative grid and notching for qualitative factors

This rating methodology combines and replaces *Moody's Rating Approach for Private Colleges and Universities* published in September 2002 and *Rating Methodology for Public Colleges and Universities* published in November 2006. The consolidated methodology reflects the common broad rating factors for these sectors as well as the continued evolution of public universities into market-driven organizations increasingly dependent on the same competitive strategies as private university peers. While reflecting the same core principles as the methodologies published in 2002 and 2006, this updated framework incorporates refinements that better reflect the current key credit fundamentals of the higher education industry.

<sup>1</sup> [Moody's Approach for Evaluating Community Colleges, December 1999 \(51626\)](#)

<sup>2</sup> [Methodology for Rating Public Universities, August 2007 \(103498\)](#)

<sup>3</sup> [Global Business and Consumer Service Industry Rating Methodology, October 2010 \(127102\)](#)

The rating methodology explains five broad factors that are important in our assessments for ratings in the U.S. higher education sector:

- » Market Position
- » Operating Performance
- » Balance Sheet and Capital Investment
- » Governance and Management
- » Legal Security and Debt Structure

In this report, we introduce a scorecard, which is the combination of a quantitative grid and qualitative factors, as shown in Figure 3. We provide an overview of each key factor in the scorecard, its importance to a university's rating, positive indicators of the factor, and how we measure the factor. For the first three factors, which are contained in the quantitative rating grid, we provide key metrics used in the rating process and an approximation of their typical importance for rating decisions. The mapping of quantitative grid metrics is separate for public and private universities. The distinct ranges of values for the grid reflect historical distinctions between the two sectors resulting in materially different quantitative results.

In the scorecard rating methodology we begin with a grid indicated rating generated from the weighted average of the quantitative metrics, which include the key factors of market position, operating performance, and balance sheet and capital investment. The weight for each factor in the grid represents an approximation of its typical importance for rating decisions, but actual importance may vary significantly in individual rating decisions. The quantitative grid represents a balance between greater complexity that would result in grid-indicated ratings that map more closely to actual ratings and simplicity that enhances a transparent presentation of the factors that are typically most important for ratings in this sector.

Following the quantitative grid scoring, we assess governance and management, legal security, and debt structure. These factors are not included in the grid because they are not easily quantified and can have varying effects on credit quality and ratings. Our evaluation of these factors can result in up to a three notch rating differential from the output of the quantitative grid. We may also incorporate credit specific considerations into our analysis that are not otherwise captured in the quantitative grid or common qualitative factors which can account for additional variation from the grid indicated rating.

Our ratings incorporate expectations for future performance. Assumptions that can cause our forward looking expectations to be incorrect include unanticipated changes in the macroeconomic environment, general financial market conditions, the operating environment that could affect federal or state funding and tax benefits, and regulatory actions.

### About Moody's Rated Colleges and Universities

Moody's currently rates 226 U.S. four-year public universities and university systems and 288 not-for-profit private colleges and universities based on their stand alone credit quality. These organizations have a combined nearly \$200 billion of debt outstanding and account for approximately 90% of the students currently enrolled in traditional colleges and universities in the United States, excluding community colleges and for-profit universities. The median rating for the U.S. public university sector

is A1 by number of institutions and Aa2 when weighted by the amount of rated debt outstanding. For the not-for-profit private university sector, the median rating by number of universities is A3 and the average rating weighted by debt outstanding is Aa3.

FIGURE 1

### Not-for-Profit Private University Rating Distribution

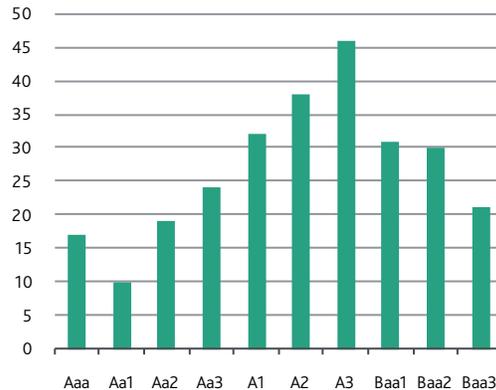
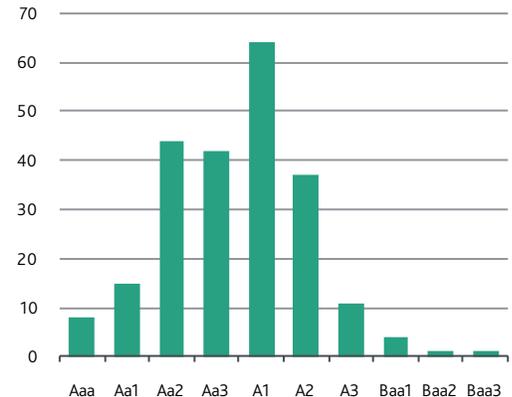


FIGURE 2

### U.S. Public University Rating Distribution



Number of universities by rating as of August 8, 2011

## Factor 1: Market Position<sup>4</sup>

The U.S. higher education industry is a highly segmented market with thousands of colleges and universities competing in many niches that exhibit varying degrees of quality, price, and specialization. Market competition is becoming a dominant business driver and is increasingly important in our ratings and assessments of universities' strategies and financial performance. A strong market position allows a university to compete effectively for tuition revenue, private gifts, research grants, and government support.

A university's market position is particularly important during challenging economic periods when a polarizing effect causes a flight to the extremes of highest quality or lowest-cost education providers. A strategic market position change, though sometimes necessary, is often associated with increased short-term credit risk.

The four sub-factors related to market position that we consider in our rating assessments are:

- » Market Reputation
- » Scope of Operations
- » Student Demand and Pricing Power
- » Philanthropic Support

<sup>4</sup> [Market Position: Key Credit Factor of U.S. Higher Education Ratings, June 2011 \(132849\)](#)

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## 1) Market Reputation

The perceived value of a university's programs and services determines its reputation and brand value. A strong market reputation and brand drive a university's ability to attract high quality students and faculty, board members, research grants, government support, and gifts. Therefore, a university's ability to shape, protect, and enhance how others perceive the value of its programs and services provides the foundation for its credit rating.

Positive indicators of market reputation include:

- » Brand identity consistent with the university's mission and market strategies
- » Number of distinct or high quality academic programs or services to enhance the university's ability to attract students, faculty, and researchers
- » Identification, assessment, and prioritization of risks followed by the coordinated application of resources to minimize, monitor, and control the probability and/or impact of those risks

We review student demand metrics, as described in Student Demand and Pricing Power, as well as peer and aspirant groups reported by the university and by other rated entities. We also look at outcomes that indicate the opinion of other key stakeholders such as job placement, graduate/professional school acceptance rates (if an undergraduate degree program), research award success rate, published rankings, donor support, and media coverage. We discuss with management how the university identifies, evaluates, and prioritizes risks. Particularly following a material event at a university, we evaluate management's application of resources to minimize, monitor, and control the impact of the event on the university's reputation.

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## 2) Scope of Operations

The size and diversification of a university, or the scope of its operations, shape the target audience for its core lines of business including academic programs, research, and health care. So long as relevance to mission and differentiation are maintained, a larger scope of operations generally provides for greater market and credit stability, insulating the university from local economic and demographic changes as well as shifts in societal preferences for specific programs, degrees, or other services. Smaller and more homogeneous colleges may be challenged to alter their focus and programs in response to changes in market preferences. Larger universities also benefit from economies of scale, although this advantage can be tempered by a highly diverse offering of programs and services. Greater scale often implies higher brand recognition, broader geographic diversification, and ability to consolidate during economically challenging times. In addition, given the greater economic and political impact in their region, larger universities can better leverage their influence to help secure financial and regulatory support.

Positive indicators of scope of operations include:

- » Alignment of academic programs and services with the university's mission and strategies
- » Diversity of programs and services
- » Demonstrated ability and willingness to react to changing market preferences by adding, eliminating, expanding, or reducing programs based on interest and profitability

We review a university's accreditation, degree offerings, as well as student demand and enrollment for key programs. We discuss with management investments in programs of distinction, the addition of new programmatic offerings or partnerships, and the elimination or reduction of programs with limited demand. If a university has a significant research profile, we examine trends in the type of research conducted, number of principal investigators, diversity of funding sources, indirect recovery rates, number of faculty awards, and percent of proposals funded. For universities with healthcare exposure, we review the relationship between a university and hospitals, clinical activities, and faculty practice plans. We examine patient volume, acuity index, payer mix, reimbursement rates, number of physicians, and market share. We analyze the financial stability of the health care operations, the flow of funds between the health care operations and the university, the governance and management overlap, and the history of the relationship between the two entities.

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### 3) Student Demand and Pricing Power

Student preference for one university over its peers is one of the most significant elements of market position. Deeper student interest in attending a particular university leads to increased flexibility for the university in shaping the characteristics of its enrollment. Demand is measured by the number, quality, and composition of applicants and the students' preference for a particular university relative to peers. The depth of student demand directly influences a university's ability to charge a particular level of tuition and fees while maintaining its optimal enrollment in terms of quality and size. These factors combined reflect the perceived quality and value of a university's programs and services. State regulations, political pressure, or a university's mission may limit a university's pricing power.

Positive indicators of student demand and pricing power include:

- » Maintenance or growth of applicant pool to support a university's target enrollment size and composition of student body
- » Sufficient geographic diversity of students to reduce vulnerability to regional economic or demographic conditions
- » Price differentiation strategy that enables the university to attract its target audience without hindering operating performance or financial reserves
- » Statutory and political flexibility to increase tuition and fees, particularly in light of declining state support of public universities

We review trends in the number of applications for primary academic areas (first-time freshmen undergraduate students, transfer students, and key graduate/professional programs), the geographic diversity of the applicants, win/loss data against primary competitors, and indicators of student quality such as standardized test scores and number of National Merit Finalists as provided by the university. We review demographic projections for the number of high school graduates, the industry's primary consumers, primarily for universities with geographically concentrated student enrollments. We evaluate the competitive landscape through discussions with universities about peer and aspiration organizations. Also, we discuss management's recruiting and admissions strategies.

When analyzing pricing power, we review absolute and comparative information including a university's "sticker price," planned tuition and fee increases, and tuition discount rates for its major programs. We discuss with management plans for future tuition increases and how the university's tuition pricing strategy compares to that of its main competition. For public universities, we review state regulations regarding in-state tuition and discuss political pressure that may limit pricing flexibility.

#### 4) Philanthropic Support

Philanthropic support both affirms and enhances the market position of a university. Donor support indicates belief in the university's mission and social significance, as well as confidence in its management and overall strategic direction. Gift revenue enables a university to fund marquee projects and programs that are at the core of a university's strategic plans. Beyond direct financial benefits, donor support strengthens a university's market position by providing opportunities for positive media exposure leading to greater awareness of the university. Since the act of philanthropic support can be viewed as a public endorsement, gifts from particularly high profile donors enhance the university's brand by association. High levels of philanthropic support can create a positive feedback loop further improving a university's market position relative to its peers.

Positive indicators of philanthropic support include:

- » Track record of meeting or exceeding campaign goals
- » History of maintenance or growth of donor support through economic cycles, including successful collection of pledge payments
- » Broad and diverse pool of donors
- » Continued cultivation of donors to support future fundraising capacity

We review a university's track record of donor support relative to local, state, and national trends, recognizing that the relative share of support garnered is as important if not more important than the absolute amount. We examine a university's fundraising pyramid, geographic diversity of donors, as well as performance relative to campaign goals, the level of giving outside of major fundraising initiatives, and the restricted nature of gifts. We assess a university's fundraising strategy, staffing, and capacity for future philanthropic support by examining the composition of the board, board and alumni size and participation rates. When a college's financial plans are predicated on an upcoming fundraising campaign, we assess the plan's potential for success based on management's track record and the strength of the target donor pool.

#### Factor 2: Operating Performance

Strong operating performance enables a university to repay debt from fiscal operations while providing funds for strategic investment in programs and facilities. As not-for-profit and public institutions, universities face the challenge of balancing spending to achieve their strategic mission with the realities of financial constraints across long-term horizons. Favorable operating performance and debt service coverage are important to support the university's mission while sustaining its economic viability.

Universities derive strength and predictability in operating performance from the relatively unique aspects of the business model for higher education including customer diversity, high switching costs, and prepayment for services. The ability to achieve balanced to surplus operating performance is important for the long-run financial health of all universities, but is especially critical for those that do not have significant financial reserves. We evaluate a university's operating performance relative to its own historical trends, performance of peers, and external economic factors.

The three sub-factors related to operating performance that we consider in our rating assessments are:

- » Cash Flow
- » Budgetary Flexibility and Operating Freedom
- » Revenue Diversity

### 1) Cash Flow

A university's ability to generate positive operating cash flow on a consistent basis is fundamental to its ability to cover existing debt service obligations while ensuring its long-term financial viability. While an operating deficit in a single year may not indicate an elevated credit risk, two or more years of weak financial performance usually signal factors that may be affecting fundamental financial equilibrium. Operating cash flow is analyzed in relation to the university's debt structure and debt service obligations.

#### Moody's Operating Ratios Use a Standard Endowment Spending Rate

A university's endowment provides an important stream of income earnings that supports programs, capital, and research. A university's endowment spending policy aims to provide consistent operating support as well as to maintain the purchasing power of the endowment. Typical spending policies aim to prevent weak investment returns from forcing commensurate decreases in spending and ensure that any increased spending can be sustained into the future when returns are robust. While endowment spending policies are based on the principle of inter-generational equity, which seeks to ensure that future generations of students and faculty benefit from the endowment to the same degree as the current generation, individual university policies vary widely. To ensure comparability of operating performance, we hold universities to a 5% spending formula based on a trailing three-year average of cash and investments, which mirrors current industry practices.

Positive indicators of cash flow include:

- » Consistently favorable annual cash flow which enables strategic investments in programs and facilities
- » Sufficient cash flow to provide ample debt service coverage
- » Growth in revenue that is equivalent to or greater than growth in expenses

We review a university's trends in revenues and expenses to determine the sustainability of operating performance and to assess if future performance will be stable, weaker, or improved. We evaluate budget to actual operating performance, multi-year budget plans, endowment spending policies, and debt service schedules. For a university that has issued variable rate debt, we focus on interest rate budgeting assumptions and the university's ability to adjust to rising interest rates and changes in the relationship of indexes used in swap agreements. If the university budgets conservatively for interest rates higher than current levels, we inquire as to how management is using current savings.

### 2) Budgetary Flexibility and Operating Freedom

A university's ability to quickly adjust its operations when confronted with unanticipated events is an important component in maintaining financial health. An effective management team closely monitors its budget to identify adverse trends so that it can swiftly implement contingency plans and make mid-year adjustments when necessary. Prudent planning and ongoing monitoring enable management to address immediate budgetary pressure. The extent to which a university can react to

negative economic conditions and events, by reducing expenses or increasing revenue, is bound by market, legal, and political constraints.

A well-run university balances budgetary flexibility, achieved through revenue generation or expense reductions, with preservation of its market position. While cutting costs can help a university offset immediate fiscal pressure, deterioration or elimination of programs or services could negatively impact its market position. The primary expense for most universities is salaries and benefits, with faculty and staff compensation typically accounting for over two-thirds of a university's annual operating expenses. The extent to which faculty are tenured and staff are unionized can significantly impact expense flexibility. In addition, as major local or regional employers, universities may face public or political pressure to maintain staffing levels during economically challenging times to limit negative economic impact.

The ability to generate additional revenue usually helps a university address near- to intermediate-term budgetary pressure, as opposed to immediate challenges. Market position, state regulatory and political environment, mission, and economic conditions may limit a university's ability to grow revenue.

Positive indicators of budgetary flexibility and operating freedom include:

- » Legal and political ability to increase revenue and/or reduce expenses
- » Contingency plans to respond to near or mid-term revenue or expense challenges
- » Decisive actions taken to preserve fiscal equilibrium during economically challenging times
- » Strength of market position to enable pricing power and potential for philanthropic support
- » Ability to manage human resource expenditures (union/tenure)

We review a university's multi-year budget plan, including key assumptions. We examine contingency plans an institution may have in place as well as past performance during unexpected occurrences. Particularly when revenues or expenses are pressured, our conversations focus on management's actions to contain or cut costs as well as protect against revenue volatility. We review legislative and statutory changes as well as the political discourse that could affect a university's ability to increase revenue or reduce expenses. We also monitor news coverage and discuss the political landscape with university management teams.

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### 3) Revenue Diversity

Diversity of revenue sources and diversity within a given source of revenue provide greater revenue stability, in turn mitigating the impact of adverse conditions on a university and improving its financial strength over time. The consistency, potential growth, and self sustainability of each revenue stream (tuition, grants, gifts, endowment income, patient care) and line of business or major operating unit are analyzed to determine a university's dependence on any single source of income. The benefits of diversity are most pronounced in cases where revenue sources have a negative or low correlation, as exemplified by the high correlation of economic prosperity and investment returns as opposed to the counter-cyclical nature of enrolment trends.

When reviewing a university with significant exposure to clinical care revenue through the ownership or operations of a hospital, faculty practice plan, or health maintenance organization, we analyze the financial stability of the healthcare operations and flow of funds between the entities. Universities

with sizeable health care exposure have relationships with large and thriving academic medical centers which are themselves far more diversified than community hospitals. These hospitals typically have a diverse payer mix, national reputations with multiple clinical specialties, healthy philanthropic support, and significant research activity. In light of the substantial risk and complexity involved in significant health care operations, we work in close collaboration with Moody's health care ratings team. For more information on Moody's rating approach for not-for-profit health care institutions, please see the Index of Rating Methodologies in the Research and Ratings tab on moodys.com.

Positive indicators of revenue diversity include:

- » Multiple sources of revenue, with diversity within each revenue stream
- » Negative or limited correlation between revenue sources
- » Self-sufficiency of major lines of business, with limited cross-subsidization required

We review the underlying diversity of a university's operating revenue. For tuition dependent colleges, we evaluate the range of academic offerings, geographic distribution of students, particularly if there is a projected decline in the number of students in the target market, and pricing power. Our analysis of research intensive universities focuses on the sources of sponsored research, types of research funded, success rate on grant proposals, diversity, and prospects for principal investigators. If healthcare revenue comprises a significant proportion of operating revenue, we review payer mix, commercial contract renewals, and trends in Medicaid and Medicare reimbursement.

### Factor 3: Balance Sheet and Capital Investment

Universities display unique credit characteristics when compared to corporations, governments, and other public entities. Their balance sheets are often the most distinguishing strength for the sector. University endowments are designed to provide support for the institution's mission in perpetuity and support very long-term capital and financial planning horizons. Management of the balance sheet has become increasingly important given the complexity of investment strategies and debt structures utilized throughout the sector. In light of these asset and liability risks, and as exemplified during the credit crunch, liquidity has become a critical component of our credit analysis.

The three sub-factors related to balance sheet and capital investment that we consider in our rating assessments are:

- » Wealth
- » Liquidity
- » Capital Investment

#### 1) Wealth

Universities with substantial net assets are better positioned to weather prolonged periods of economic and market volatility and provide heightened security that bondholders will be repaid despite potentially stressed operations. The strength of a university's balance sheet is assessed relative to the size of its operations and enrollment, as well as to debt and other liabilities. Additionally, a university's potential for net asset growth as well as potential liabilities, including other post-employment benefits (OPEB), are important components of wealth analysis.

### Campus Real Estate is Excluded from Financial Resource Calculations

Our calculation of financial resources excludes a university's net investment in plant (campus land and facilities). However, we will evaluate and factor in the value of these assets on a case-by-case basis, particularly for universities in vibrant urban areas with no clearly defined campus boundaries or when assets are not located on the core campus. Our rationale to generally exclude net investment in plant is based on several factors, including the illiquid nature of these assets which are only likely to become available for investors upon bankruptcy. The ultimate liquidation value of these assets is highly uncertain and the length of time to sell is typically quite long.<sup>5</sup>

Positive indicators of wealth include:

- » Spendable financial reserves to support near- and intermediate-term goals
- » Financial flexibility from share of reserves free from external restrictions
- » History of operating surpluses, strong philanthropic support, or long-term investment returns to bolster financial reserves over time
- » Manageable post-employment obligations and fully funded pension

We review both the resources currently available as well as the potential for additional growth through retained earnings, gift support, and prudent endowment management practices. We also evaluate potential uses of financial resources, including funding of capital or other strategic initiatives, or financing of deficits for universities with weak operating performance. For universities with defined benefit pension plans or other post-employment benefits, we review the size of the unfunded actuarial accrued liability relative to the university's other assets and liabilities, annual contribution relative to its expenses, actuarial assumptions used to determine the size of the liability, benefits that are currently provided to employees, as well as the flexibility to modify those benefits.

## 2) Liquidity

Unrestricted cash and investments that can be readily liquidated are critical to a university's near-term ability to meet operating, capital, investment, and debt service requirements. The strength of a university's liquidity position is viewed in relation to its own business structure and potential demands on liquidity including investment strategies, variable rate demand obligations, and collateral posting requirements associated with interest rate swap agreements. Through a "sources and uses" approach, we seek to understand the correlation and likelihood of demands and the university's broad ability to meet those demands.

Positive indicators of liquidity include:

- » Ample liquidity relative to operating, debt, and investment strategies
- » External liquidity and/or market access to supplement internal reserves in case of unforeseen events
- » Investment oversight and risk management to mitigate potential liquidity calls
- » Well integrated treasury, investment, and finance functions, including use of scenario-risk assessments and prioritization of steps to preserve or improve liquidity if needed

<sup>5</sup> [Campus Real Estate: A Financial Asset?, February 2002 \(74086\)](#)

We review a university's sources of liquidity by examining its investment asset allocation, operating cash flow, dependence on investment income to support the annual budget, near-term fundraising capacity, availability of bank lines, and market access. We evaluate potential calls on a university's liquidity by examining endowment spending policies and trends, unfunded capital commitments, collateral posting requirements related to interest rate swap agreements, the potential for debt to be accelerated and headroom under covenants, and planned use of liquidity to fund strategic initiatives. We assess how various functions of the university are integrated to ensure coordinated responses to liquidity needs. We discuss how the university monitors liquidity risks associated with its business model, investment strategies, and debt structure, including reviewing the university's sensitivity models as well as presentations made to senior leadership and board members. We also discuss with management examples of or willingness to take actions to preserve or improve the university's liquidity position such as selling investments at a significant loss, increasing external lines of credit, or restructuring debt obligations.

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### 3) Capital Investment

Proper development and maintenance of facilities are necessary in order for a university to remain competitive. Determining the appropriate level of capital investment is a significant challenge for the sector as too little investment can result in a gradual loss of student demand, research funding, or philanthropy if donors feel that the institution is in decline. Too much capital investment can saddle a college with unsustainable ongoing maintenance and debt service costs. A university's capital needs are driven by the complexity of its operations, with research organizations and those with academic medical centers being by far the most capital intensive in the sector. A well-run institution typically has multiple means of funding capital, including annually budgeting for renewal and replacement, retained surpluses, debt, philanthropy, and, for public universities, state capital appropriations.

Funding capital plans through debt may be strategically beneficial if a project would improve a university's competitive position or if a project is revenue generating. While additional debt could potentially increase a university's risk profile over the short-term, placing negative pressure on the outlook or rating, it might also improve its credit profile over the longer term if the financed projects are successful in improving the university's reputation and student demand. Projects that are revenue generating and are expected to be self-supporting may require less debt capacity than those that do not have an associated revenue stream to assist with debt repayment. We do not, however, deduct projects that are self-supporting from an institution's leverage profile, but rather take into account the credit benefit derived from the additional revenue to support debt service.

Positive indicators of capital investment include:

- » Integrated financial and capital plans
- » Appropriate capital investment to maintain the attractiveness and competitiveness of facilities to successfully recruit students, faculty, research, and donor support
- » Ability to utilize a combination of operating surpluses, gifts, and debt for capital improvements
- » Operating budget includes annual depreciation or comparable amount for regular renewal and replacement of facilities
- » A multi-year capital plan that includes identification of funding sources, including reserves, operating cash flow, philanthropy, and debt, with no heavy reliance on any single funding source
- » Pace of capital investment is commensurate with growth of balance sheet and revenue

We review a university's identified capital plan to determine the potential growth in liabilities, reviewing how projects are prioritized and internal policies on when a university may proceed. We examine the magnitude of the capital program and type of investment relative to peers, as well as identified sources of funding for capital investment, including debt. We also assess the realistic nature of the capital plan by touring a university's campus and comparing it to known peers and competitors. If a university utilizes public private partnerships or operating leases, we explore the university's rationale for using the particular financing structure, strategic importance of the project to the university, the university's role in the project, and certain legal considerations.

## Factor 4: Governance and Management

Effective governance and strong management enable an organization to reach its full potential while avoiding financial stress. Strategy, financial health, and credit position are all fundamentally driven by decisions made by a university's board members and leadership team. Over the longer term, non-quantitative indicators of governance and management are likely to provide equal, if not greater, insights into credit quality than quantitative ratios.

Governance and management assessments often account for a notch or more in the final rating outcome compared with the rating that would be indicated by purely quantitative ratio analysis. The weight of this assessment in our analysis is particularly important when a university is facing strategic change, including: embarking on a major expansion of programs, initiating a significant new borrowing or fundraising campaign, undergoing financial stress or facing a weakening market position, or experiencing high turnover in senior management.

The five sub-factors related to governance and management that we consider in our rating assessments are:

- » Board and Senior Management Composition
- » Oversight and Disclosure Practices
- » Short- and Long-Term Planning
- » Self-Assessment and Benchmarking
- » Government Relations

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### 1) Board and Senior Management Composition

Board members and senior leadership must balance a university's charitable mission over the long-term with the need to manage financial resources in a way that ensures the institution's continued viability. Public university boards also incorporate the diverse policy goals and political aspirations of a state's elected leaders, with most states continuing to appoint board members. Notable tensions can develop between the board's fiduciary responsibilities and competing state interests. Board members retain the ultimate authority in setting a university's strategic direction. The composition of a university's leadership is the foundation for organizational effectiveness.

Positive indicators of board and senior management composition include:

- » Mix of tenured and new members with knowledge of institutional history as well as external best practices and strategies, thereby ensuring continuity as well as adoption of new perspectives
- » Board members who provide expertise in the areas of risk management, financial statements, multi-year financial and capital plans, and investment strategies as well as material philanthropic support
- » President who demonstrates clear understanding and leadership on financial and capital matters as well as the university's academic and research mission
- » Strong chief financial officer and other vice presidents who demonstrate independent expertise and mastery of multi-year financial plans, budgets, and financial statements
- » Leadership with diverse experience both inside and outside the university, including some experience from business and government in addition to the higher education industry

We review written materials that cover the professional backgrounds and years of tenure of board members and the senior management team, the composition and structure of the board and its committees, the procedures for selection of new board members as well as the president, and division of responsibilities. When warranted, we request a conversation with key board members.

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## 2) Oversight and Disclosure Practices

Clearly articulated policies and division of responsibilities provide transparency, accountability, and oversight. Though internal controls cannot eliminate problems, they can alert management to potential issues and minimize the impact of such issues when problems arise. Effective internal controls are necessary for maintaining accreditation, federal financial aid eligibility, grants, contracts, and donor confidence. Additionally, external public disclosure of policies, budgeting practices, projections, and long-term plans help ensure accountability to key stakeholders.

Positive indicators of oversight and disclosure practices include:

- » Board approved policies on investments, debt, liquidity, and conflicts of interest
- » Detailed disclosure and transparency for internal decision makers and external stakeholders
- » Appropriate staffing for effective implementation of policies
- » Frequent board oversight of the president, including annual performance assessment by multiple board members who rotate over time
- » Use of internal audit function that reports to the board
- » Detailed disclosure on university website regarding student outcomes, financial statements, research activity, budgets, compliance with bond covenants, and other material issues
- » Filing of financial statements within 90 days of the fiscal year end, including detailed management discussion and analysis
- » Availability of quarterly statements or interim information for larger research and endowed universities, as well as those with healthcare operations
- » Clearly defined board committee structure and responsibilities

» Term limits for board members

We review a university's written policies, assess presentations made by management to the board, and discuss staffing and processes for risk management with members of senior leadership. We look for the board to develop and routinely review key policies overseeing the university's investments, debt, operations, and compliance-related issues. We also examine information made available to external stakeholders through web sites, financial statements, and official statements associated with debt issuances.

### 3) Short- and Long-Term Planning

Effective utilization of a university's resources requires a long-term strategic plan, a long-term financial plan, prudent short-term budgeting, and the continuous alignment of all three. Planning is critical given the institutional imperative to fulfill a stated mission in an environment of changing student demographics and financial constraints, coupled with increasing external stakeholder scrutiny (tax-exempt status, accreditation, and community relations). These plans should incorporate detailed conservative, but realistic assumptions. Budgets and plans that are overly conservative or optimistic provide limited value in indicating the organization's real potential and management's ability to achieve its goals without causing financial stress.

Positive indicators of short- and long-term planning include:

- » Integrated strategic, capital, and financial plans
- » Use of detailed multi-year financial plans and budgets that tie to audited financial statements
- » Conservative budgeting, producing consistent operating surpluses
- » Financial and capital scenario evaluation and stress testing
- » Development of well considered contingency plans
- » Prudent endowment management and sustainable endowment spending policies that are regularly reviewed in context of overall university risk assessment and multi-year financial plan
- » History of meeting or exceeding internal forecasts for budget performance, enrollment, and fundraising
- » Recognition of key risks in multi-year plans and development of contingencies for addressing them

We review a university's written strategic plan, master facilities or capital plan, as well as mid-range and long-range budget projections (five to ten years). We analyze budget-to-actual results for enrollment, fundraising, investment returns, and operational performance. We examine management's assumptions used in projections as well as use of stress testing scenarios.

### 4) Self-Assessment and Benchmarking

Self-assessment provides governing boards and management teams with the tools to identify challenges early and to develop strategies to address those challenges in the interest of maximizing efficiency. External benchmarking is of particular importance in light of increasing competition for students, grants, and philanthropic support. The most successful organizations follow best practices in self-assessment, including use of a short list or "dashboard" of key metrics that are closely monitored on a

regular basis to identify adverse trends quickly and develop contingency plans to make mid-year adjustments when necessary.

Positive indicators of self-assessment and benchmarking include:

- » Benchmarking relative to best practices and strategies across higher education sector
- » Existence of key performance indicators that are regularly monitored
- » Regular performance reviews and assessment of the college president and senior leadership
- » In-depth institutional research and evaluation of competitive landscape

We review the metrics and set of peer organizations by which a university chooses to measure itself. Well managed organizations compare themselves against a carefully selected set of peers rather than only to an 'aspirant' peer group that is likely to reflect hope and image over substance. We discuss with management the frequency and depth with which the information is reviewed by senior leadership and board members. We also inquire about examples of leadership actions based on a university's performance relative to key indicators to understand its willingness and ability to react to developing situations.

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## 5) Government Relations

Many external stakeholders can directly affect the financial position of universities through their potential to restrict access to capital, reduce tax subsidies, or increase regulatory oversight. A university's relationship with government is perhaps paramount due to the importance of securing continued financial support in the form of state funding for operations or capital, federal student financial aid, research awards, and the continuation of tax-exempt status. To help ensure a supportive relationship from key stakeholders, colleges and universities increasingly must clearly articulate the economic benefits they provide to the nation, state, and region.

In the U.S., we generally view increased university autonomy as a credit positive because it tends to promote more efficient resource utilization and effective execution of long-term plans. However, we recognize that governmental financial support, which appropriately comes with certain conditions and expectations, can strengthen the credit quality of a university. Consistent funding for operations and capital, extraordinary financial support driven by particular events (e.g. natural disasters or institutional scandals), and programs to support higher education debt issuance, can contribute to the fiscal health of an organization.

Positive indicators of government relations include:

- » Political autonomy from the state in key areas, including ability to set tuition and fees, regulate mix of in-state and out-of-state students, retain surpluses, and manage investment
- » Consistent state financial support for operations and capital projects, particularly during times the state is experiencing economic challenges
- » Evidence of stable and supportive relationships with the local community including lack of contentious debate or proposals over local taxes
- » Substantial local/regional economic impact of the university

- » Special programs which provide additional support for public higher education such as debt service reimbursement from the state, intercept programs, and funds established to support a specific university or higher education in the state at large

We evaluate the political and regulatory environment in which a university operates and look for examples of the limitations or flexibility in navigating particularly challenging situations. We review legislative and statutory changes as well as the political discourse that could affect a particular university or the higher education sector as a whole. In addition to monitoring news coverage and leveraging the research of Moody's state and local government analysts, we discuss the political landscape with university management teams.

## Factor 5: Legal Security and Debt Structure

External financings play an important role in supporting a university's capital investment and as a source of liquidity, supplementing internal financial reserves, cash flow, and philanthropy. Increasingly, universities have undertaken more complex debt structures, including a mix of variable rate and fixed rate debt, use of derivative instruments and escalating and/or bullet maturity debt structures to achieve a lower cost of borrowing. The terms and conditions of financings such as bonds, operating lines, leases, or private placements affect the amount and circumstances under which a university is expected to make payments, regularly scheduled or accelerated. A university's debt structure, therefore, can have liquidity and cash flow implications. The legal security and covenants for these financings allocate these risks between the university and the lender/creditor.

The two sub-factors related to legal security and debt structure that we consider in our rating assessments are:

- » Bondholder Security Provisions
- » External Financing Terms and Conditions

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### 1) Bondholder Security Provisions

Security provisions and covenants provide a source of protection to bondholders and can determine the priority of payments between creditors. Universities with strong and stable financial positions typically issue debt as an unsecured general obligation of the organization. For universities with more modest reserves, volatile operating history, or legal limitations on providing a broad pledge, specific security provisions may be granted to bondholders, including a security interest in tuition or a mortgage pledge on a portion of or all of the campus. The likelihood of payment or recovery, in case of default, is dependent upon the legal availability of the pledge, the potential market value and liquidity of the underlying assets being pledged, and the rights of bondholders under various scenarios.

Positive indicators of bondholder security provisions include:

- » Broad pledge of revenues and/or assets providing consistently healthy debt service coverage
- » Parity or senior position of bondholders relative to other lenders
- » Appropriate additional security based on the risk of the project or borrower

We review the bond indenture, loan agreement, and any other legal documents that pertain to repayment of debt to evaluate the legal security for repayment of debt, covenants, position of bondholders relative to other lenders, events of default, and remedies. We analyze the breadth and stability in the pledged revenues, comparing historical and projected net revenues to maximum annual

debt service requirements, not just annual requirements. We also examine the revenue and expense growth assumptions that govern projected debt service coverage ratios and, where the potential exists for construction delays, the adequacy of capitalized interest funding.

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## 2) External Financing Terms and Conditions

A university's debt profile reflects its strategy of balancing the cost of capital with the potential balance sheet and operational risks of external financing options. The appropriate debt structure for a university depends on its unique credit characteristics and management's risk tolerance. Moody's does not prescribe a specific debt profile for the sector. Some financing options, particularly structures that permit the sudden acceleration of debt repayment, carry more risks than others. Well run universities have the ability to capitalize on the potential benefits of various structures while mitigating associated risks. The broader the array of financing options at a university's disposal, the greater its financial flexibility.

Positive indicators of external financing terms and conditions include:

- » Diversity of counterparties to insulate the university from negative events associated with the counterparty's credit profile
- » Conservative budgeting assumptions and operating flexibility to absorb spikes in interest rates associated with variable rate debt instruments
- » Staggering of expiration dates on bank liquidity agreements and mandatory or optional tender dates
- » Sufficient headroom under covenants
- » Proactive renewal of bank facilities well in advance of expiration date
- » Ample liquidity relative to potential needs, including the accelerated repayment of debt or posting of collateral on an interest rate swap agreement
- » Access to a variety of debt products and refinancing alternatives

Through discussions with senior management, we evaluate a university's understanding of and strategy for undertaking particular debt structures. We look for the university, not a financial advisor or other third party, to explain these risks and university specific mitigants. We evaluate the budgeting practices, staffing levels, wealth, and liquidity relative to the university's specific financing terms and characteristics.

When a university has exposure to variable rate debt, we review interest rate assumptions imbedded in a university's budget and its flexibility to absorb spikes in variable rate debt service (including when synthetically fixed rate) and changes in the relationship of interest rate indexes for swap agreements. We review the terms of bank liquidity agreements and interest rate swap agreements, including financial covenants, term-out provisions, events of default, termination events, acceleration provisions, or collateral posting requirements. If a university plans to refinance a mandatory tender or bullet maturity, we assess the window of time to refinance, ability to access a variety of debt products or other alternatives, and management's plans and procedures for ensuring a successfully executed refinancing.

### Moody's Incorporates Alternative Financings into a University's Credit Profiles

Universities continue to explore financing options, beyond traditional bond and commercial paper programs, to finance capital needs. Despite a lack of legal commitment to such a financing, many colleges might have strong economic or strategic incentives to use their resources to aid a failing project financed off-balance sheet. Therefore, we incorporate these financings into the credit profile of the affiliated university. Two common financing strategies include the use of operating leases and public private partnerships.

Operating leases may be used for assets with relatively short lives, like equipment, or to provide flexibility within an organization's capital structure. Oftentimes, universities finance off-campus sites through operating leases in order to increase their flexibility to pull out of new markets if demand does not materialize or if demand declines in existing sites. Operating leases could also be used for swing space as a university undergoes major capital improvements.<sup>6</sup>

Another strategy growing in popularity is the use of public private partnerships (P3s). The common characteristic of all P3s is that the university retains some financial stake in the project, but the actual financing has no legal tie back to the university to pay debt service. We consider the project's strategic value to the university and the likelihood of university support in the university's overall credit profile.<sup>7</sup>

## Applying The Rating Methodology

The rating methodology consists of two steps. We begin with a grid indicated rating generated from the weighted average of the quantitative metrics, which include the key factors of market position, operating performance, and balance sheet and capital investment. We then assess governance and management as well as legal security and debt structure. Our evaluation of these factors can result in up to a three notch rating differential from the output of the quantitative grid. These factors provide equal, if not greater, insight into the long-term credit quality of a university. We may also incorporate credit specific considerations into our analysis that are not otherwise captured in the quantitative grid or common qualitative factors which can account for additional variation from the grid indicated rating.

### Quantitative Grid

The grid provides guidance for the quantitative factors that are generally most important in assigning ratings to colleges and universities. It is a summary that does not include every rating consideration. The weights shown for each factor in the grid represent an approximation of their typical importance for rating decisions but actual importance may vary significantly. Accordingly, the grid-indicated rating is not expected to precisely match the actual rating in most cases. This is particularly true for speculative grade borrowers, where qualitative factors weigh heavily in rating outcomes.

The mapping of quantitative grid metrics is separate for public and private universities. The distinct ranges of values for the grid reflect historical distinctions between the two sectors resulting in materially different quantitative results. Traditionally, states have subsidized higher education through operating and capital appropriations and enabled public universities to offer lower cost education and

<sup>6</sup> [Moody's Views on Operating Leases for Higher Education and Not-for-Profit Organizations, August 2004 \(88635\)](#)

<sup>7</sup> [Public-Private Partnerships in U.S. Higher Education, June 2008 \(109385\)](#)

services. In addition, the access mission of public higher education combined with varying degrees of regulatory oversight by each state have affected these quantitative measures. A long-term trend of declining state support and increased operating freedom have resulted in public universities becoming more market driven and more closely following practices of private peers. Despite the reduction of state support as a percentage of operating budgets, we believe the connection of public universities to state governments is a key credit factor that underpins public university ratings for which we account as a sub-factor of governance and management.

The grid contains fourteen metrics, detailed in Appendix A, with values mapped to a broad rating category based on the distribution of values in Moody's current rated portfolio. All of the quantitative metrics incorporate Moody's standard adjustments to a university's balance sheet, income statement, and cash flow statement. The weighted average of the sub-factor ratings produces a grid-indicated rating for each factor. We convert each of the 14 sub-factors into numeric values based on the scale below.<sup>8</sup>

Aaa	Aa	A	Baa	Ba	B	Caa	Ca
1	3	6	9	12	15	18	21

### Scorecard Adjustments

We use both historical and projected financial results in the rating process. Moody's ratings are forward-looking and incorporate our expectations for future financial and operating performance. Accordingly, we make adjustments to the quantitative factors based on anticipated near-term results. In some cases, confidential information that we cannot publish may inform our expectations for future performance. In other cases, we estimate future results based upon past performance, industry trends, competitor actions, near-term borrowing plans, and other factors. Historical results help us understand patterns and trends for a university's performance as well as for peer comparison.

Ratings may reflect circumstances in which the weighting of a particular factor will be different from the weighting suggested by the grid. Extraordinary strength or weakness in a key factor may dominate other factors and therefore alter the weight assigned to that one factor. The rating methodology grid incorporates a trade-off between simplicity that enhances transparency and greater complexity that would enable the grid to map more closely to actual ratings. The three rating factors in the quantitative grid do not constitute an exhaustive treatment of all of the considerations that are important for ratings of U.S. colleges and universities.

<sup>8</sup> The scorecard is available in the Index of Rating Methodologies in the Research and Ratings tab on [moodys.com](http://moodys.com).

FIGURE 3

U.S Higher Education Scorecard

	Sub-Factor Weights	Value	Score	Implied Rating
<b>Factor 1: Market Position (35%)</b>				
Operating Revenue (\$000)	10%			
Primary Selectivity (%)	5%			
Primary Matriculation (%)	5%			
Net Tuition per Student (\$)	10%			
Average Gifts per Student (\$)	5%			
<b>Factor 2: Operating Performance (30%)</b>				
Operating Cash Flow Margin (%)	10%			
Average Debt Service Coverage (x)	10%			
Revenue Diversity (Max Single Contribution) (%)	10%			
<b>Factor 3: Balance Sheet and Capital Investment (35%)</b>				
Total Cash and Investments (\$000)	10%			
Expendable Financial Resources to Direct Debt (x)	5%			
Expendable Financial Resources to Operations (x)	5%			
Debt to Operating Revenues (x)	5%			
Monthly Days Cash on Hand (x)	5%			
Monthly Liquidity to Demand Debt (%)	5%			

Factors 4 & 5: Governance and Management, Legal Security and Debt Structure, & Other Credit Specific Considerations	Positive, Neutral, or Negative	Analytical Notching (+/-)	Weighted Score
4) Governance and Management			Grid Rating
a. Board and Senior Management Composition			Overall Rating
b. Oversight and Disclosure Practices			
c. Short and Long-Term Planning			
d. Self-Assessment and Benchmarking			
e. Government Relations			
5) Legal Security and Debt Structure			
a. Bondholder Security Provisions			
b. External Financing Terms and Conditions			
Other Credit Specific Considerations			
a. Multi-Year Trends			
b. Healthcare Exposure (ownership of a hospital or practice plan)			
c. Marketable Real Estate			
d. Event Risk (i.e. natural disasters, legal judgments, or security incidents)			
e. Other Factors			
<b>Net Notching →</b>			

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### Qualitative Factors

Moody's assessment of a university's governance and management, together with the legal security on its debt obligations and its debt structure, can account for up to a three notch differential from the output of the quantitative grid. Using the positive indicators outlined, we evaluate whether these factors have a positive, neutral, or negative impact on the university's credit profile and adjust the rating outcome accordingly. We may incorporate additional credit specific considerations into our analysis that are not otherwise captured in the quantitative grid or common qualitative factors. Examples of other factors include multi-year trends in key metrics, highly marketable real estate, healthcare exposure, or event risks such as legal judgments, security incidents, or natural disasters. Our evaluation is aided by comparative assessments across the higher education industry derived from our extensive market coverage of colleges and universities in the United States.

The weight, or importance, of the qualitative sub-factors can vary based on the particular credit profile and circumstances under review. Extraordinary strength or weakness in a key sub-factor may dominate the others in light of the particular credit conditions. For example, our analysis of governance and management is particularly important when a university is facing strategic change, including: embarking on a major expansion of programs, initiating a significant new borrowing or fundraising campaign, undergoing financial stress or facing a weakening market position, or experiencing high turnover in senior management. In our published rating reports, we provide discussion of our assessment of these qualitative factors to explain our rating opinions. The depth of the discussion and points of emphasis will vary based on the particular credit issues facing the college or university and the importance of those issues to the rating.

## Appendices

### Appendix A: U.S. Higher Education Methodology Quantitative Grid Factors and Definitions

#### Market Position

**Operating Revenue** defines the scope of a university's operations and gives an indication of the number of students served and type of services provided (undergraduate, graduate/professional programs, research, healthcare, etc.).

*Total adjusted operating revenue as stated in the audit, including all unrestricted giving and excluding net assets released from restriction for capital or from long-term investment gains, less realized and unrealized gains or losses, plus 5% of the trailing three-year average of cash and investments*

**Primary Selectivity** measures the depth of demand for a university by comparing the number of applicants to the number of accepted students.

*Number of acceptances divided by number of applicants*

**Primary Matriculation**, or yield, reflects the strength of students' preference for a university by comparing the number of accepted students to the number of those who chose to enroll. A high yield rate demonstrates that students have a strong preference to attend the university, perhaps as a first-choice.

*Number of students enrolled divided by number of applications accepted*

**Net Tuition per Student** measures the amount that students are willing and able to pay to attend a university. In addition, a high net tuition per student can reflect programmatic diversity as graduate and professional programs are generally priced higher than undergraduate programs and receive relatively limited financial aid.

*The sum of gross tuition and fees revenue, including Pell Grant revenue, less scholarship discount and allowances less scholarship expense divided by total full-time equivalent students for the prior year (e.g. fall 2010 for FY 2011)*

**Average Gifts per Student** measures philanthropic support of a university committed to annual operations, capital, and endowment over a three year period on a per student basis.

*Total gift revenue (unrestricted, temporarily restricted, and permanently restricted) for the last three years, divided by three*

#### Operating Performance

**Operating Cash Flow Margin** measures the level of cash flow from operations that is available to cover principal and interest payments on debt.

*Operating surplus (or deficit) plus depreciation expense plus interest expense plus additional non-cash expenses (e.g. OPEB expense), divided by total adjusted operating revenues*

**Average Direct Debt Service Coverage** measures a university's ability to repay debt principal and interest from Moody's adjusted net operating income. The calculation is a three-year average of income compared to actual principal and interest on capital debt.

*Three years of annual operating surplus (deficit) plus interest and depreciation expenses, divided by three years of actual principal and interest payments*

**Revenue Diversity** measures the dependence of a university on a single revenue stream.

Largest source of revenue divided by total adjusted operating revenues

### Balance Sheet and Capital Investment

**Total Cash and Investments** measures the base of assets that generate investment return

*Cash and investments plus bond trustee debt service reserve funds or debt service funds*

**Expendable Financial Resources to Debt** measures coverage of debt by financial reserves or funds a university can access in the intermediate term due to temporary spending restrictions, largely donor or sponsor imposed. The amount includes unrestricted resources that are available for immediate expenditure, but excludes both unrestricted and temporarily restricted net investment in plant.

*Private universities: Total unrestricted and temporarily restricted net assets less unrestricted net investment in plant less temporarily restricted net investment in plant divided by debt*

*Public universities: University's unrestricted net assets plus restricted expendable net assets minus restricted expendable net assets restricted for capital projects plus unrestricted and temporarily restricted net assets of affiliated foundations/support organizations minus net assets related to capital divided by debt*

**Expendable Financial Resources to Operations** measures coverage of operating expenses by financial reserves or funds a university can access in the intermediate term due to temporary spending restrictions, largely donor or sponsor imposed. The amount includes unrestricted resources that are available for immediate expenditure, but excludes both unrestricted and temporarily restricted net investment in plant.

*Private universities: Total unrestricted and temporarily restricted net assets less unrestricted net investment in plant less temporarily restricted net investment in plant divided by total operating expenses*

*Public universities: University's unrestricted net assets plus restricted expendable net assets minus restricted expendable net assets restricted for capital projects plus unrestricted and temporarily restricted net assets of affiliated foundations/support organizations minus net assets related to capital divided by total operating expenses*

**Debt to Operating Revenue** measures coverage of debt from annual operating revenue.

Debt divided by total revenues

**Monthly Days Cash on Hand** measures the number of days a university is able to operate (cover its cash operating expenses) from unrestricted cash and investments from both operating and endowment/long-term accounts that can be liquidated and spent within 30 days.

*Monthly liquidity (sum of a university's unrestricted investments in the operating funds with liquidity of one month or less plus the lesser of endowment funds available within one month or the sum of unrestricted board designated net assets plus unrestricted funds commingled with the endowment) multiplied by 365, divided by adjusted operating expenses minus depreciation expenses and other large non-cash expenses. Excluded from the calculations are the investments of a university's affiliated fundraising foundation, as we believe the access any university has to the assets of the affiliated foundation can vary, as can the relationship between the two organizations.*

**Monthly Liquidity to Demand Debt** measures an institution's ability to repay all puttable debt (debt with a tender feature) from unrestricted cash and investments from both operating and endowment/long-term accounts that can be liquidated and spent within 30 days.

*Monthly liquidity (sum of a university's unrestricted investments in the operating funds with liquidity of one month or less plus the lesser of endowment funds available within one month or the sum of unrestricted board designated net assets plus unrestricted funds commingled with the endowment) divided by demand debt. Excluded from the calculations are the investments of a university's affiliated fundraising foundation, as we believe the access any university has to the assets of the affiliated foundation can vary, as can the relationship between the two organizations.*

## Appendix B: U.S. Not-for-Profit Private University Quantitative Grid Ranges

Market Position	Aaa	Aa	A	Baa	SG
Operating Revenue (\$000)	≥2,900,000	<2,900,000 ≥ 200,000	<200,000 ≥ 74,000	<74,000 ≥ 48,000	<48,000
Primary Selectivity (%)	≤ 12	>12 ≤ 40	>40 ≤ 69	>69 ≤ 80	>80
Primary Matriculation (%)	≥63	<63 ≥ 34	<34 ≥ 23	<23 ≥ 17	<17
Net Tuition per student (\$)	≥32,000	<32,000 ≥ 24,000	<24,000 ≥ 17,000	<17,000 ≥ 13,000	<13,000
Average Gifts per student (\$)	≥26,000	<26,000 ≥ 7,500	<7,500 ≥ 2,000	<2,000 ≥ 900	<900
Operating Performance	Aaa	Aa	A	Baa	SG
Operating Cash Flow Margin (%)	≥31	<31 ≥ 18	<18 ≥ 12	<12 ≥ 8	<8
Average Debt Service Coverage (x)	≥9.0	<9.0 ≥ 4.0	<4.0 ≥ 2.0	<2.0 ≥ 1.0	<1.0
Revenue Diversity (Max Single Contribution) (%)	≤ 41	>41 ≤ 63	>63 ≤ 83	>83 ≤ 90	>90
Balance Sheet and Capital Investment	Aaa	Aa	A	Baa	SG
Total Cash and Investments (\$000)	≥6,000,000	<6,000,000 ≥ 440,000	<440,000 ≥ 110,000	<110,000 ≥ 43,000	<43,000
Expendable Financial Resources to Direct Debt (x)	≥7.0	<7.0 ≥ 2.0	<2.0 ≥ 0.80	<0.80 ≥ 0.25	<0.25
Expendable Financial Resources to Operations (x)	≥6.6	<6.6 ≥ 1.5	<1.5 ≥ 0.50	<0.50 ≥ 0.20	<0.20
Debt to Operating Revenues (x)	≤ 0.20	>0.20 ≤ 0.60	>0.60 ≤ 0.90	>0.90 ≤ 1.3	>1.3
Monthly Days Cash on Hand (x)	≥1,100	<1,100 ≥ 360	<360 ≥ 160	<160 ≥ 70	<70
Monthly Liquidity to Demand Debt (%)	No Variable Rate Debt or ≥1,800	<1,800 ≥ 370	<370 ≥ 150	<150 ≥ 70	<70

The sub-factor ranges by rating category are based on the distribution of values from Moody's current rated portfolio. We will periodically review the data and update the ranges as necessary.

## Appendix C: U.S. Public University Quantitative Grid Ranges

Market Position	Aaa	Aa	A	Baa	SG
Operating Revenue (\$000)	≥2,800,000	<2,800,000 ≥ 150,000	<150,000 ≥ 44,000	<44,000 ≥ 37,000	<37,000
Primary Selectivity (%)	≤ 43	>43 ≤ 77	>77 ≤ 93	>93 ≤ 95	>95
Primary Matriculation (%)	≥69	<69 ≥ 35	>35 ≤ 25	<25 ≥ 15	<15
Net Tuition per student (\$)	≥13,000	<13,000 ≥ 5,000	<5,000 ≥ 3,000	<3,000 ≥ 2,700	<2,700
Average Gifts per student (\$)	≥3,500	<3,500 ≥ 300	<300 ≥ 40	<40 ≥ 20	<20
Operating Performance	Aaa	Aa	A	Baa	SG
Operating Cash Flow Margin (%)	≥20	<20 ≥ 10	<10 ≥ 5	<5 ≥ 3	<3
Average Debt Service Coverage (x)	≥6.0	<6.0 ≥ 2.0	<2.0 ≥ 1.2	<1.2 ≥ 1.05	< 1.05
Revenue Diversity (Max Single Contribution) (%)	≤ 33	>33 ≤ 53	>53 ≤ 68	>68 ≤ 71	>71
Balance Sheet and Capital Investment	Aaa	Aa	A	Baa	SG
Total Cash and Investments (\$000)	≥2,000,000	<2,000,000 ≥ 55,000	<55,000 ≥ 13,500	<13,500 ≥ 11,500	<11,500
Expendable Financial Resources to Direct Debt (x)	≥3.0	<3.0 ≥ 0.40	<0.40 ≥ 0.10	<0.10 ≥ 0.07	<0.07
Expendable Financial Resources to Operations (x)	≥0.90	<0.90 ≥ 0.30	<0.30 ≥ 0.09	<0.09 ≥ 0.06	<0.06
Debt to Operating Revenues (x)	≤ 0.20	>0.20 ≤ 0.80	>0.80 ≤ 1.50	>1.50 ≤ 1.65	>1.65
Monthly Days Cash on Hand (x)	≥250	<250 ≥ 80	<80 ≥ 45	<45 ≥ 30	<30
Monthly Liquidity to Demand Debt (%)	No Variable Rate Debt or ≥1,600	<1,600 ≥ 180	<180 ≥ 50	<50 ≥ 25	<25

The sub-factor ranges by rating category are based on the distribution of values from Moody's current rated portfolio. We will periodically review the data and update the ranges as necessary.

## Moody's Related Research

### Special Comments:

- » [Market Position: Key Credit Factor of U.S. Higher Education Ratings, June 2011 \(132849\)](#)
- » [Primer on Key Moody's U.S. Public Higher Education Ratio Calculations, December 2010 \(127480\)](#)
- » [Governance and Management: The Underpinning of University Credit Ratings, November 2010 \(128850\)](#)
- » [Privatized Student Housing and Debt Capacity, March 2010 \(123896\)](#)
- » [Primer on Key Moody's Private Higher Education Ratio Calculations, July 2009 \(118340\)](#)
- » [Risks of Variable Rate Debt No Longer Hidden, December 2008 \(113702\)](#)
- » [Public-Private Partnerships in U.S. Higher Education, June 2008 \(109385\)](#)
- » [Capital Investment for Higher Education Institutions: A Key Credit Factor in a Competitive Marketplace, December 2006 \(101049\)](#)
- » [Moody's Views on Operating Leases for Higher Education and Not-for-Profit Organizations, August 2004 \(88635\)](#)
- » [Campus Real Estate: A Financial Asset?, February 2002 \(74086\)](#)

### Rating Methodologies:

- » [Moody's Approach for Evaluating Community Colleges, December 1999 \(51626\)](#)
- » [Methodology for Rating Public Universities, August 2007 \(103498\)](#)
- » [Global Business and Consumer Service Industry Rating Methodology, October 2010 \(127102\)](#)

To access any of these reports, click on the entry above. Note that these references are current as of the date of publication of this report and that more recent reports may be available. All research may not be available to all clients.

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