Moody's
U.S. Public Finance

Special Comment

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U.S. Colleges and Universities Rating Roadmap: Focus on Special Risks During Recession & Credit Crisis

Moody's to Rely on Core Higher Education Methodologies Supplemented by Specific Ratio Thresholds and Metrics During Current Turbulence

Summary

For the first time in decades, serious sector-wide credit risks are challenging U.S. colleges and universities. Unprecedented losses in long-term endowment portfolios and the sudden evaporation of normal liquidity sources have shocked the nation's wealthiest universities. The sector collectively has lost at least $120 billion of investment value since July 2008.

During this turbulent period, Moody's will still rely on established core metrics and methodologies we use to evaluate higher education ratings during more stable times[1]. However, emphasis will be placed on the special risks now facing the U.S. higher education sector. The following six factors, supplemented with specific ratio thresholds and other metrics, will be critical in determining the rating impact on private colleges and universities in 2009. These factors will also be used to evaluate the ratings for public universities, although specific ratio metrics are less broadly applicable to individual public universities due to their widely varying degrees of dependence on state funding, investments and tuition revenue.

1 Rating Methodology for Public Colleges and Universities, November 2006.
Rating Methodology for Private Colleges and Universities, September 2002.

Moody's Investors Service

Credit Risks

1. Weaker Market Demand and Declining Cash Flow Margins
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Risk Mitigants

1. Management and Governance Actions
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This report provides detailed guidance on how we will assess certain credit risks that are most evident during this turbulent period. A university's financial performance against these metrics will influence the likelihood of rating actions.

This special comment is part of a series of publications authored by Moody's Public Finance Group that will outline the nature of the challenges facing each of the major sectors that we rate. The publication series will also provide guidance on how we will assess the impact of the challenges on the credit ratings in each sector and will discuss the factors that may offset, in whole or in part, downward rating pressure.

Current Credit Challenges are Unprecedented

Higher education institutions are now faced with a confluence of low probability events that are creating powerful challenges that will test their underlying credit stability. Severe losses of 30% or more in endowment values, similar drops in home values in many regional U.S. markets, and escalating unemployment are creating new pressures: first on university balance sheets and liquidity, and second on projections of future flows of tuition and philanthropic revenues. In addition, the traditionally stable conditions in the tax-exempt market have been dislocated by widening credit spreads, loss of Aaa-rated bond insurance, failed short-term debt remarketings and scarcity of once-abundant liquidity available from commercial banks. One counter-intuitive result of these shifts is that the nation's wealthiest and highest rated universities are the most immediately affected by liquidity stress because they are the most dependent on investment-based revenue, the largest investors in illiquid private assets, and the heaviest users of variable rate debt and swaps. The effects on lower-rated institutions will also likely be significant, although drawn out over a longer period of time.

Public Universities and Credit Metrics

Public universities are buffeted by the same sector-wide credit risks as their private university competitors. Private higher education may be relatively more directly affected by these risks, but uncertainty about student ability to pay, cash flow, liquidity, balance sheet position, debt structure and market access also affects public universities. We are not presenting credit metrics by rating category for public universities because employing specific metric thresholds for all public universities is less useful than it is for private universities. Individual state decisions on public university funding and political oversight in response to sector-wide risks will vary widely across the nation, often mitigating risks otherwise indicated by specific credit metrics. When rating public universities, we will still assess how they are affected by the four credit risks and two broad risk mitigants established in this report. But we will also carefully consider how state government decisions will alter the credit position of universities in individual states.

Since the long bull market in U.S. equities began in 1982, the nation's colleges and universities have not faced any credit challenge comparable to the current period. Throughout the last four decades, demand for higher education has grown inexorably as the shift to a "knowledge economy"[2] has underpinned a strong societal perception that a college degree is vital for achieving success. The greatest prior credit challenge for higher education was demographic in origin—the gradual decline in high school graduates in the 1980s and early 1990s as the baby-boom generation aged past the college years. This forced many institutions to scale back capital investment, leading to substantial deferred maintenance and aging physical facilities across the sector. Many also developed highly sophisticated recruitment strategies and pricing models to ensure adequate cash flow from tuition revenue. The U.S. recession of the early 1990s coincided with the depths of this demographic trough and represented the previous credit low point for the sector.

Rising credit risks led Moody's to change the outlook for the higher education sector to negative from stable in January of 2009.[3] We expect nearly all rated colleges and universities to report weakened balances sheets in 2009. Many will face liquidity challenges, even if their long-term investments remain at acceptable levels. Some also face added risks caused by use of variable rate debt and swaps that can amplify liquidity problems.

Differing Credit Impacts at Different Rating Levels

The most immediate effects of the economic and market turmoil have been felt by Aaa and Aa-rated private universities because they are more dependent on endowment earnings. These universities are facing unexpected liquidity strains and some are likely to reexamine core financial and operating strategies. However, as their high ratings suggest, these institutions can fall back on their diversified credit strengths—powerful positions in the student, research, and philanthropic markets—to buttress their credit positions. This unsettling period also presents an opportunity for the sector's leading universities to improve financial disclosure, spending discipline and governance oversight, in part to assure skeptical investors and other stakeholders that investment and liquidity losses can be managed.

Private colleges and universities rated in the A and Baa categories are far less diversified in their revenue sources, and much more dependent on student tuition revenue. For many of these institutions, credit challenges will be more evident when fall 2009 entering classes are enrolled, probably at lower levels of net tuition revenue than previously expected. These issuers are more directly affected by weakness in the nation's economy--the steepening loss of jobs, income and net worth which is reducing the ability of families to pay high tuition. These tuition-dependent institutions, faced with potential loss of student market share to more affordable public institutions, are redoubling their student recruiting and retention efforts. Public universities, in turn, must deal with sudden drops in state funding, although their lower tuition level and large economies of scale afford them more financial flexibility even as they struggle to make difficult budgetary decisions.

The U.S. higher education sector has long been amply supported by federal and state government policies, especially the provision of tax subsidies and grants for research and student aid. The new federal stimulus program includes the potential for $50 to $100 billion of added funding for this sector for 2009 and 2010—public and research universities will be the biggest beneficiaries.[4] This amplified federal government stimulus will soften the effects of some market demand and research funding risks for universities, but the more immediate and complex investment and liquidity challenges will only be addressed through market improvement, as well as strong management and governance actions. These institutional risks will rise in importance as bond rating factors while these newly stressed organizations cope with the impact of depressed liquidity and volatile capital markets.

[2] Peter Drucker is often credited with identifying the critical role of knowledge-based workers and the growing need for an educated work force as far back as the 1950s.

[3] U.S. Higher Education Outlook, January 2009.

[4] U.S. Federal Stimulus Likely to Relieve Short Term Credit Pressures Facing a Number of Municipal Issuers, February 2009.

Colleges and Universities Operate Under a Highly Stable Business Model, but Face New Uncertainties

U.S. universities operate under a robust business model that is among the strongest of any industry or sector, a structural strength that will allow many to avoid rating downgrades over the coming year or more. The favorable effects of this model create highly stable cash flow under most conditions. On average, 80-90% of operating revenue for most colleges and universities is either recurring or highly predictable on a year to year basis. The favorable contrast with the other large not-for-profit sector that borrows heavily in the municipal bond market --not-for-profit hospitals-- is especially striking:

- A strong student tuition prepayment model reduces the risks of bad debt and lagging receivables to a comparatively trivial amount—hospital-style reimbursement based payments are extremely rare in U.S. higher education.
- Revenue transactions are also far fewer, more predictable and simpler to manage because most students commit to spend two to four years at their college or universities, compared to days for a typical hospital patient.
- Large donations and research funds are similarly a stabilizing source of revenue as they are typically provided in multi-year commitments and are rarely written off; most hospitals do not receive material revenue from these sources.
- Some colleges and universities are also much less dependent on volatile local markets than are hospitals, recruiting students, faculty, donors and research grants from a regional, national or global market.
- Public universities often operate as multi-campus systems, typically enroll 10,000 to 30,000 students or more per campus, charge much lower tuition, and receive 20-40% of their operating revenue directly from state government. All of these factors create economies of scale and credit stability for most rated public universities. Public hospitals are often smaller than many private competitors and may receive no direct government funding outside of Medicare and Medicaid.
- Few private colleges provide defined benefit pension plans for their employees, whereas many hospitals still maintain these costly benefit plans and are now facing large new funding requirements. Public university pension plans are often funded at the state government level, protecting many issuers from these funding costs.
- Finally, the lagged endowment spending model employed by most colleges and universities dampens volatility in budgeted investment-based revenue and, in most cases, gives institutions several years to adjust operating spending gradually when investment losses occur.

Rating Framework for U.S. Private Higher Education

Moody's established rating methodologies for higher education provide the continuing framework for our ratings. The remainder of this report provides detailed guidance on how we will assess certain credit risks that are most evident during this turbulent period. We will pay special attention to six critical factors – 4 risks and 2 mitigants (please see page 13 for a tabular display of this guidance by rating category). A university's financial performance against these metrics will influence the likelihood of rating actions. These metrics are provided for private colleges and universities. Additional guidance for public universities, which face overlapping but generally less intense risks than private universities, is provided as a separate text on page 2.

Falling below the guidance level for any individual financial metric will not necessarily trigger a rating review for a university, unless that single variance is extreme and creates the potential for additional credit risk by itself. Many stable colleges and universities will fall below the guidance metric for an individual indicator. However, rating reviews will be more likely to be triggered for rated institutions that fall below multiple metrics, especially if they are rated higher in their broad rating category (eg: A1 or A2, rather than A3) and have deteriorated from long held stable positions. These financial metrics were developed from our experience with stressed situations that we have assessed since the conclusion of the most recent university fiscal year (June 30, 2008 for a majority of rated obligors). Our recently published FY 2008 Preliminary Medians for private universities[5] show only a minor amount of the deterioration in balance sheet ratios that we expect for FY 2009.

This report also provides a list of fourteen universal warning signs – irrespective of rating category – that could trigger rating reviews by Moody's (please see text box on page 11). In particular, many investors have inquired as to whether we will take rating action if a university violates a covenant (usually a liquidity or coverage covenant) in the bond documents. We do not anticipate automatic rating downgrades solely due to a covenant violation in the bond documents (also known as a "technical" default rather than a payment default) but rather will review the factors causing the violation and the implications for such a violation. We will assess the relevance of the covenant to credit and liquidity considerations and determine if rating action is needed. For example, some colleges and universities may trip coverage covenants because the definition for debt service coverage includes non-cash losses such as losses on refundings, negative swap valuations, or unrealized investment losses. Factors such as these may not result in a rating downgrade if core operating performance is stable. However, rating actions may occur if the cause of the rate covenant violation reflects a downturn in core operating performance, tighter liquidity, weakened balance sheet position, or leads to the acceleration of debt.

Six Critical Factors Driving 2009 Rating Actions

The following factors will be especially important for assessing higher education credit ratings during this period of market turmoil. These factors are applicable to all university ratings, although the accompanying detailed metrics are established as guidance specifically for private universities. Public universities will be evaluated under the same broad factors, but the specific metrics we will employ will vary depending on state funding patterns and other unique factors that tend to affect public universities differently by state.

Credit Risks

1. Weaker Market Demand and Declining Cash Flow Margins

Student demand is expected to remain generally robust across the sector, but shifts in demand toward lower cost providers are likely. The nation's most selective and highest rated colleges and universities are unlikely to be stressed by these student market shifts, although they may have to scale back some of their recently enhanced financial aid strategies and accept greater numbers of affluent applicants to increase net tuition revenues to compensate for lower endowment-based revenues. Generating strong operating margins for these universities has historically been more of a matter of choice than necessity because their other credit strengths negated the need for a tuition maximization pricing strategy. Many of these universities are also major research institutions and can count on stable to improving funding in this business line for at least the next two years due to the federal stimulus program.

Many private colleges and universities rated in the A and Baa categories are not so favorably positioned. They typically are smaller and accept more than 50% of student applicants while yielding 30% or less on admitted students. They also are much less diversified, depending on student-based revenues for two-thirds or more of their operating revenue. These institutions may be especially sensitive to further declines in student capacity to pay, driven either by further economic decline or policy changes that could reduce the availability of private student loans. Maintaining healthy cash flow margins is more important for these organizations because they need a cushion against the increased risk that their competitive positions could suffer from stressed macroeconomic and capital market conditions. There are comparatively few research universities in these rating categories.

Public universities generally are experiencing increased student demand and struggling to control class size and tuition levels as states cut funding. Many are in the unusual position of cutting budgets and restricting access to qualified students because of weaker state funding and political constraints that limit them from

5 Moody's Preliminary Fiscal Year 2008 Medians for Private Colleges and Universities, March 2009.

raising tuition high enough to expand programs to accommodate rising student demand. In most states, operating cash flow for public universities is heavily influenced by state funding as well as student market demand. Although state appropriations typically only provide a third of public university operating revenue, these public funds are mainly used for core salary and benefits costs and thus are significant governors of overall spending and operating results. Some of the nation's largest research universities are in the public sector and they can be expected to thrive in research for at least two years due to the federal stimulus program.

We do not anticipate broad rating downgrades simply because of moderately weaker student demand and operating cash flow margins. However, rating downgrades and negative outlooks will be more likely for private colleges and universities that show a severe impairment in student market demand and financial performance that we believe is outside a manageable, cyclical decline.

Key Ratio and Metrics: To determine market demand and operating strength, we will evaluate trends in student demand and yield, net tuition and research revenue growth. For Aaa universities we expect selectivity rates to remain below 30% with yields above 40%, as well as maintenance of at least 2% growth in net tuition and research revenues. We also anticipate that these extremely strong debt issuers can maintain operating cash flow margins of at least 12% as that measure becomes more important as a means of replacing lost liquidity.

These metrics are adjusted gradually downward through the lower rating categories reflecting the less robust credit position of these colleges and universities. For example in the Baa category, we have established these minimum guidance metrics: selectivity rates to remain below 90% with yields above 20%, as well as no more than 2% decline in net tuition and research revenues. We also anticipate that these issuers can maintain operating cash flow margins of at least 5%. These metrics are intended to reflect our expectation that these lower-rated colleges and universities will weaken operationally during the next year or two, but we also recognize that this weakness cannot continue indefinitely. We expect these debt issuers to improve performance in later years—downgrades are more likely for those that appear to have suffered a sustained loss of performance capability. There are no significant research universities rated in the Baa category.

2. Investment Losses and Weakened Balance Sheets

The large majority of colleges and universities are facing sharp declines in net worth as steep losses in their endowment investment pools have hit unexpectedly hard. The 30% and greater declines that many have taken are raising new questions about asset allocation and leverage decisions made over the last two decades that have resulted in much heavier exposures to private equity and other privately managed funds. While the richest universities can ultimately accommodate large losses, the magnitude of the decline is generally beyond their previous planning scenarios and reflects a failure to value liquidity sufficiently. For many debt issuers in this sector, following the investment practices of the largest endowments has been risky and reflective of questionable governance oversight, as most institutions lack adequate staff and risk monitoring resources necessary for overseeing private investment managers. However, for most issuers the large losses will still not tip them into financial stress due to their low dependence on endowment-based revenue.

Given the importance of the balance sheet for credit position in this sector, we expect selective rating downgrades will occur mainly because the balance sheet cushion has declined dramatically for some issuers, taking them below any reasonable metric for their current rating. However, we are also likely to maintain stable, or at worst negative, credit outlooks for the majority of issuers because of their differing degrees of dependence on investment-based revenues, their diversified credit strengths in other areas and their demonstrated ability to alter financial and capital plans to adjust to a new, lower level of endowment resources. We also expect a fundamental reassessment of investing strategy to take place at many colleges and universities, with a higher priority placed on liquidity and manager oversight.

Key Ratios and Metrics: Our two key metrics for measuring balance sheet position are expendable resources to debt and operations. For the Aaa rating category, we expect universities to maintain expendable resources to debt equal to at least 300%, as well as expendable resources to operations of at least 200%. In the lowest investment grade category—colleges rated Baa—we expect issuers to maintain expendable resources to debt equal to at least 70%, as well as expendable resources to operations of at least 50%.

We have not established set thresholds for unrestricted resources to debt and operations because the presentation of unrestricted net assets is less consistent and will vary widely across states depending on interpretation of state trust law and accounting guidance under new UPMIFA rules.[6] However, we are aware that unrestricted resources will generally decline by 50%, or even more, at many colleges and universities because unrestricted net assets must absorb first losses on restricted endowment accounts in order to maintain the value of the original endowment principal. We also note that large negative valuations for swap portfolios will depress expendable resources, and barring collateral posting requirements or unfavorable termination provisions, will consider these liabilities in assessing metrics against benchmarks. We will closely review each issuer's ability to spend from temporarily and permanently restricted assets to support their operations and debt servicing ability.

3. Debt Structure and Liquidity Stress

Liquidity has risen to the top of immediate financial concerns in the sector, especially at the more than 50 private colleges and universities that depend on investment-derived income for 20% or more of their operating revenue. Most of these issuers are rated in the Aaa and Aa categories, although there are some rated in the A and Baa categories as well. Liquidity challenges are especially acute at those institutions that have high operating dependence on their investments and have also issued more than 50% of their debt in variable rate mode. Issuers in this latter group, which totals approximately two dozen colleges and universities, are nearly all rated Aaa or Aa.

Debt structure has become more obviously linked to liquidity risk for many issuers because of reduced confidence among variable rate bond investors and more expensive and scarce bank liquidity. Moody's has long commented on the "hidden" risks of these debt structures,[7] but these risks have become fully appreciated by most issuers only in the last year. The unprecedented collapse of the auction rate market in February 2008 and the spike in interest rates in October 2008 underscored the liquidity implications of these structures. Explicit risks include bank counterparty risk, interest rate risk, renewal risk, and most fundamentally, risk of payment acceleration if there is an event of a default under the letter of credit or standby bond purchase agreement.

These risks are heightened if a university with a sizable variable rate program uses only one liquidity provider (concentration risk). Significant exposure to a downgraded liquidity provider can subject a university to tenders (puts) that are supported by the liquidity provider. These tenders are largely unrelated to the underlying credit quality of the borrower. Some colleges and universities saw failed remarketings of variable rate debt in October 2008 as bank downgrades occurred. The market solutions that colleges and universities previously relied on to manage these problems, such as the converting to fixed rate, are now more expensive and may involve additional fees to change counterparties if the swaps are terminated in conjunction with the conversion. Under current market conditions, a few low rated credits may not be able to escape from variable rate structures at affordable rates.

Many bank liquidity facilities have balance sheet or debt service coverage covenants measured at least once during the fiscal year. Failure to meet theses tests is an event of default in most documents. Upon violating these types of covenants, the bank has the option to declare an event of default, give notice of a mandatory tender and require immediate or short-term principal repayment by the university. Theoretically, this could wipe out all, or a large portion, of an issuer's unrestricted cash, leaving little liquidity for the fixed rate bondholders or ongoing operations of the college.

[6] UPMIFA Implementation by Endowed Organizations Will Not Alter Credit Evaluation Following Changed Accounting Treatment, April 2009.
[7] Hidden Risks of Variable Rate Debt, March 2004; Risks of Variable Rate Debt No Longer Hidden, December 2008.

Colleges and universities that have limited headroom vis-à-vis their balance sheet and coverage covenants may face rating or outlook pressure. We will use our best judgment to determine the near-term or long-term possibility of a covenant violation. For example, if we believe there is a 50% chance of a covenant violation occurring in the next several months, we may downgrade the rating a notch, depending on the severity of the consequences of the violation.

In our research, we will inform investors how low the rating may go if the bank elects to accelerate the bonds in the event of a covenant violation. If that risk increases to 90%, we may downgrade the rating closer to where it would be after acceleration. In the rare case of an event of an actual acceleration by the bank, the rating impact may be very severe with a downgrade well into the below investment grade categories.

In addition to the risks of variable rate debt structures, liquidity risks have also become a major concern due to some interest rates swap agreements. Many universities have used these derivatives to hedge the variable rate risk on their bonds (known as fixed payer swaps). Mark-to-market liabilities on long-dated fixed payer interest rate swaps have grown considerably since mid-2008 due mainly to falling long LIBOR interest rates. Many universities have seen the fair value of their swap agreements decline significantly, and some have been forced to post large amounts of cash collateral[8], including several rated in the Aaa and Aa categories. This liquidity problem would be much worse had not a substantial number of universities avoided the risk by negotiating to have no collateral posting requirements in their swap agreements or setting relatively high thresholds.

Key Ratio and Metric: Our key ratio for measuring the risk of variable rate debt is unrestricted cash-to-puttable debt. Puttable debt is debt that has a variable interest rate with provisions for investors to tender their bonds and demand full payment at par. In cases where this ratio may be weak, we will pay particular attention to the actual liquidity of the cash holdings. For example, cash held in hedge funds and private investment vehicles will not be considered to be liquid. Proceeds from external bank line borrowings will generally be excluded from this calculation of unrestricted cash. We would expect higher-rated universities be able to withstand a bank acceleration, as well as requirements to post collateral under swaps, because of their superior cash liquidity and market access. After such acceleration, we would expect there to be enough liquidity to fund operating needs, routine capital needs and make fixed rate debt payments. Lower-rated colleges and universities will likely have a harder time absorbing the impact of an acceleration or swap collateral posting given their lower liquidity levels. For Aaa rated issuers, we look for unrestricted cash to cover puttable debt by at least 175%; for Aa rated issuers at least 150% coverage; for A rated issuers at least 90% coverage; and for Baa rated institutions, a minimum of 70% cash to puttable debt.

We will also evaluate covenant "headroom" under bank and swap agreements. Headroom is a measure of the clearance left before a college or university violates a particular covenant that could result in termination by the bank or swap counterparty. For Aaa rated universities, we would expect to see at least 75% clearance under the covenants; for Aa rated issuers at least 55% clearance, for A rated issuers at least 40% clearance; and for Baa rated issuers, at least 25% clearance. Falling below these clearance levels may warrant a rating review.

4. Market Access Problems

Until recently, access to the economical tax exempt market was virtually assured for all investment grade colleges and universities and, over the past decade, increasingly became the key resource for funding routine and strategic capital needs. Following the recent market dislocation, many lower rated colleges are finding it more difficult and costly to access the bond market to restructure debt and fund necessary capital. Higher rated universities are likely to continue enjoying reasonable access to the bond market, even if credit conditions revert to the highly stressed conditions of last fall. However, lower rated colleges, especially those with a large share of variable rate debt, are likely to face difficult market access conditions for some time.

All higher education issuers will need to balance their future capital needs against market access costs, and determine what borrowing rate is tolerable for their capital structure and financial goals. In the short-term, if

[8] Interest Rate Swaps Cause New Liquidity Stress for Some Healthcare, Higher Education and other Not-for-Profit Borrowers, February 2009.

bond market access is no longer a source of capital or deemed unaffordable, we anticipate that smaller colleges will simply stop their capital spending or increase their use of bank loans and leases, which will be incorporated into our ratios as additional leverage. We also expect many issuers to cut operating budgets, restrict contributions to their long term investment pools and allocate larger amounts of cash flow to capital spending. Those issuers that severely reduce capital spending are assuming varying degrees of competitive risk depending on the condition of their facilities compared to peer institutions.

Key Ratio and Metric: Our key metric for measuring market access is the percentage of variable rate debt (before interest rate swaps) in an issuer's total indebtedness. This indicator is a proxy for perceived refinancing risk. We are seeking to measure the risk of a university having to refinance a potentially large amount of variable rate debt at a time of limited or expensive market access. For those issuers able to obtain bank liquidity or assure investors that their own liquidity is sufficient to meet puts, the short-term debt market is likely to offer attractive borrowing rates. For others, the short term market may simply not be available and fixed rates and spreads may be unattractive in the long term market. Our analysis of the amount of variable rate debt does not prescribe any particular mix of variable and fixed rate debt that an institution should have, but it does reflect our assessment of likely market views of a college's or university's ability to access debt in the bond market at affordable rates.

As expressed above, the inherent risks of variable rate debt are amplified given current market conditions. Some colleges, even those with high ratings, are being notified of non-renewals or of dramatic increases in fees by their liquidity providers. The higher the exposure to variable rate debt, the more likely an issuer may need to return to the debt market to refinance with fixed rate debt. The ability to issue fixed rate debt at affordable rates has improved for higher rated universities, although below the Aa level debt costs and market access is still somewhat impaired compared to a year ago. If a lower rated college has material exposure to variable rate debt, market access may be very limited and alternative forms of debt quite costly. For Aaa rated universities, we look for no more than 60% variable rate debt; for Aa rated issuers no more than 50%, for A rated issuers, no more than 35% and for Baa rated issuers, no more than 20% variable rate debt.

Credit Mitigants

1. Management and Governance Actions

Effective action taken by a college or university management team and its board of trustees to respond promptly to looming financial problems and implement corrective strategies will be a strong factor in avoiding rating downgrades. In many cases, current market challenges are likely to require quick and decisive responses to prevent further deterioration in a university's credit position and market reputation. A lagging and indecisive management response will be a significant negative factor in rating issuers in this sector.

Improved disclosure to bond investors and lenders will be necessary for the higher education sector during this credit crisis. In particular, much better information about investments, liquidity and covenant headroom needs to be provided. Universities that take expansive disclosure seriously are likely to be rewarded with better market access and lower debt service costs.

Moody's has already seen many issuers take steps to slow their capital programs, cut operating spending midyear, and take aggressive steps to build liquidity. Some higher rated universities, generally those with a high dependence on endowment spending and a large allocation to depressed privately managed investments, have chosen to borrow in the taxable market to supplement liquidity immediately. Our assessment of this strategy will depend on a university's near term plans for use of these funds. Some universities are planning to maintain the borrowed funds in highly liquid investments, while others may choose to spend the cash in the near term. We will also assess multi-year financial plans for bringing operating and investing demands on liquidity more closely into balance.

Liquidity restoration strategies are critically important given the sizable market losses that nearly all higher education institutions have already incurred. The liquidity strategies we are observing include:

1. Re-evaluating all capital plans and operating budgets
2. Restructuring debt to fixed rate; replacing Letters of Credits (LOCs) from weaker counterparties with new LOCs from stronger counterparties; diversification of counterparties; amending Standby Bond Purchase Agreements (SBPAs) so that financial guarantors with credit issues are no longer causing failed remarketings and bank bonds
3. Terminating interest rate swaps to remove collateral posting risk (even if a termination payment is necessary)
4. Liquidating some long-term investments, even at depressed values, to generate short-term liquidity
5. Securing new bank lines from regional and local commercial banks that can be used for working capital needs
6. Taxable borrowing to add liquidity to the balance sheet
7. Revisiting asset allocations and assumed rates of return on long term investments

2. Deployment of Federal Fiscal Stimulus

For higher education, the American Recovery and Reinvestment Act of 2009 (the federal stimulus plan) will likely moderate the stress caused by current economic and credit conditions. It may help mitigate negative credit pressure, in particular for public institutions that depend on state aid to support operations. Public universities and community colleges are expected to be the main beneficiaries of direct relief made through various channels from $30 billion of increased student aid and $54 billion of support to public institutions (to be shared with K-12 education). Both public and private research universities will benefit from nearly $16 billion of additional research funding that is expected to flow through to higher education institutions.

These stimulus funds flowing to higher education are substantial, but the mechanism for allocating funds and the timeliness of delivery of funds over the next two years, are only now beginning to take shape. The impact on individual institutions remains unclear, but the funding is unlikely to fully alleviate all the operating and credit pressures facing the higher education sector. In particular, the stimulus may help offset some of the economic drivers of credit stress, but are unlikely to alleviate the liquidity and capital market causes of stress. Nonetheless, this aid is expected to provide a degree of temporary relief and additional time for management and university boards to revisit operating budgets and capital plans.

Private colleges and universities are expected to receive much less in direct benefits, although some will clearly be aided by the increased research and student aid funding. In particular, the substantial increase in Pell Grants and tax credits provided in the stimulus package may help alleviate budgetary pressures for urban, private colleges and universities. But overall, many private institutions will likely remain relatively more stressed than their public competitors.

Analytical Red Flags for All Colleges and Universities

The following indictors will also be used in evaluating all private and public universities, regardless of rating category. They will be used as a screening tool in conjunction with established methodologies and specific metrics discussed in this report:

1. Decline in enrollment
2. Decline in total operating revenue
3. Rising operating deficits
4. No audit delivered 6 months after the fiscal year-end
5. Qualified audit opinion
6. Technical default under bond covenants; covenant breach in bank documents
7. Unexpected increase in debt (20% or more)
8. Greater notional amount of swaps than debt
9. More than 70% of debt is variable rate (before swaps)
10. Bank bonds or auction rate debt with high rates or short payout
11. Unresponsive and stagnant management teams and boards
12. Investment allocation with more than 10% in one fund
13. Unusually high assumed investment returns on long-term investments

Conclusion

The sharp declines in the stock market and broader economy have presented unexpectedly sharp credit challenges for U.S. colleges and universities. While the sector will still enjoy strong aggregate market demand for the foreseeable future, credit risks have become much more pronounced. Investment markets have caused major losses in balance sheet strength and liquidity, and debt market dislocations have restricted market access for some issuers while raising the cost of borrowing for nearly all. Various counterparties that serve important roles in university financings have been downgraded as well, removing historically abundant sources of credit enhancement from the bond market. Our rating analysis will focus on four key risk factors in 2009 to determine when rating action is warranted. The most effective measures to mitigate these challenges will result from strong management and governance decision-making, including enhanced disclosure about investment strategies, liquidity and covenant capacity in counterparty agreements. A clear planning approach to addressing and resolving near-term and looming challenges may reduce the likelihood of negative outlooks and rating downgrades for many colleges and universities.

Moody's Related Research

Special Comment:

- Interest Rate Swaps Cause New Liquidity Stress for Some Healthcare, Higher Education and other Not-for-Profit Borrowers, February 2009 (114629)
- Risks of Variable Rate Debt No Longer Hidden, December 2008 (113702)
- UPMIFA Implementation by Endowed Organizations Will Not Alter Credit Evaluation Following Changed Accounting Treatment, April 2009 (114855)
- Moody's Preliminary Fiscal Year 2008 Medians for Private Colleges and Universities, March 2009 (115457)
- U.S. Federal Stimulus Likely to Relieve Short Term Credit Pressures Facing a Number of Municipal Issuers, February 2009 (114765)
- Not-for-Profit Healthcare Rating Roadmap: Hospitals Under Stress, but Strong Management and Federal Stimulus May Mitigate Risks, April 2009 (115867)

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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.

U.S. Colleges and Universities Rating Roadmap: Focus on Special Risks During Recession & Credit Crisis

RECESSION & CREDIT MARKET RISKS: Private Higher Education Rating Guidance

Rating Category	Weaker Market Demand & Declining Cash Flow Margins		Investment Losses & Weaker Balance Sheet	Debt Structure & Liquidity Stress		Market Access Problems & Weakened Capital Investment Capacity		Management and Governance Actions	Federal Government Actions
Aaa	Student Admit Rate <30%; Student Yield Rate >40%; Net Tuition Revenues or Research Grants show at least 2% growth	Operating Cash Flow Margin at least 12%	Expendable Resources to Direct Debt at least 300%; Expendable Resources to Operations at least 200%	Expansive headroom under bank and swap covenants (at least 75% clearance); excellent diversification of investment managers and funds, banks and counterparties	Unrestricted Cash-to-puttable debt at least 175%	Easy market access, spreads are strongest in market	No more than 60% variable rate debt	**1) NEAR TERM ACTIONS:** Evidence of operational, capital and liquidity decisions to mitigate effects of downturn even if impairment of cash flow or liquidity has not fully materialized yet. This includes established operating lines of credit with banks, restructuring debt structures, reducing or abating large capital projects to conserve cash, and revisiting investment strategies to improve liquidity. **2) LONG TERM ACTIONS & BOARD SUPPORT:** Evidence that management and board agree to take defensive actions if needed; including borrowing for liquidity to store on balance sheet in lieu of depressed asset sales; delay in capital program, cuts in compensation, staffing and student services; also including re-visiting of investment allocation; consideration to change benefit plans.	**1) STIMULUS PROGRAM:** Stimulus Act is expected to directly help universities that conduct research and enroll large share of low-income students; expanded role of federal government in student loans and expanded tax-credit incentives will have mildly stimulative effect on entire sector overall; **2) EDUCATION POLICY:** Administration's new efforts to expand % of Americans with colleges degrees and expand funding for energy research will benefit community colleges, public universities and research universities; however, tax-code changes may make philanthropic giving to colleges less attractive for donors, which would weaken private colleges the most
Aa	Student Admit Rate <40%; Student Yield Rate >30%; Net Tuition Revenues or Research Grants show at least 2% growth	Operating Cash Flow Margin at least 9%	Expendable Resources to Direct Debt at least 200%; Expendable Resources to Operations at least 150%	Significant headroom under bank and swap covenants (at least 55% clearance); strong diversification of investment managers and funds, banks and counterparties	Unrestricted Cash-to-puttable debt at least 150%	Viable market access still assured although at elevated spreads	No more than 50% variable rate debt		
A	Student Admit Rate <70%; Student Yield Rate >25%; Net Tuition Revenues are at least stable	Operating Cash Flow Margin at least 7%	Expendable Resources to Direct Debt at least 100%; Expendable Resources to Operations at least 100%	Significant headroom under bank and swap covenants (at least 40% clearance); strong diversification of investment managers and funds, banks and counterparties	Unrestricted Cash-to-puttable debt at least 90%	Strained but still viable market access at much higher spreads	No more than 35% variable rate debt		
Baa	Student Admit Rate >90%; Student Yield Rate <20%; Net Tuition Revenues declining no more than 2%	Operating Cash Flow Margin at least 5%	Expendable Resources to Direct Debt at least 70%; Expendable Resources to Operations at least 50%	Headroom under bank and swap covenants narrowing (at least 25% clearance); moderate to strong diversification of investment managers and funds, banks and counterparties	Unrestricted Cash-to-puttable debt at least 70%	Limited or no market access to capital	No more than 20% variable rate debt		

U.S. Colleges and Universities Rating Roadmap: Focus on Special Risks During Recession & Credit Crisis

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