

SPECIAL COMMENT

Liquidity and Credit Risk at Endowed U.S. Universities and Not-for-Profits

Ratings Focus on Institutional Governance and Management of Interrelated Risks

Table of Contents:

SUMMARY OPINION	1
ORIGINS OF LIQUIDITY STRESS AT ENDOWED ORGANIZATIONS	1
Long-Term Trend in Investment Performance Favors Illiquidity	2
Debt Rises Rapidly, With Increasing Share in Variable Rate Mode	2
Debt Structures Conflict with Increased Illiquidity of Large Balance Sheets	4
CONVERGENCE OF TWO MAJOR TRENDS LEADS TO LIQUIDITY CRISIS	5
RISK AND LIQUIDITY OVERSIGHT	7
LIQUIDITY DISCLOSURE – MOODY'S INTRODUCES FORMAL LIQUIDITY RATIOS	8
CONCLUSION	9
MOODY'S RELATED RESEARCH	10

Analyst Contacts:

NEW YORK	1.212.553.1653
Stephanie Woepfel	1.212.553.4840
<i>Analyst</i>	
Stephanie.Woepfel@moodys.com	
Roger Goodman	1.212.553.3842
<i>Vice President-Senior Credit Officer</i>	
Roger.Goodman@moodys.com	
John C. Nelson	1.212.553.4096
<i>Team Managing Director</i>	
John.Nelson@moodys.com	

Summary Opinion

Liquidity management at universities and other endowed not-for-profit organizations was severely tested during the global financial crisis, highlighting significant gaps in institutional risk assessment and liquidity management. This experience showed the importance of coordinating risk management, governance oversight responsibilities, management planning capacity, and organizational structures. Credit risk assessment of endowed not-for-profit debt issuers is increasingly driven by analysis of institutional governance and risk management processes. These centralized, top-down processes, for better or worse, are embedded throughout an organization's diverse operations and ultimately determine financial results as measured by traditional credit measures of operating performance, balance sheet strength, leverage, and market position.

In this comment, we discuss the credit rating implications of organizational liquidity management, risk assessment, and governance. We examine the conditions and actions that drove endowed institutions to favor illiquidity over the last 15 years, how these drivers converged to create a crisis of liquidity, and the subsequent credit effects on institutions during the recent financial crisis.

Origins of Liquidity Stress at Endowed Organizations

Liquidity shortages emerged at many universities and not-for-profit organizations during the height of the recent financial crisis, causing many management teams to make unexpected budget cuts and even borrow externally for near-term liquidity. Much of the recent challenges stemmed from the convergence of two long-term trends:

- » an extended period of positive endowment performance—fueled by rising allocations to private investments—that far exceeded most benchmarks; and
- » increasing leverage and borrowing under variable rate structures.

These trends led to accumulated, and underestimated, liquidity pressure by creating strong incentives to undervalue liquidity when making investment allocations and by decreasing the perception of risk presented by debt structures that ultimately require liquidity support.

Long-Term Trend in Investment Performance Favors Illiquidity

Since the 1980s, U.S. colleges and universities have benefited greatly from above average returns in equity markets and falling interest rates, leading boards to approve ever higher endowment allocations to public equity, private equity, hedge funds and real assets as well as lower allocations to fixed income. Investment performance of most endowments over this period consistently exceeded target benchmarks, especially among funds that followed the most illiquid and long-term strategies, thereby encouraging further allocations to these illiquid strategies.

The largest endowments led this trend and benefited the most, as their investment performance regularly exceeded returns available in public investment markets. For example, Yale University's endowment grew by 15.9 % annually from 1988 to 2008, allowing the endowment to grow by ten times over the period despite growing spending to support operations of the university.¹ As high returns from long-term endowment investments continued and short-term returns on cash balances dwindled with declining interest rates, many boards increasingly moved more operating funds into the long-term pool of endowment investments—expecting that future operating cash needs could increasingly be funded from positive returns on long-term investments. As a result, relative institutional cash liquidity declined significantly even as universities became wealthier.

Debt Rises Rapidly, With Increasing Share in Variable Rate Mode

Over the last 15 years, debt issuance by universities has grown rapidly. This increase in borrowing was driven by a combination of factors, including lower interest rates, catch-up on capital spending deferred during the demographically weak 1985-1995 period, competition among institutions for the best qualified students and state-of-the-art facilities, expanded research funding from the federal government, and rising demographic demand as more students enrolled in higher education over the period.

As universities expanded their research, educational, and student-life facilities to meet rising demand for their services, they developed more ambitious strategic and capital plans. To fund these plans, they faced strong incentives to maximize financial assets invested in high-performing endowment pools in order to increase their resources to a greater level over the long-term. Long-term investment management became, in effect, a core business line of the university because it was generating institutional resources much like private fundraising and student tuition.

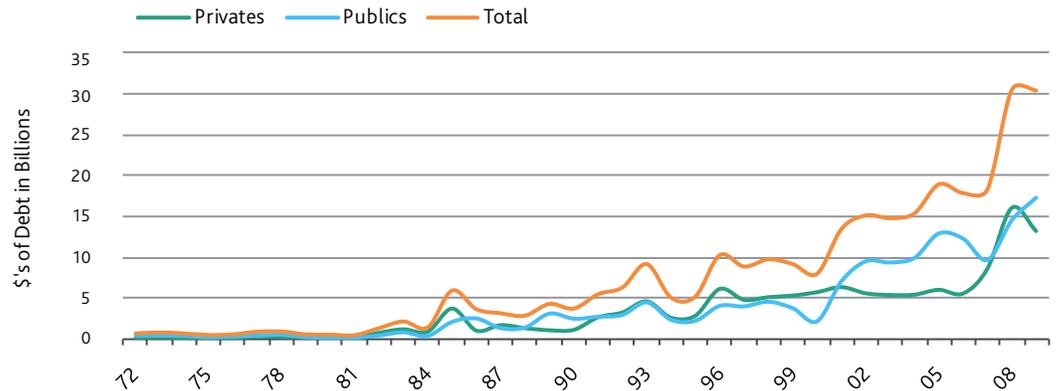
This dynamic led naturally to institutional preference for more borrowing to pay for capital projects due to the high opportunity cost of pulling funds out of the strongly performing endowment. Utilizing more low cost debt to pay for capital expansion, rather than liquidating high returning investment assets, seemed an obvious way to maximize long-term institutional benefits for students, faculty, donors, government, and alumni.

As many endowments sought to maximize annual endowment returns, already averaging well in excess of 10%, they sought to minimize the cost of borrowed capital even lower than the 5% widely available for long-term fixed rate tax-exempt debt. The simplest way to achieve a stable but lower cost of capital was to issue variable rate debt at 3% or less, and then “synthetically” fix the long-term cost of the debt through an interest rate swap with a counterparty. Beginning in 2001, short-term tax-exempt rates declined well below 3% and consequently variable rate borrowing and use of swaps increased rapidly.

¹ http://www.yale.edu/investments/Yale_Endowment_08.pdf

By 2008, more than 50% of Moody's rated private colleges and universities had some debt issued in a variable rate demand mode.²

FIGURE 1
Borrowing Rises Rapidly as Interest Rates Fell, Student Demand Increased and Wealth Expanded



Source: Moody's MFRA

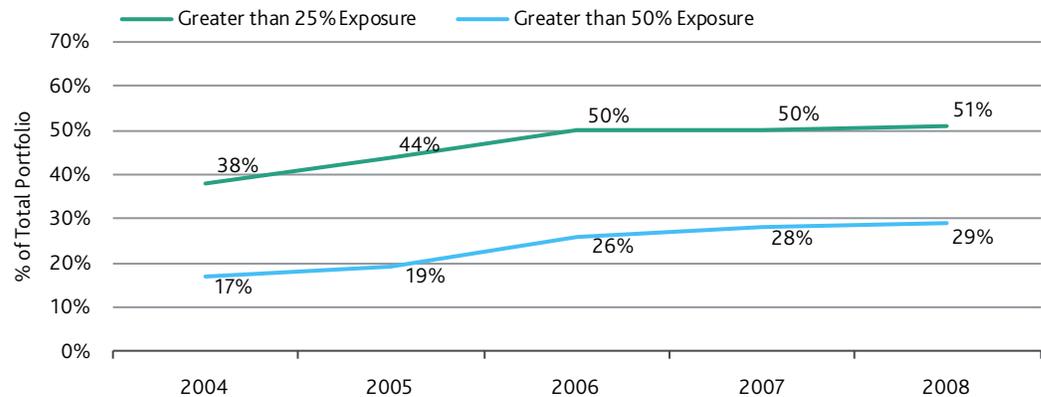
As interest rates fell and favorable endowment returns persisted, institutional leadership throughout the sector became increasingly comfortable with the use of variable rate debt. Variable rate debt offered lower interest costs in the short-run, but also carried other risks and required greater liquidity support in the event of investor puts. What was once a market dominated by fixed rate borrowers had become highly populated by variable rate borrowings. As of 2008, almost 30% of Moody's portfolio had over 50% variable rate exposure before swaps and an additional 20% had over 25% exposure. The variable rate structure brought with it new risks in the form of fluctuating interest rates and demand or tender features that placed greater liquidity pressures on the borrower³.

Ironically, exposure to liquidity risk grew as the global financial crisis began because the collapse of the auction rate market in 2007 caused many to see variable rate demand obligations as an appropriate substitution for failed auction rate securities. Not all institutions fully appreciated that they might be substituting one form of risk for another due to the large exposure to liquidity, interest rate, and counterparty risks embedded in variable rate debt and swap structures. Many colleges and universities increased the use of bank liquidity facilities to reduce, but not eliminate, liquidity risk caused by the demand feature of variable rate bonds. They continued the use of interest rate swaps even though these instruments sometimes contained the additional risk of potential demands on liquidity through collateral posting requirements to counterparties.

² Source: [Moody's](#)

³ Depending on the particular structure, variable rate debt other than auction rate debt, included provisions for very rapid repayment of the full borrowing amount with timelines as short as 1 day notice. For more detail, see our publication dated March 2004, ["Hidden Risks of Variable Rate Debt"](#)

FIGURE 2
Private Higher Education Variable Rate Exposure
 (before swaps)



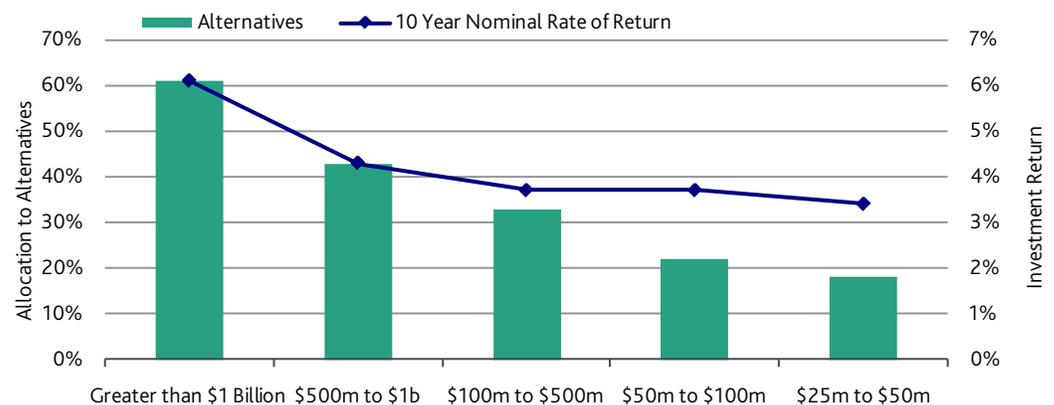
Source: Moody's MFRA

Debt Structures Conflict with Increased Illiquidity of Large Balance Sheets

As variable rate debt structures created underappreciated liquidity risk and investment holdings became less liquid, institutions increasingly focused on whether their endowments were structured to maximize return and protect from investment losses—but not whether reserve liquidity would be available in a crisis. Hedge funds, private equity, and venture capital proved to be strong return generators while seemingly protecting on the down-side due to lower correlations with other asset classes. The performance of these asset classes after the tech-bubble burst earlier in the decade proved convincing, especially for hedge funds that generated modest positive returns in a sharply down market in 2001 and 2002.

As highly endowed institutions increasingly produced greater returns through alternative investments at the cost of reduced liquidity, widespread reallocation to alternative, illiquid investments occurred throughout the sector. Overseeing investment strategy, asset allocation and manager selection became a dominant focus of many boards. Debt management was more typically delegated to financial staff, often with a strategic connection to long-term asset management strategy.

FIGURE 3
Investment Strategy Pushes Toward Alternatives and Illiquidity



Source: 2009 NACUBO-Commonfund Study of Endowments

Many organizations made a shift over time from conservative fixed rate borrowing structures and liquid public equity and fixed income investments toward variable rate debt structures, derivative instruments, and illiquid alternative investments.

Convergence of Two Major Trends Leads to Liquidity Crisis

In the past two years, colleges, universities, and other endowed not-for-profit organizations in the U.S. have experienced the negative repercussions associated these trends. Instability in the market has highlighted debt structure risks once considered highly unlikely. At the same time, investment decisions that were designed to enhance safety and increase returns became highly troublesome in terms of access to liquidity. Convergence of these trends coupled with a “perfect storm” of tumultuous market events produced historically unmatched liquidity pressure at these institutions.

Significant demands on liquidity at the peak of the crisis included:

- » **Collateral posting requirements:** Under a significant number of swap agreements, associated parties agreed to the posting of collateral in the event that the fair market value or mark-to-market of a swap reached a certain threshold, typically in the several millions of dollars. Collateral eligible for posting is typically more liquid investments. Given the precipitous drop in treasury rates and associated indexes, swap fair market values surged in favor of the variable rate payer (typically the bank) causing the fixed rate payer (typically the university) to post collateral for up to the full value of the liability. As a result, issuers found themselves without access to millions of dollars in liquid assets.
- » **Capital investment calls:** Many issuers with private equity or venture capital allocation experienced calls on committed funds, often requiring liquidation of existing investments.
- » **Maintenance of liquidity based financial covenants:** Issuers are often required to maintain financial covenants associated with liquidity facility or swap agreements, which required maintenance of liquidity thresholds as demands on liquidity were arising. The need to meet covenants drove some issuers to exit equity markets at low points, reducing opportunities for a rebound in value.
- » **Downgrade of financial institutions and financial guarantors:** The lack of market confidence in the financial guarantors and banking institutions resulted in the need for some issuers to restructure debt obligations and cash-fund debt service reserve funds previously guaranteed by surety bonds.
- » **Spike in variable interest rates for short period:** As tax-exempt variable rates rose as high as 10%, interest costs for unhedged issuers rose well above budgeted assumptions.
- » **State government budget challenges:** State budget challenges lead some states to delay funds for public universities, creating additional liquidity pressure on some public institutions.
- » **Failed remarketing of demand debt:** The inability to remarket demand debt created the potential for draws on issuer liquidity under letters of credit and standby bond purchase agreements. Terms for repaying the bank when draws are made—known as “term out” provisions for repaying “bank bonds”—vary widely. In some situations, the bank can demand immediate repayment of bank bonds, but generally repayment is required over one to five years, which is still much faster than

the repayment required under original debt service schedules. Moody's rated colleges and universities avoided this harsh liquidity squeeze because they were able to eventually remarket without facing term out requirements from the bank. However, a few experienced modestly increased demands on liquidity as a result of inflated interest rates on bank bonds.

At the same time that demands on liquidity were rising, liquidity was declining as a result of:

- » **Investment losses:** Steep investment declines in fiscal year 2009--averaging 19% for the sector as a whole, but exceeding 25% for many large endowed universities--reduced liquidity and caused institutions to allocate losses heavily to unrestricted and expendable net assets. Many permanent endowment funds became "underwater", meaning their market value was less than their original gift value. At the depth of the crisis, projections were for investment losses to approach or surpass 30% for FY 2009.
- » **Reduced investment distributions:** Reduced or stagnant distributions from private equity and alternative investments resulted in reduced liquidity as previous commitments to illiquid investments continued to be called. As losses in the endowment increased, distributions of gains fell dramatically and removed a source of cash flow expected to fund operating draws under endowment spending policies.
- » **Lockup of operating funds:** Many institutions felt a significant liquidity squeeze as withdrawal of operating assets from what were considered highly liquid short-term investment funds was restricted as a result of investment losses. The most notable instance was the closure of the Commonfund Short Term Fund in September of 2008.
- » **Reduction of market access:** The credit freeze impacted many issuers as access to the market for liquidity (debt and bank lines) became increasingly expensive and constrained.

What resulted from these events was an unprecedented crisis of liquidity at many colleges, universities, and endowed U.S. not-for-profit organizations. In an effort to manage through the crisis, institutions employed various strategies to meet obligations, including debt restructuring, accessing internal liquidity, generating external liquidity, and counterparty/manager negotiations.

The most prevalent of these strategies has been the restructuring of un-remarketed or unfavorable debt structures. Because of the very recent trend of more conservative debt management strategies, increased costs associated with liquidity facilities, and favorable rates for issuers of fixed rate debt, there has been a significant return to fixed rate borrowing for both new debt issuance and refunding transactions. Also common has been the restructuring of variable rate debt to exclude demand features—for example by using privately placed bank debt which eliminates the need for liquidity facilities. New debt issues may also be structured with shorter maturities under the expectation that interest rates will rise and future swap valuations will become more favorable--allowing issuers to terminate floating to fixed-rate swaps without paying substantial termination costs.

Many institutions have looked internally to alleviate liquidity stress through liquidation of endowment assets, reclassification of the restricted nature of gifts, and cuts in operating and capital budgets. While large-scale asset reallocation has been limited, many colleges and universities have liquidated a portion of funds to meet immediate obligations and provide greater short-term liquidity. Others have taken the approach of reaching out to large donors for authorization to modify the restricted nature of gifts given that steep investment losses have impacted unrestricted investments most. Lastly, budget cuts, including capital project delays, have been seen almost across the board as a way to maintain additional liquid assets and general operational stability during the economic downturn.

In addition to rebuilding internal liquidity, many institutions have looked externally for relief from liquidity stress. This includes drawing on lines of credit or obtaining loans as an immediate and ongoing liquidity source. Issuance of taxable borrowing to generate liquidity was also an option for wealthier institutions.

For those unable or unwilling to obtain additional liquidity, negotiation with counterparties became necessary, often at an additional cost. Under letter of credit agreements, standby bond purchase agreements, and swap agreements, breach of liquidity-based financial covenants could result in a technical event of default that could allow for the acceleration of the debt. If restructuring was not a feasible option, issuers worked with liquidity and swap providers to obtain one-time waivers or formally amend covenants to avoid such technical breaches. For un-remarketed debt that was unable to be restructured in a timely fashion, term-out provisions were also negotiated with banking institutions. And finally, timing of funding and size of commitments to private investments were also renegotiated given that many issuers found themselves stressed to generate adequate liquidity to meet calls.

Restructuring debt, restructuring internal asset pools to be more liquid, accessing external liquidity, or renegotiating with managers or counterparties was sometimes costly for affected universities. Ultimately, all of Moody's rated institutions were able to meet debt obligations during the 2009 fiscal year, demonstrating the inherent credit strength of these often highly-rated borrowers, the relatively low risk of the sector overall, and investor and bank acceptance of the sector's long-term viability. At the same time, these events brought to the forefront the structural limitations of illiquidity in the higher education sector.

Risk and Liquidity Oversight

The recent credit/liquidity crisis made evident a structural deficiency of management and board oversight at many institutions. Leading up to the crisis, some institutions considered and became comfortable with the associated risks they were taking on. Many, however, did not fully weigh the embedded risks of variable rate debt or believed there was little value in preparing for the extraordinary, low-probability events that would have to occur for these risks to become manifest.

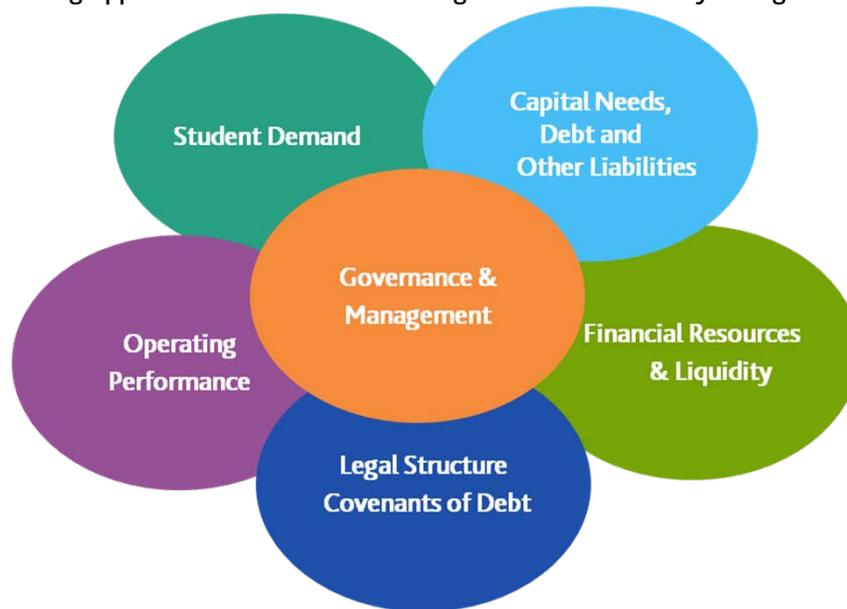
Strategic consideration of risk management pertaining to liquidity was clearly not a priority at most endowed institutions before the credit crisis. Despite rising usage of liquidity-based debt structures and increasingly illiquid investment strategies, organizations were overwhelmingly focused on risk management of investment preservation and return strategies rather than liquidity of the organization as a whole. For example, few if any debt, investment, or financial policies set targets for liquidity that cut across endowment and treasury management. While many set targets for liquidity supporting self-liquidity debt, few broadened that perspective to incorporate risks that might arise simultaneously across the organization.

Many management teams were structurally ill-suited for unified liquidity policy formulation because they largely divorced management of treasury operations and financing decisions from investments and endowment management. This separation may have been caused by creation of separate chief investment officers or asset management companies at the largest endowments, or by the domination of investment decisions by an investment committee of the board, distinct from other finance related committees.

We believe this lack of attention was also encouraged by a deficit of clear reporting on the liquidity of universities. Disclosure of liquidity has historically been poor, providing an inadequate picture of liquidity for both internal decision makers and external stakeholders. This inadequate disclosure and transparency resulted in heightened institutional uncertainty and lack of bondholder confidence during the economic downturn.

FIGURE 4

Rating Approach: Governance and Management Central to Key Rating Factors

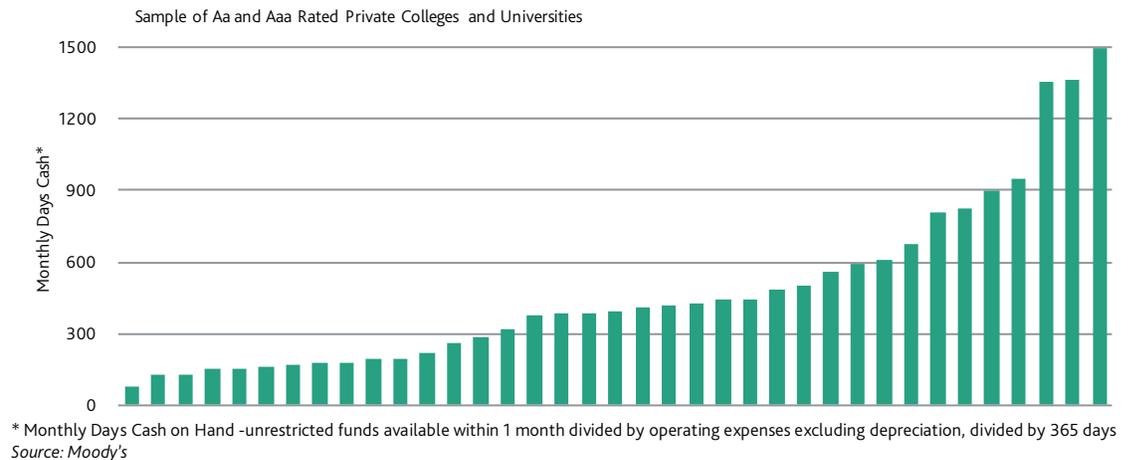


Liquidity Disclosure – Moody's Introduces Formal Liquidity Ratios

As a result of the growing demand from investors for liquidity disclosure and transparency, Moody's Higher Education and Not-for-Profit team recently introduced formal liquidity ratios into our analysis. While liquidity has been a focus of our analysis for some time, we have expanded our annual disclosure information requirements to include a detailed breakout of cash and investments in order to gain a broad understanding of liquidity across business units. This information will provide a liquidity profile for each institution on a basis that is consistent with reported audited financial results and will be utilized in individual and portfolio-wide analysis. We do not anticipate that our employment of new liquidity ratios will cause unusual rating changes among rated colleges, universities, and other U.S. endowed not-for-profits.

FIGURE 5

Wide Variation in Liquidity Metrics Amongst the Highest Rated (FY 2009)



Liquidity plays a critical role in the rating evaluation for all institutions regardless of endowment dependence or debt structure. We recognize that there will be significantly diverse liquidity profiles within each rating category. Our approach is to examine each institution's liquidity position in relation to its own business structure and potential demands on liquidity. For instance, liquidity risks of an institution with a 100% variable rate debt structure will be viewed differently than the risks facing an institution with only fixed rate obligations. To aid in this evaluation, we have adopted a "sources and uses" approach to liquidity by identifying all potential sources of liquidity and well as all potential demands on liquidity. We seek to understand the correlation and likelihood of demands and the institution's broad ability to meet those demands. In addition to providing a current liquidity picture, new liquidity data and ratios will allow analysts to evaluate institutional risk tolerance and how it may fluctuate over time.

Preliminary liquidity medians for private colleges and universities can be found in Moody's publication: "Moody's Preliminary Fiscal Year 2009 Medians for Private Colleges and Universities" dated June 11, 2010.

Conclusion

We continue to expand our assessment of the governance and management of liquidity and related risk tolerance. Investment allocation, debt structure, use of derivatives, as well as operational budget needs must all be considered simultaneously in order to maintain structural financial balance under varying market conditions. We believe that a clear understanding by the board and senior management of the potential implications of their liquidity decisions is critically correlated with future institutional credit strength. Key considerations for risk and liquidity management include:

- » **Staffing and oversight relative to risk profile:** A qualified and diligent team with a strong ability to successfully oversee an institution's risk profile as well as react prudently to market events is critical to long-term health.
- » **Scenario planning and stress testing:** Historical trends are not always good predictors of future events. Board members and senior management should be able to clearly explain their views of

institutional liquidity and risk tolerance, including discussion of expected institutional actions under potential stress conditions that might arise.

- » **Implications of financial agreements:** No two financial agreements are the same. Management's understanding of the potential interaction between agreements (both investment and debt related) is critical to managing risk associated with these commitments.
- » **Transparency for internal decision makers and external stakeholders:** Detailed disclosure both demonstrates management's attentiveness to its liquidity and facilitates the opportunity for management to present what it considers to be the most significant liquidity risks to the organization.

Moody's Related Research

Industry Outlook:

- » [U.S. Higher Education Outlook, January 2009 \(113886\)](#)

Rating Methodologies:

- » [Hidden Risks of Variable Rate Debt, March 2004 \(81480\)](#)
- » [Risks of Variable Rate No Longer Hidden, December 2008 \(113702\)](#)

Special Comments:

- » [Moody's New Liquidity Ratios Increase Transparency, March 2010 \(123377\)](#)
- » [Near-Term Liquidity Stress Can Impact Long-Term Municipal Ratings, March 2008 \(108140\)](#)

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.

Report Number: 123460

Authors
 Roger Goodman
 Stephanie Woepfel

Editor
 John Nelson

Production Associate
 Kerstin Thoma

© 2010 Moody's Investors Service, Inc. and/or its licensors and affiliates (collectively, "MOODY'S"). All rights reserved.

CREDIT RATINGS ARE MOODY'S INVESTORS SERVICE, INC.'S ("MIS") CURRENT OPINIONS OF THE RELATIVE FUTURE CREDIT RISK OF ENTITIES, CREDIT COMMITMENTS, OR DEBT OR DEBT-LIKE SECURITIES. MIS DEFINES CREDIT RISK AS THE RISK THAT AN ENTITY MAY NOT MEET ITS CONTRACTUAL, FINANCIAL OBLIGATIONS AS THEY COME DUE AND ANY ESTIMATED FINANCIAL LOSS IN THE EVENT OF DEFAULT. CREDIT RATINGS DO NOT ADDRESS ANY OTHER RISK, INCLUDING BUT NOT LIMITED TO: LIQUIDITY RISK, MARKET VALUE RISK, OR PRICE VOLATILITY. CREDIT RATINGS ARE NOT STATEMENTS OF CURRENT OR HISTORICAL FACT. CREDIT RATINGS DO NOT CONSTITUTE INVESTMENT OR FINANCIAL ADVICE, AND CREDIT RATINGS ARE NOT RECOMMENDATIONS TO PURCHASE, SELL, OR HOLD PARTICULAR SECURITIES. CREDIT RATINGS DO NOT COMMENT ON THE SUITABILITY OF AN INVESTMENT FOR ANY PARTICULAR INVESTOR. MIS ISSUES ITS CREDIT RATINGS WITH THE EXPECTATION AND UNDERSTANDING THAT EACH INVESTOR WILL MAKE ITS OWN STUDY AND EVALUATION OF EACH SECURITY THAT IS UNDER CONSIDERATION FOR PURCHASE, HOLDING, OR SALE.

ALL INFORMATION CONTAINED HEREIN IS PROTECTED BY LAW, INCLUDING BUT NOT LIMITED TO, COPYRIGHT LAW, AND NONE OF SUCH INFORMATION MAY BE COPIED OR OTHERWISE REPRODUCED, REPACKAGED, FURTHER TRANSMITTED, TRANSFERRED, DISSEMINATED, REDISTRIBUTED OR RESOLD, OR STORED FOR SUBSEQUENT USE FOR ANY SUCH PURPOSE, IN WHOLE OR IN PART, IN ANY FORM OR MANNER OR BY ANY MEANS WHATSOEVER, BY ANY PERSON WITHOUT MOODY'S PRIOR WRITTEN CONSENT. All information contained herein is obtained by MOODY'S from sources believed by it to be accurate and reliable. Because of the possibility of human or mechanical error as well as other factors, however, all information contained herein is provided "AS IS" without warranty of any kind. Under no circumstances shall MOODY'S have any liability to any person or entity for (a) any loss or damage in whole or in part caused by, resulting from, or relating to, any error (negligent or otherwise) or other circumstance or contingency within or outside the control of MOODY'S or any of its directors, officers, employees or agents in connection with the procurement, collection, compilation, analysis, interpretation, communication, publication or delivery of any such information, or (b) any direct, indirect, special, consequential, compensatory or incidental damages whatsoever (including without limitation, lost profits), even if MOODY'S is advised in advance of the possibility of such damages, resulting from the use of or inability to use, any such information. The ratings, financial reporting analysis, projections, and other observations, if any, constituting part of the information contained herein are, and must be construed solely as, statements of opinion and not statements of fact or recommendations to purchase, sell or hold any securities. Each user of the information contained herein must make its own study and evaluation of each security it may consider purchasing, holding or selling. NO WARRANTY, EXPRESS OR IMPLIED, AS TO THE ACCURACY, TIMELINESS, COMPLETENESS, MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE OF ANY SUCH RATING OR OTHER OPINION OR INFORMATION IS GIVEN OR MADE BY MOODY'S IN ANY FORM OR MANNER WHATSOEVER.

MIS, a wholly-owned credit rating agency subsidiary of Moody's Corporation ("MCO"), hereby discloses that most issuers of debt securities (including corporate and municipal bonds, debentures, notes and commercial paper) and preferred stock rated by MIS have, prior to assignment of any rating, agreed to pay to MIS for appraisal and rating services rendered by it fees ranging from \$1,500 to approximately \$2,500,000. MCO and MIS also maintain policies and procedures to address the independence of MIS's ratings and rating processes. Information regarding certain affiliations that may exist between directors of MCO and rated entities, and between entities who hold ratings from MIS and have also publicly reported to the SEC an ownership interest in MCO of more than 5%, is posted annually at www.moody.com under the heading "Shareholder Relations – Corporate Governance – Director and Shareholder Affiliation Policy."

Any publication into Australia of this Document is by Moody's affiliate Moody's Investors Service Pty Limited ABN 61 003 399 657, which holds Australian Financial Services License no. 336969. This document is intended to be provided only to wholesale clients (within the meaning of section 761G of the Corporations Act 2001). By continuing to access this Document from within Australia, you represent to Moody's and its affiliates that you are, or are accessing the Document as a representative of, a wholesale client and that neither you nor the entity you represent will directly or indirectly disseminate this Document or its contents to retail clients (within the meaning of section 761G of the Corporations Act 2001).