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SPECIAL COMMENT

U.S. Colleges and Universities Increase Liquidity as Credit Pressures Continue

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Summary

Liquidity in the U.S. Higher Education sector is generally strong despite negative credit pressures affecting the large majority of rated colleges and universities. Liquidity risks have stabilized for most universities nearly two years after unexpected cash shortages caused fifteen highly rated private universities to borrow more than $7 billion in taxable debt to bolster their liquidity. The healthy liquidity position of most U.S. Colleges and Universities has also aided bank liquidity facility renewals for the sector thus far in 2011. Nevertheless, significant uncertainty remains for some universities that face potential liquidity risks from variable rate debt structures, weak tuition pricing power, investment volatility and cuts in government funding.

Key conclusions from analysis of Moody's liquidity data for rated U.S. colleges and universities[1] include:

» ***Monthly liquidity[2] increased in most rating categories in 2010:*** Median monthly liquidity increased in the sector last year at a much faster pace than growth in total cash and investments. Private universities saw a 15% increase in median monthly liquidity to $89 million. Increases were aided by long-term investment returns, careful expense containment, and more active liquidity management.

» ***Private universities maintain greater liquidity relative to their operating expenses:*** In 2010, monthly liquidity for privates provided median coverage of 229 days of cash to operating expenses, compared to 128 days for publics.

» ***Monthly liquidity as a share of total investments is lower for wealthier universities:*** Higher rated universities have stronger balance sheets and can afford to invest in less liquid investment strategies. Aaa-rated private and public universities report a median of only 29% and 34% of unrestricted cash and investments available within one month compared to 41% and 72% for A-rated private and public universities, respectively.

[1] New liquidity data have been collected for Moody's rated U.S. colleges and universities for fiscal years 2009 and 2010. Comparisons of 2010 to 2009 cover a subset of 319 rated institutions for both years (213 privates, 106 publics), or approximately two-thirds of Moody's rated colleges and universities. Data pertaining to only 2009 analysis cover 492 rated institutions. Data for 2010 for all institutions will be provided in our final medians reports on the U.S. higher education sector later in 2011.

[2] Defined as unrestricted cash and investments able to be liquidated within one month.

» ***Monthly liquidity coverage of demand debt greater for higher rated universities:*** Aaa-rated private universities with demand debt covered these liabilities by a median of 5.5 times in 2010, compared to 3.2 times for Aa-rated privates, and 1.0 time for Baa-rated privates. Coverage of demand debt[3] broadly improved in 2010 due both to increases in monthly liquidity and reductions in use of demand debt. Private universities are heavier users of demand debt structures than public universities--67% of all privates had demand debt in 2010 compared to 56% of all publics.

» ***The most significant change in liquidity position occurred among A-rated private colleges.*** This group increased holdings of monthly liquidity to a median of 41% of cash and investments in 2010 compared to 37% in 2009. Coverage of demand debt by monthly liquidity for A-rated colleges rose to a median of 2.5 times from 1.9 times in 2009, aided in some cases by replacing variable rate debt with fixed rate debt.

» ***Monthly liquidity for public universities provides an important buffer against sudden cuts in state funding:*** Public universities used 2010 to build liquid reserves, with median monthly days cash on hand growing to 128 days FY 2010 from 117 days in 2009.

» ***Outliers in all rating categories show thin liquidity; rating analysis focuses on mitigating factors:*** Liquidity values well below median are reported by some universities for monthly days cash on hand and monthly liquidity to demand debt. In these instances, Moody's focuses on mitigating factors such as the availability of restricted assets that could be liquidated, if necessary, by board action, details of the debt structure, and budgetary flexibility.

Background

The 2008-09 credit crisis highlighted the importance of assessing the liquidity of colleges and universities that borrow in the capital markets, particularly given the sector's appetite for illiquid investment strategies and debt structures with a demand feature. Moody's introduced new liquidity ratios, beginning with FY 2009 financial data, to assess the portion of cash and investments that is both free from external restrictions and liquid within one month or one year. These ratios bridge the gap in financial reporting between net asset restrictions and investment liquidity and provide comparable data across our rated portfolio. This information enhances Moody's analysis of a university's broader sources and uses of liquidity and serves as the starting point for discussions with management on how the university approaches liquidity needs.

In this report, we highlight our key liquidity findings for U.S. private and public universities and discuss how the information is utilized in our rating approach. The comment also includes a "Beyond the Numbers" section that discusses potential mitigating factors for those with relatively weak liquidity measures.

[3] Demand debt includes all Variable Rate Demand Obligations (tender feature supported by self-liquidity, letters of credit, or standby bond purchase agreements), commercial paper, all put bonds (regardless of put date), amounts outstanding under bank operating lines of credit, bank loans and private placements (with a put feature).

Liquidity Issues Highlighted in 2011 Outlook for U.S. Higher Education

In Moody's 2011 outlook for U.S. Higher Education, ample liquidity versus limited liquidity remains an important signpost of those segments with stable or negative outlooks. The stable sector outlook applies to diversified market-leading universities with balance sheet strength including ample liquidity. The negative sector outlook applies to those public and private universities with more limited market strength, less revenue diversity beyond student charges or state appropriations, and relatively less liquidity relative to operating expenses or debt.

» Market-leading private universities have strong liquidity despite less liquid investment strategies; some of these institutions borrowed taxable debt to bolster liquidity in 2009. Two universities have already repaid a portion of the taxable debt they issued in 2009.

» Leading public universities have lower liquidity than similarly-rated private universities, but have more liquid investment strategies, are less likely to use demand debt, and have greater budgeting flexibility due to economies of scale.

» The majority of rated colleges and universities maintain adequate liquidity, but many face ongoing credit risks that raise new doubts about their revenue raising ability and future ability to maintain current liquidity levels. Tuition-dependent private colleges have lost much of their pricing power, while state-dependent publics face both deeper state cuts and political pressure not to maximize tuition potential. All face a need to become more efficient and lower operating costs.

Liquidity Data Provides Important Insights for Rating Process

The liquidity data reported for Moody's rated private and public universities supplements the information we have historically used in our ratings reviews. The data enhance our discussions with universities about strategies for providing liquidity to meet ordinary and extraordinary demands on liquidity. Moody's rating approach focuses on a university's potential sources and uses of liquidity, as well as our assessment of the university's ability to manage low-probability, but potentially severe, credit events.

The liquidity data and ratios have increased comparability of credit risk across the portfolio and can be key rating drivers in specific rating actions. For instance, we examined the liquidity of Illinois public universities to evaluate the impact of extensive delays in state appropriations that were budgeted for FY 2010 and will continue to monitor their liquidity going forward given pressures at the state.[4] We have found that the presence or absence of a healthy liquidity position can bolster a rating or detract from credit quality depending on the strength of other fundamental rating factors.

We expect the data to provide valuable insights about the ability of universities to withstand sudden market or financial stress. In addition, these point-in-time measures will allow us to monitor trends in liquidity across the higher education sector over time, with the first year of recorded data for FY 2009 representing a baseline highlighting the sector's liquidity position immediately following the global financial crisis.

[4] All Illinois Public Universities Reviewed Due to Impact of State Budget Crisis, February 2010 (123335)

Our liquidity data and analysis have the following attributes:

» Provides consistently defined, conservative measures of unrestricted liquidity usually lacking in university financial statements

» Provides insight about relative credit strength and ability of universities to manage through potential stress

» Analyzed within broader context of university-wide sources and uses of liquidity

» Reported as of fiscal year-end to tie analysis to the aggregated cash and investment data reported in university financial statements

» Nearly all data reported as of June 30, which is usually a seasonal low point of liquidity, especially for tuition-dependent universities that receive the bulk of their tuition dollars in the late summer and early winter

» Measures also exclude assets held as temporarily restricted funds, but we recognize in our analysis that these funds may support some operating spending by universities.

» We also recognize that the Uniform Prudent Management of Institutional Funds Act (UPMIFA) forced many private universities to report reduced unrestricted cash and investments over the last few years, but they also gained new flexibility, subject to fiduciary prudence, to spend from underwater restricted endowments.

Wealth Versus Liquidity: Liquidity Data Supplements Financial Statement Disclosure

The need to distinguish between a university's wealth, as expressed through net asset disclosure in financial statements, and actual liquidity arises from: 1) the increased use of variable rate debt and swaps on the liability side of the balance sheet and 2) the increased use of illiquid investment strategies on the asset side. Financial statements do not provide adequate disclosure on the actual liquidity of unrestricted cash and investments. For information on issues encountered in liquidity reporting see Appendix 1.

Our approach for measuring unrestricted liquidity of higher education borrowers bridges the primary spending restrictions an institution faces: accounting rules, donor stipulations, and investment strategies. The liquidity data better distinguish between the wealth and liquidity of a university's investment portfolio in order to assess how much liquidity it has on a monthly and annual basis to meet large unexpected payments, especially accelerated payments on debt.

Our calculation of **monthly liquidity** is:

» Funds available within one month that consist of unrestricted operating accounts or other non-endowment unrestricted funds

PLUS:

The lesser of:

» Funds available within one month in endowment or other long-term funds or

» Unrestricted Board Designated Endowment (Net Assets) as presented in the footnotes of the annual audit for private colleges and universities and self-reported by public colleges and universities.

Our calculation of **annual liquidity** is:

» Funds available within one year that consist of unrestricted operating accounts or other non-endowment unrestricted funds

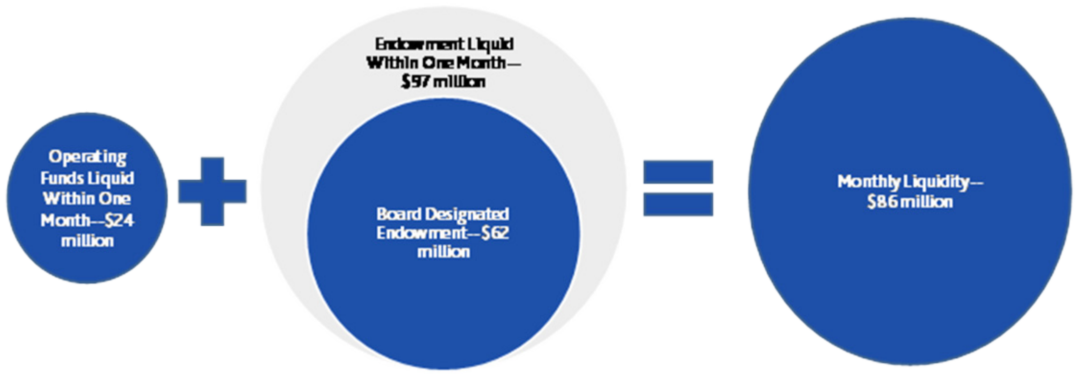
PLUS:

The lesser of:

» Funds available within one month plus funds available within one year in the endowment or other long-term funds or

» Unrestricted Board Designated Endowment (Net Assets) as presented in the footnotes of the annual audit for private colleges and universities and self-reported by public colleges and universities.

FIGURE 1
Board-Designated Unrestricted Endowment Is A Key Limit to Liquidity
Median Private University Monthly Liquidity Calculation for FY 2010



Key Ratios Offer Better Insight on Risk of Debt Structure and Operating Flexibility

Two ratios adopted with our measurement of liquidity are **monthly liquidity to demand debt** and **annual liquidity to demand debt**. These ratios indicate the amount of liquidity available on a monthly and annual basis to cover outstanding demand debt. Demand debt does not include regularly scheduled principal maturities or bullet maturities. For these measures, we include all of the following types of debt in our definition of demand debt:

» All Variable Rate Demand Obligations (tender feature supported by self-liquidity, letters of credit, or standby bond purchase agreements)

» Commercial paper

» All put bonds (regardless of put date)

» Amounts outstanding under bank operating lines of credit

» Bank loans and private placements (with a put feature)

Moody's also introduced two measures of operating flexibility, **monthly days cash on hand** and **annual days cash on hand**. These ratios measure the number of days an institution is able to operate from unrestricted investments available within one month and one year, respectively. The ratios are calculated by multiplying the liquidity measure by 365 and dividing by total expenses less depreciation and additional, unusually large non-cash expenses such as the non-cash portion of Postemployment Benefits Other Than Pensions (OPEB) expense for a fiscal year.

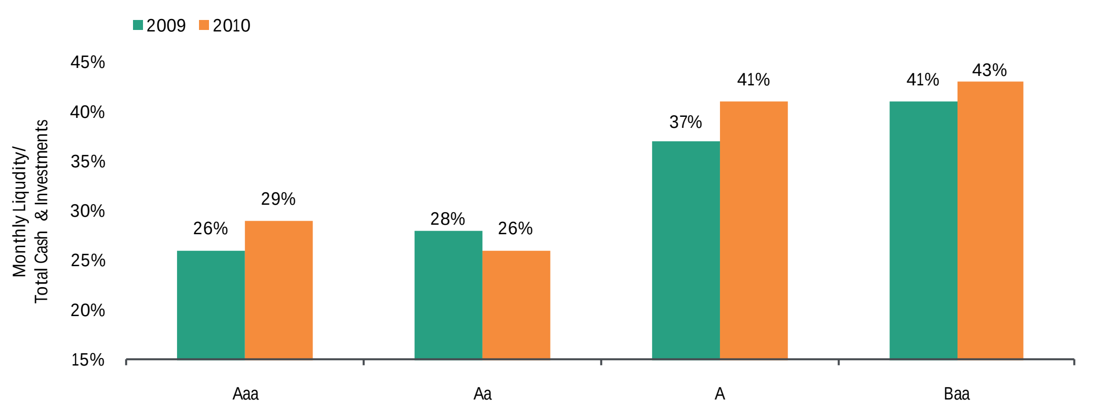
Private Higher Education: Insights and Trends from Moody's Liquidity Measures

Moody's liquidity measures for private universities support our view that most rated universities have considerable liquidity relative to their expenses and expected demands on their liquidity. Fiscal 2010 saw an increase for most, with median monthly liquidity increasing 15% from $77 million for private universities in FY 2009. The median monthly days cash on hand translated to 229 days of cash expenses, representing a substantial cushion given the relative predictability of key revenue streams. The liquidity measures are highly correlated with our ratings as the Figures in this section reveal for nominal monthly liquidity, monthly days cash on hand and monthly liquidity to demand debt. The gilt-edge Aaa-rated private universities typically have investment strategies that limit their liquidity more than the legal restrictions on their cash and investments, but for 56% of issuers the limiting factor is not asset allocation choices, but donor and other legal restrictions.

Liquidity across Moody's rated private colleges and universities remains adequate in context of other credit strengths, with a median of 36% of total cash and investments unrestricted and liquid within one month based on 2010 results, up from 34% for 2009. While median data for monthly and annual liquidity are narrowly distributed across rating categories, highly rated universities are relatively less liquid. Figure 1 shows that Aaa-rated universities have a median 29% of total cash and investments unrestricted and available within one month, while the median for private universities rated Baa is 43%. Preliminary FY 2010 median monthly liquidity increased 15% over the prior year, driven primarily by healthy investment returns of approximately 12%. Other drivers of the fiscal 2010 increase were careful expense containment resulting in improved operating cash flow for most, management discipline in building liquidity and limiting new commitments to illiquid assets. For fiscal 2009 private university median and quartile data for the liquidity measures see Appendix 2.

FIGURE 2

Lower Rated Private Universities Have a Higher Portion of Liquid Cash & Investments



The nominal amount of liquidity has a strong direct correlation with ratings for private universities as detailed in Figure 3. The most highly rated private universities have solid liquidity despite the relatively illiquid investment strategies they employ. While the FY 2010 private median for monthly liquidity is $77 million, the Aa median is more than 2.5 times that at $199 million compared to the Baa median of 35% of the median at $27 million.

FIGURE 3

Higher Rated Private Universities Have Greater Monthly Liquidity

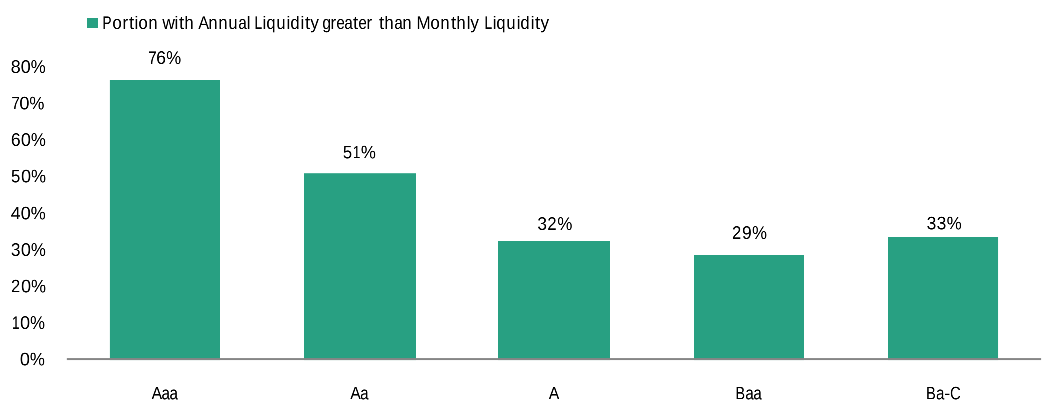
	FY 2010 Median Monthly Liquidity ($M)
Aaa	$1,613
Aa	$199
A	$108
Baa	$27
Ba-C	$7

The difference between monthly liquidity and annual liquidity is not great for most of the private higher education portfolio although it tends to be significant for the largest and wealthiest universities. For most universities the limiting factor is what portion of the total cash and investments is unrestricted. For a minority of universities, the limit is driven by an asset allocation favoring less liquid investments. In our opinion, the more highly rated private colleges and universities are able to maintain less monthly and annual liquidity as a share of their total cash and investments because their larger asset bases allow them to invest in longer-term and less liquid asset classes and still meet their liquidity needs.

Because both the monthly liquidity and annual liquidity measures are entirely unrestricted funds, in any case where annual liquidity is greater than monthly liquidity we know that asset liquidity is the source of restriction for monthly liquidity as opposed to what portion is unrestricted. For the majority of private universities (56% in 2010), monthly liquidity is limited by donors or accounting rules rather than investment strategies. For that 56% portion of rated private universities the limit comes from what assets are unrestricted. For the other 44% portion, the limit on monthly liquidity comes from the liquidity of the investments. Figure 4 below illustrates that 76% of Aaa-rated private universities have investment strategies that restrict liquidity, while only 29% of Baa-rated private universities do.

FIGURE 4

Higher Rated Private Universities Report More Liquidity Restrictions from Less Liquid Investments

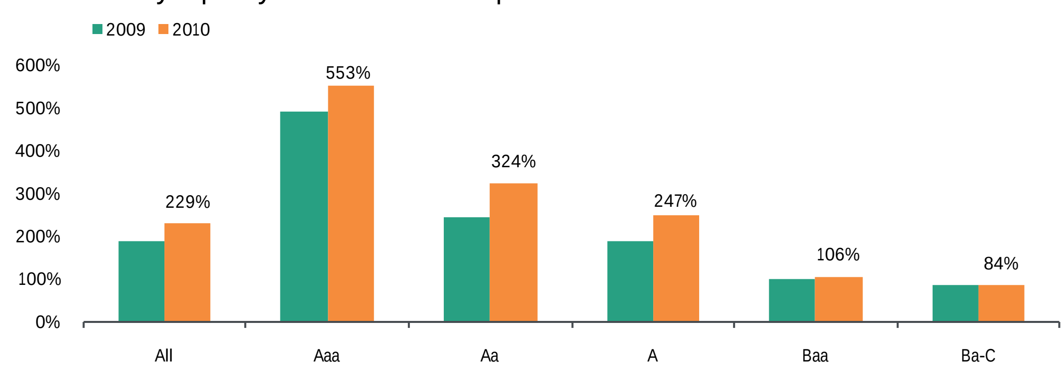


Results of our analysis show that, despite a relatively lower proportion of liquidity, highly rated colleges and universities have more operating flexibility. Figure 5 illustrates that higher rated private universities can cover a larger share of cash operating expenses from their liquid assets than can lower-rated universities. The medians for Moody's days cash on hand ratios exactly follow the rating categories. The median days cash on hand from monthly liquidity is highest for Aaa-rated colleges and universities (737 days in 2010) and lowest for universities rated below investment grade (49 days in 2010).

FIGURE 5
Higher Rated Private Universities Have Strong Monthly Days Cash on Hand

Despite the more frequent use of debt structures with a demand feature, more highly-rated private colleges and universities maintain far greater liquidity to demand debt than lower rated universities. As with operating flexibility, the median for the ratios generally decreases in line with ratings categories. The median for all rating categories based on currently available 2009 and 2010 information increased in 2010 from 189% coverage to 229% as monthly liquidity increased and many sought to reduce demand debt. Monthly liquidity to demand debt shows a more pronounced improvement in FY 2010 as illustrated in Figure 6 . While the median data show considerable coverage for most of the portfolio, we remain focused on downside risks related to weaker coverage and the potential for accelerated repayment. For further discussion of downside risk around debt structure as it relates to our liquidity measures, see the "Focus on Outliers" section below.

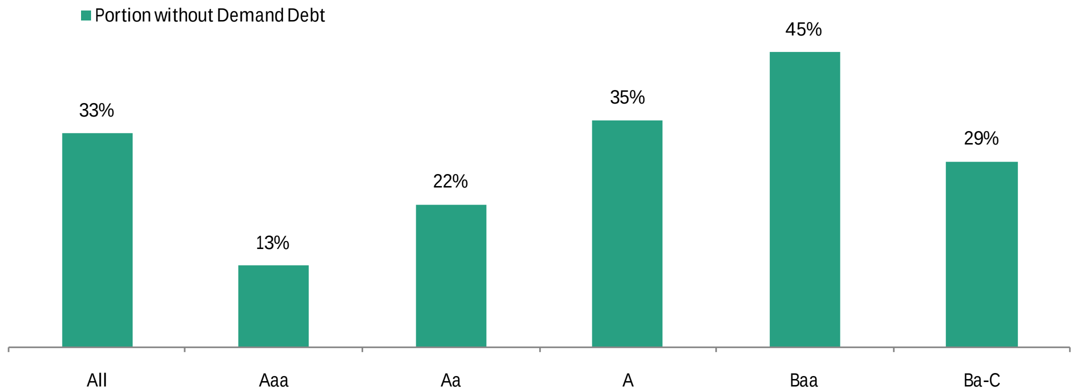
FIGURE 6
Median Monthly Liquidity to Demand Debt Improved in 2010



The monthly liquidity to demand debt medians in Figure 6 represent that portion of the rated universe of private colleges and universities with at least some demand debt. However, one-third of private universities ended fiscal 2010 with no demand debt, with 45% of Baa-rate private universities having no demand debt as shown in Figure 7. Some of these universities may still have relatively thin liquidity to meet the various potential demands on that liquidity, but the lack of demand debt does not add to those related potential calls on liquidity.

FIGURE 7

A Third of Private Universities Have No Demand Debt



Focus on Downside Outliers: Private Universities with Weak Liquidity to Demand Debt

The liquidity measures have offered powerful tools for assessing credit risk and identifying outliers.

Private colleges and universities are heavier users of demand debt than public universities, largely because they have stronger balance sheets, on average. However, many of these borrowers face the need to renew bank liquidity facilities in 2011 and beyond to support their outstanding variable rate demand bonds (VRDBs). Thus far in 2011, bank liquidity facility renewal has been proceeding fairly well.[5] To evaluate this debt structure risk, Moody's evaluates several factors, one of which is the availability of monthly liquidity relative to demand debt. For additional discussion of these debt structure risks, please see our 2011 Outlook[6]. Monthly liquidity to demand debt has become one of the most cited key indicators in our research since early 2010 and we continue to be focused on potential downside risk of obligors unable to meet potential accelerated repayment demands related to their debt structure.

With median monthly liquidity to demand debt of 194% for private universities in FY 2009 and 25th percentile coverage of 102%, the measures do not convey the low outliers with very thin coverage. In fiscal year 2009, for example, 97 rated private universities had weaker than median monthly liquidity to demand debt. Several of these colleges and universities are rated relatively low, with five of those with less than 100% coverage rated below investment grade. In other cases, there are mitigating credit factors such as the availability of liquid, but temporarily restricted funds which could be made available, pending certain internal and external approvals, to redeem accelerated demand debt. In some other cases, annual liquidity or even quarterly liquidity provides much greater coverage not captured in the monthly measure.

Our broader rating approach to assessing liquidity and potential demands on liquidity continues to rely on assessment of a university's potential sources and uses of liquidity. The various potential demands on liquidity we consider include demand debt, collateral posting requirements, capital investment calls, maintenance of liquidity based financial covenants, regular seasonality of cash flow, and unexpected interruption in operating cash flow. The potential sources to meet these include liquid working and endowment funds, along with the potential availability of operating lines of credit or other credit facilities, operating cash flow, and gifts. Our assessment of the governance and management of these related risks has continued to expand. As discussed in our Special Comment, *Liquidity and Credit Risk at Endowed U.S. Universities and Not-for-Profits*[7], clear scenario planning and stress testing around liquidity projections is an expected part of a well managed endowed college or university.

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5 So Far So Good: Market Absorbing High Volume of U.S. Public Finance Sector Bank Facility Expirations, May 2011 (133001)

6 Moody's 2011 Outlook for U.S. Higher Education, January 2011 (129939)

7 Liquidity and Credit Risk at Endowed U.S. Universities and Not-for-Profits, June 2010 (123460)

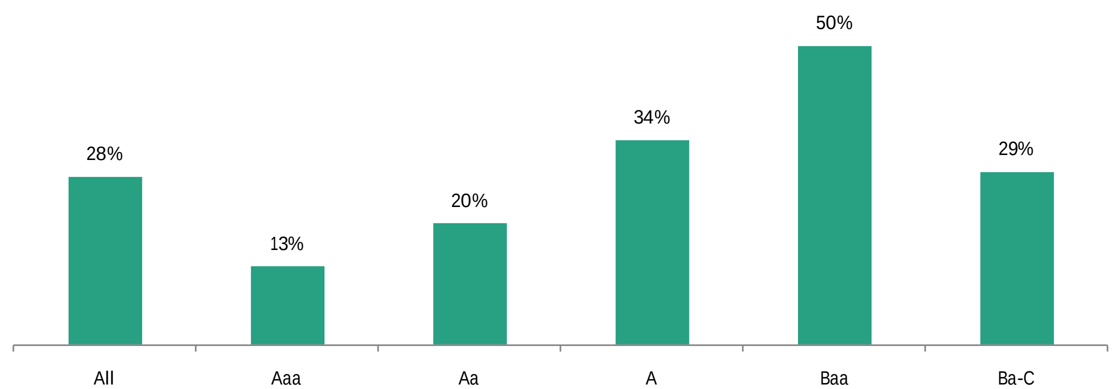
Comparing Liquidity Held in Operating Funds to Liquidity of Endowments and Bank Lines

While most of our liquidity-related research has focused on the six new liquidity measures, we continue to analyze the more granular data provided on the liquidity reporting form across our portfolio and the case of individual universities as well. Each obligor is asked to report this information once a year. For fiscal 2010, the form has 57 unique cells for reporting cash and investments according to restriction and asset class liquidity. The broad liquidity categories are liquid within one month, liquid beyond one month but within one year, and liquid beyond one year. These assets are presented in three columns: operating/unrestricted operating funds, endowment/long-term funds, and other funds such as donor or grantor restricted funds not part of the first two. In addition, the form collects other data including the amount of unrestricted board designated endowment and lines of credit.

Because the form requests a breakout between operating and endowment funds, we have informative data on operating reserves not readily discernable from audited financial statements alone. For fiscal 2010, the median unrestricted operating assets were $24 million at both the monthly and annual level as most universities have limited amounts of less liquid assets in their operating reserves. The $24 million monthly operating liquidity is up 10.4% from the prior year indicating the typical increase in this source of liquidity. Figure 8 displays the portion of total monthly liquidity provided by the operating assets. The share is lowest for Aaa-rated privates and highest for Baa-rated privates. The latter typically have more limited fundraising and a need to build their own reserve base over time and also have more potential volatility in their revenue base with a high reliance on student charges and meeting ongoing enrollment targets.

FIGURE 8

Portion of Monthly Liquidity Held in Operating Funds is Highest for Baa-rated Private Universities



Turning from the operating assets to the endowment assets column, the new data also provide a comparison of endowment liquidity relative to the unrestricted portion of the endowment. The unrestricted portion of the endowment for most private universities is simply the unrestricted board designated or quasi-endowment. Some universities also have unrestricted working capital (or other unrestricted funds) commingled with the endowment pool. Figure 9 shows that, by median, and for the majority of private universities, the endowment assets liquid within one month is greater than the unrestricted portion of the endowment assets. For all rating categories, the median endowment assets liquid within one month is $97 million, or almost 1.6 times the median unrestricted portion of the endowment. This relationship does not hold for the Aaa median however, where the asset allocation becomes the limiting factor with median monthly endowment liquidity of $1.38 billion at 85% of unrestricted endowment assets of $1.62 billion. So, while the limit is typically based on what portion of assets are unrestricted, it is more commonly based on endowment asset liquidity for the wealthiest private universities.

FIGURE 9

Median Endowment Liquidity Within One Month is Greater Than Median Unrestricted Portion of Endowment for Most

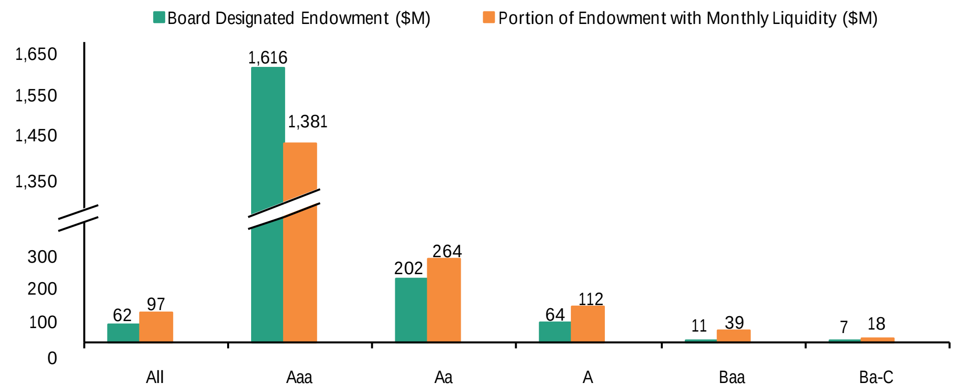
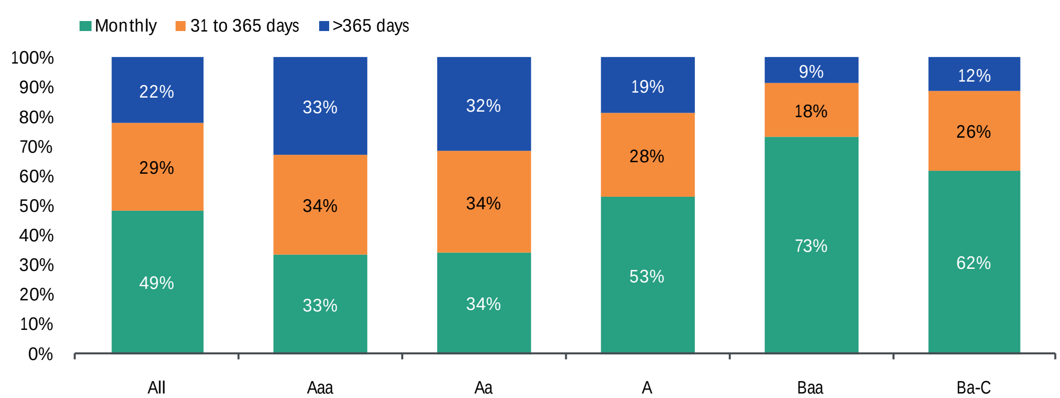


Figure 10 below describes the liquidity profile for endowment assets for fiscal 2010 for private universities. The bar chart reveals that wealthier universities are more likely to have a larger portion of less liquid assets in their pooled endowment. For Baa-rated universities, 73% of endowment assets are liquid within one month, while for Aaa-rated universities, just 33% of endowment assets are liquid within that same period. While these median data are not surprising, it is instructive and also helps discern those outliers where liquidity is much more limited or where a smaller endowment is trying to replicate the asset allocation approach of a very large endowment.

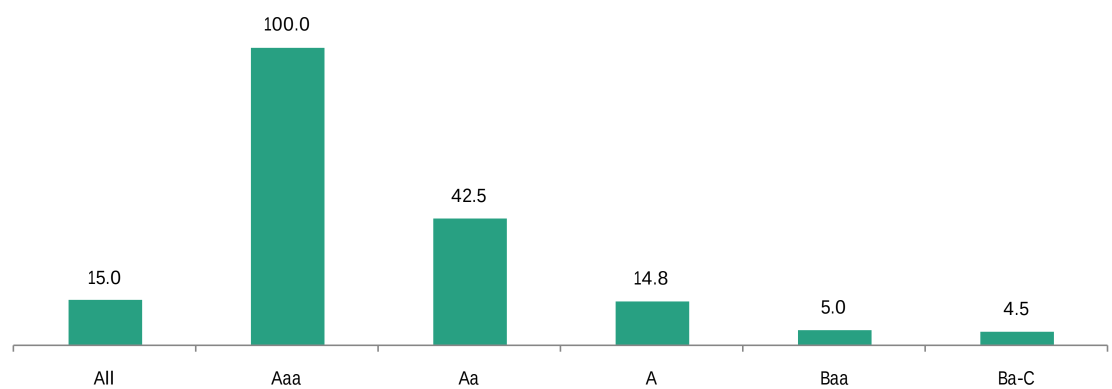
FIGURE 10

Highest Rated Universities Have One-Third of Long-Term Pool Illiquid Within One Year



The liquidity form also requests information on lines of credit, an important source of liquidity for potential unforeseen demands for many. While we view sustained reliance on operating lines for seasonal cash flow needs as a credit negative, having unused capacity as a potential tool to manage through uncertain liquidity demands is favorable. For those private universities reporting the presence of an operating line for fiscal 2010, the average number of lines is 1.5 with most having one line and a few having as many as five operating lines. Figure 11 below shows the median dollar amount of the lines with larger and wealthier universities typically entering into facilities with greater limits. The median line limit is $15 million for the sector.

FIGURE 11
Higher Rated Universities Have Greater Median Operating Line Amount ($M)

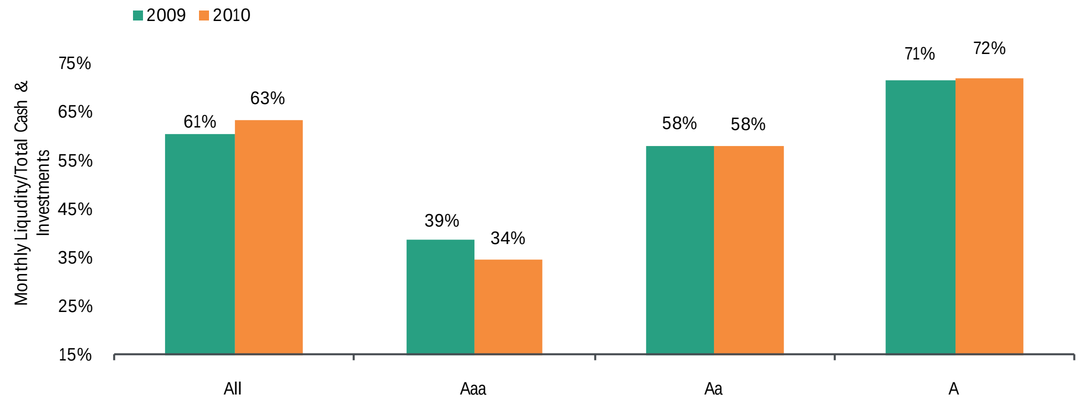


Public Higher Education: Lower Operating Liquidity with More Stability for Most

Many states are under some degree of fiscal stress, and a few are delaying payments or making swift reductions to the operating and capital support for their public universities. Liquidity analysis is therefore becoming more important for rating public universities. These institutions typically have a larger portion of their total cash and investments held in monthly liquidity than private ones, and in some states, they are required to maintain working reserves in cash and cash equivalents. However, their absolute amount of liquidity is lower-- their median monthly days cash on hand is only 59% of the level of private universities. On the positive side, liquidity compared to demand debt is less of a risk because publics use less of this borrowing structure - 44% of publics have no demand debt as compared to only 33% of privates. Moody's analysis of public university liquidity remains cognizant of state factors that may limit or discourage flexible reserves held by the university. We also consider the liquidity and flexibility of affiliated foundations even though their assets are rarely unrestricted and they are not included in the liquidity calculations.

Public colleges and universities, excluding affiliated foundations, have a larger proportion of cash and investments unrestricted and liquid within one month and one year compared to private colleges and universities. We believe the greater liquidity of cash and investments held by public colleges and universities primarily reflects investment mandates imposed by state governments. For example, many public universities are required to invest funds in a short-term investment pool managed by the state. Across all public universities, the current 2010 median level of unrestricted monthly liquidity represents 63% of their total cash and investments. Highly rated public universities have the lowest median percent of total cash and investments that are liquid on a monthly basis. Median monthly liquidity for Aaa-rated public universities of 34% compares to 72% for A-rated universities. Figure 12 shows the distribution of median monthly liquidity as a percentage of total cash and investments by rating category for 2009 and 2010 for those obligors with complete data available for both years. Because of the very low number of public universities with highest rated debt below A, we have not included a below A category in these public university graphs.

FIGURE 12
Public Universities: Higher Portion is Liquid, Especially for the A-rated

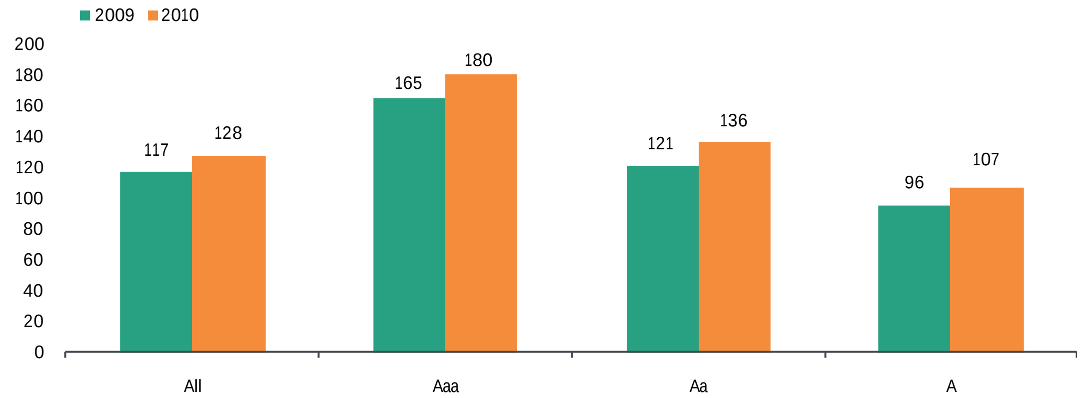


The Appendix 3 data show the median as well as the first and third quartiles of the rated public universities with fiscal 2009 data for Monthly and Annual Liquidity by rating category. The illustrations make clear the strong and direct relationship between liquidity and ratings. The data we collected from our rated public colleges and universities also demonstrate that both monthly and annual liquidity are more likely limited by the restriction of terms established by donors, grantors, and accounting rules for endowment holdings rather than by investment strategies. Of the total rated public universities, just 31% had annual liquidity greater than monthly liquidity, pointing to the majority where the limit is based on external restriction and not illiquid investments.

Despite a relatively higher proportion of liquidity to cash and investments, median monthly and annual days cash on hand for public universities are much lower than for private ones. Figures 13 displays the median monthly days cash on hand for public universities by rating category. Median coverage of cash operating expenses with unrestricted resources liquid within one month is strongest at the Aaa-rated level (180 days in 2010) and generally declines with lower rating categories. The median cushion did improve for most as 2010 was a year to safeguard liquidity and build reserves against coming uncertainty such as the end of American Recovery and Reinvestment Act stimulus funds, cuts in state operating support and other revenue uncertainty.

FIGURE 13

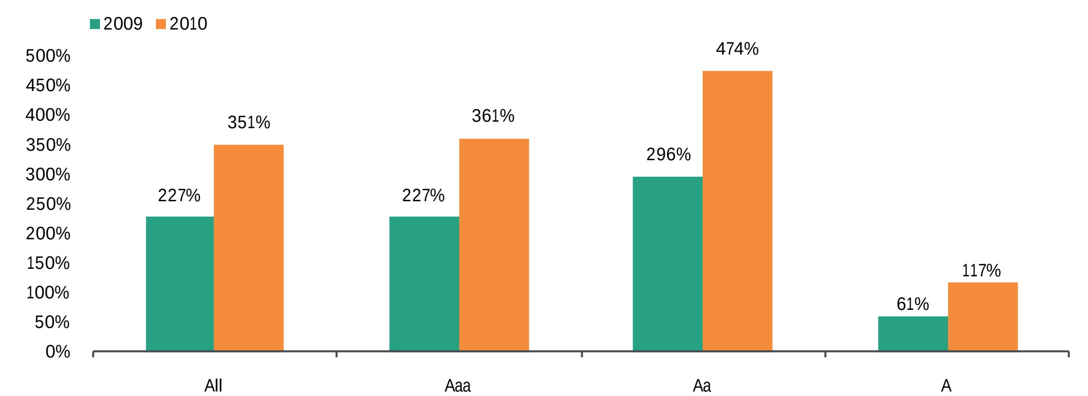
Median Monthly Days Cash, Though Lower than Privates, Improved in 2010



We believe the lower levels of monthly and annual days cash on hand at public universities compared to private colleges and universities reflect several factors. First, public universities are generally bigger than private colleges and universities, with larger expense bases. In FY 2009, median annual expenses for Moody's rated public universities of $338 million was more than triple the median for private universities of $107 million. Second, our liquidity measures do not include the assets of affiliated foundations, although these assets can be substantial, particularly where foundations manage the endowment or other long-term funds of the university. Assets of affiliated foundations are excluded from Moody's liquidity ratios because the relationships between public universities and their affiliated foundations vary and the foundation's assets may be difficult for the university to access. In addition, state funds are often held in accounts or funds at the state level and, therefore, may not be reflected in an individual university's investment information. As a result, this significant share of support for operating expenses could be excluded from the liquid assets of public colleges and universities. Finally, it may be politically advantageous for public colleges and universities to maintain lower balances of liquid and unrestricted assets to demonstrate their need for sustained or increased state appropriations.

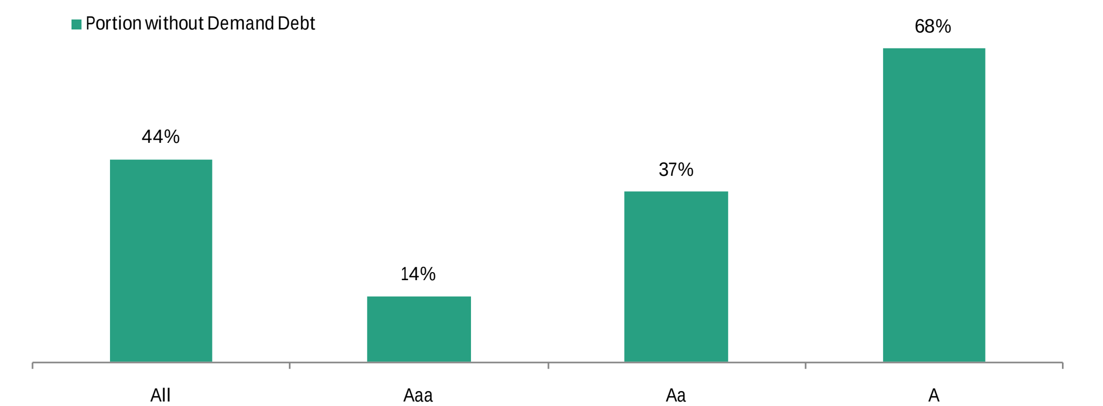
FIGURE 14

Public University Median Monthly Liquidity to Demand Debt Improved in 2010



The median levels of monthly liquidity to demand debt for public colleges and universities exceeds that of private universities. The 2010 median level of monthly liquidity to demand debt is 351% for all public universities with some amount of demand debt. Median liquidity to demand debt is particularly high for those in the Aa category (monthly liquidity to demand debt of approximately five times) due to the relatively low share of demand debt supported by strong financial resources. Monthly liquidity to demand debt is much lower for A-rated public colleges and universities, but only 32% of the public universities in this rating category had demand debt outstanding at fiscal end 2010 as shown in Figure 15. The first and third quartile data in Appendix 3 demonstrate very strong coverage of demand debt in most cases, reflecting debt portfolios strongly tilted to fixed rate debt. In many cases, for public universities we are measuring public university liquidity to demand debt at both the public university and affiliated foundations as part of campus-wide direct debt. In some cases the related foundations have material liquidity not included in the university-only liquidity figures. In a handful of cases, the debt structure of public universities and their related foundations does demonstrate a relatively aggressive amount of demand debt relative to flexible reserves and our discussion above of downside risks related to private higher education outliers applies in those cases as well.

FIGURE 15
44% of Public Universities Have No Demand Debt



Beyond the Numbers: Mitigating Factors Related to Liquidity Risks

In our assessment of universities with relatively low levels of liquidity, we have found the following factors mitigate credit risk, that is, they offer some offsetting credit strength to counterbalance an uncommonly weak liquidity measure.

» *Availability of temporarily restricted resources.* In several cases, Moody's considers other liquid financial resources subject to donor restriction that may be available outside of the typical endowment spending process. In a few cases, temporarily restricted donor funds are explicitly available to retire capital acquisition debt including accelerated debt repayment.

» *Availability of liquid financial resources at an affiliated entity*. This counterbalance is most commonly present in the relationship between a public university and its support foundation or other closely related not-for-profit. For a measure such as Monthly Liquidity to Demand Debt, Moody's tracks demand debt at the related foundation as demand debt of the university and compares that to university-only monthly liquidity. Clearly, when considering the debt structure of public universities and their support foundations, we broaden our analysis to include campus wide potential sources and uses of liquidity as well as an understanding of the how the various organizations have interacted in the past and how they might behave in the future. The difference between monthly liquidity and annual liquidity is not great for most of the private higher education portfolio although it tends to be significant for the largest and wealthiest universities. In our opinion, the more highly rated private colleges and universities are able to maintain less monthly and annual liquidity as a share of their total cash and investments because their larger asset bases allow them to invest in longer-term and less liquid asset classes and still meet their liquidity needs.

» *Budgetary flexibility.* While some universities have high fixed costs, many have more budgetary flexibility than is generally perceived. With a declining portion of tenured faculty many universities already have more flexible, "just-in-time" labor pools they can hire or fire as needed to meet enrollment fluctuations. Spending cuts and new efficiency measures, such as adopting a corporate shared-services model for purchasing, information management and other non-academic services, are also sweeping the sector. Many public and private universities demonstrated their ability to react to revenue pressure in fairly short order during the recent recession.

» *Not all demand debt is equal.* While our monthly liquidity and annual liquidity to demand debt remain valuable measures, we recognize that liabilities tracked as demand debt present a range of credit risks. Clearly a series of weekly Variable Rate Demand Obligations suggests several risks as compared to long mode put bonds with a put event several years away. For these considerations we focus on board policies around debt structure and try to gain an understanding of management's appetite for risk and assumptions around future market access and financial counterparty relationships. We also see a wide range of credit terms for similar financial agreements such a letter of credit reimbursement agreements. Understanding both how those credit terms could impact the university and how the university manages the associated risk remains a core part of the rating.

» *Our monthly liquidity and annual liquidity measures do not measure other time horizons such as quarterly.* While our decision to measure and track monthly and annual liquidity was a carefully considered choice, we accept that dynamic issues such as pooled endowment liquidity often have a complexity poorly described by two measures at a single point in time. For larger and more complex endowments with many manager relationships and a broad mix of liquidity provisions, we incorporate other reporting around these topics and seek to understand how management tracks, measures and predicts liquidity as part of our broader assessment.

» *Strong cash flow from operations partially offsets needs for operating reserves.* For those universities with an uncommonly strong historic and expected future cash flow from operations, the need to maintain flexible reserves is somewhat less. However, we often observe those with uncommonly strong cash flow performance also maintaining higher level of liquid reserves, partially built from past surpluses, free from donor restrictions.

» *An explicit management plan to rebuild liquidity.* Fiscal 2009 presented a near-term valley for many endowed universities in terms of liquidity. In many cases, boards and management teams developed plans to restore liquidity over time. Understanding how these teams track and predict a range of potential cash flow needs becomes crucial to understanding the related credit risks.

Appendix 1: Issues Encountered in Liquidity Reporting

As Moody's implemented the liquidity measures over the past year, we encountered a number of issues. These issues include concerns that our approach undercounts available liquidity and that the calculation of unrestricted board designated net assets for public colleges and universities is imprecise. In addition, borrowers have expressed confusion about how to complete the liquidity form itself. We address these issues below.

Does Moody's Approach Understate Available Liquidity?

In crafting our approach for measuring assets available on a monthly and annual basis, we acknowledge that our calculations are conservative and may not include assets that a university believes it could access over these time frames. For example, some private colleges and universities have informed us that they could utilize temporarily restricted net assets in an emergency situation. In addition, a number of public universities have reported that their relationships with affiliated foundations would allow them to access assets managed by the foundations, particularly over a one-year horizon. Several universities noted that they invest unrestricted working capital or other unrestricted funds in their endowment or long-term investment pools, rather than in operating funds, which makes those assets appear less available. Our ratios also exclude external liquidity facilities such as lines or letters of credit as well as standby bond purchase agreements. Because all hedge funds are placed in annual or greater than annual liquidity categories, our tool may be relatively conservative in some cases.

Our approach aims for consistent treatment across universities. Nevertheless, we welcome additional data from colleges and universities that provide more detail about their specific circumstances. In some instances, we have made quantitative and qualitative adjustments to our understanding of available liquidity based on this additional information. Beginning with the FY 2010 liquidity data, we have revised the reporting form to include the ability to report the amount of unrestricted working capital and other unrestricted funds that are commingled with the endowment. Some universities have developed custom approaches to describing the liquidity of their assets over time, other sources of liquidity as well as potential demands on liquidity. We welcome the opportunity to consider these reports in our rating process.

Calculation of Unrestricted Board Designated Endowment Net Assets for Public Colleges and Universities:

Unlike private universities subject to the Uniform Prudent Management of Institutional Funds Act (UPMIFA), there is no financial statement reporting requirement for public colleges and universities to disclose "Unrestricted Board Designated Endowment (Net Assets)". Therefore, there is not a clear best measure for the portion of endowment or other long-term investments that are unrestricted and available to our rated public universities. As a result, we request that each public university report a figure on the disclosure form that is the best estimate for this value and discuss what types of funds are included or excluded. We recognize that this approach relies on reporting by individual universities rather than on data from audited financials and therefore could create more variation across the public universities than private universities. As liquidity reporting becomes more routine, we expect the data that comprise this value for public colleges and universities to be increasingly standardized.

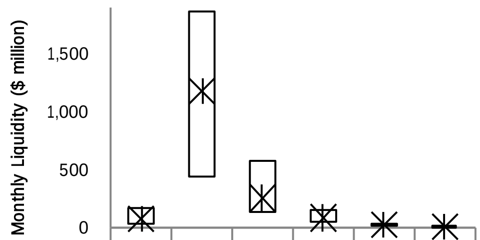
Completing the Liquidity Reporting Form:

Through their submissions and questions, a small number of borrowers have expressed confusion about how to complete the liquidity reporting form. Typical concerns include whether the operating and endowment assets reported on the form should equal total cash and investments reported in the financial statements and how to classify various types of investments. With the revised form for FY 2010 data, we provide an additional column in which to report investments in other funds so that each university can calculate an amount that matches total cash and investments. This change will also make it easier to monitor whether universities are incorrectly incorporating assets such as those held by foundations affiliated with public universities. While we understand that the classification of investments by type can be difficult in some instances, we encourage colleges and universities to refer to the Frequently Asked Questions section of our March 2010 publication[8] and to discuss this issue with their Moody's analyst.

[8] Moody's New Liquidity Ratios Increase Transparency, March 2010 (123377)

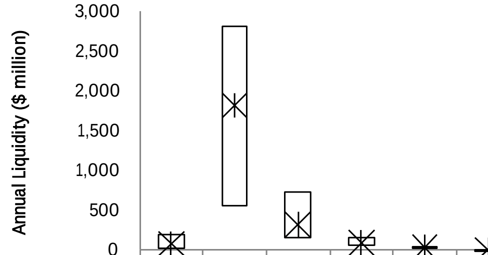
Appendix 2: Private Higher Education 2009 Median and Quartile Liquidity Data

FIGURE 16
Monthly Liquidity by Rating



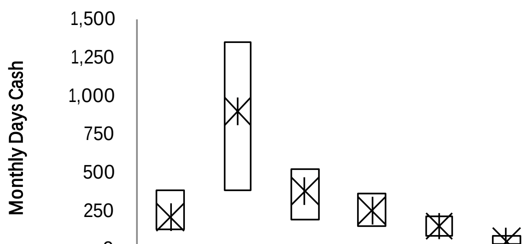
	All	Aaa	Aa	A	Baa	Ba-C
75th percentile	177	1,872	582	148	40	11
⨯ Median	75	1,175	253	87	27	7
25th percentile	29	446	129	51	16	4

FIGURE 17
Annual Liquidity by Rating



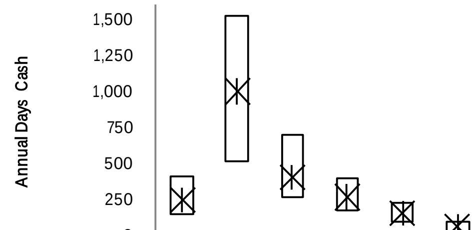
	All	Aaa	Aa	A	Baa	Ba-C
75th percentile	202	2,820	737	157	42	11
⨯ Median	83	1,824	318	97	29	7
25th percentile	30	551	157	54	17	4

FIGURE 18
Monthly Days Cash by Rating



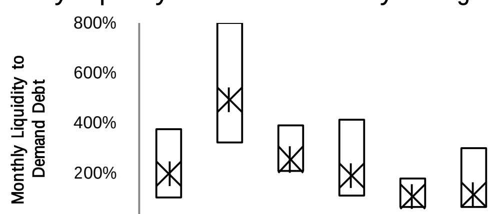
	All	Aaa	Aa	A	Baa	Ba-C
75th percentile	381	1,354	525	368	220	91
⨯ Median	213	903	381	252	151	53
25th percentile	126	381	197	153	92	34

FIGURE 19
Annual Days Cash by Rating



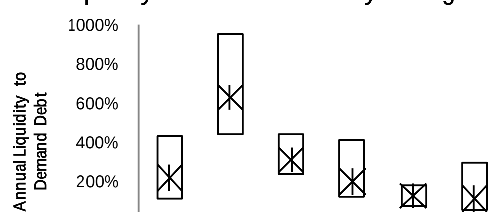
	All	Aaa	Aa	A	Baa	Ba-C
75th percentile	412	1,528	694	391	233	91
⨯ Median	242	998	406	265	159	60
25th percentile	145	514	265	170	98	34

FIGURE 20
Monthly Liquidity to Demand Debt by Rating



	All	Aaa	Aa	A	Baa	Ba-C
75th percentile	3.74	7.96	3.92	4.10	1.80	2.97
⨯ Median	1.94	4.92	2.53	1.91	1.03	1.12
25th percentile	1.02	3.23	2.10	1.08	0.64	0.61

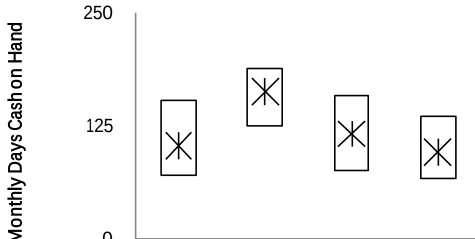
FIGURE 21
Annual Liquidity to Demand Debt by Rating



	All	Aaa	Aa	A	Baa	Ba-C
75th percentile	4.31	9.54	4.41	4.11	1.85	2.97
⨯ Median	2.21	6.28	3.14	2.02	1.28	1.13
25th percentile	1.13	4.43	2.38	1.28	0.72	0.61

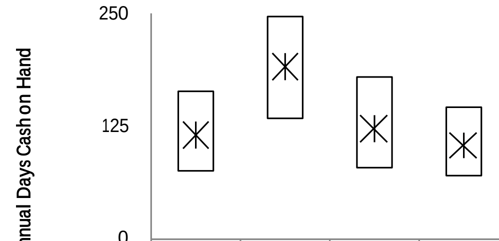
Appendix 3: Public Higher Education 2009 Median and Quartile Liquidity Data

FIGURE 22
Monthly Liquidity by Rating



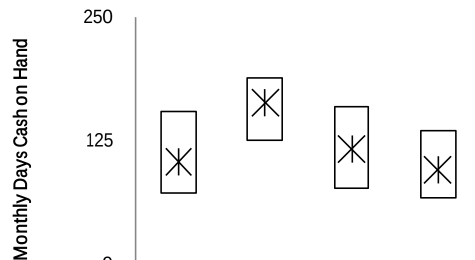
	All	Aaa	Aa	A
75th percentile	154	188	160	136
⋇Median	104	164	117	96
25th percentile	72	125	77	67

FIGURE 23
Annual Liquidity by Rating



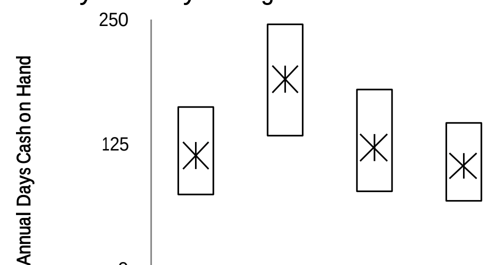
	All	Aaa	Aa	A
75th percentile	164	247	180	147
⋇Median	115	191	123	104
25th percentile	75	134	79	70

FIGURE 24
Monthly Days Cash by Rating



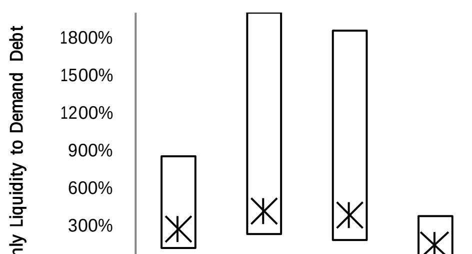
	All	Aaa	Aa	A
75th percentile	154	188	160	136
⋇Median	104	164	117	96
25th percentile	72	125	77	67

FIGURE 25
Annual Days Cash by Rating



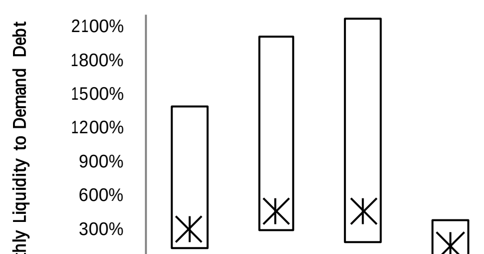
	All	Aaa	Aa	A
75th percentile	164	247	180	147
⋇Median	115	191	123	104
25th percentile	75	134	79	70

FIGURE 26
Monthly Liquidity to Demand Debt by Rating



	All	Aaa	Aa	A
75th percentile	8.61	20.02	18.56	3.77
⋇Median	2.75	4.19	3.83	1.46
25th percentile	1.23	2.25	1.84	0.45

FIGURE 27
Annual Liquidity to Demand Debt by Rating



	All	Aaa	Aa	A
75th percentile	13.91	20.02	21.68	3.77
⋇Median	2.95	4.55	4.57	1.46
25th percentile	1.26	2.96	1.84	0.49

Moody's Related Research

Industry Outlook:

» 2011 Outlook for U.S. Higher Education, January 2011(129939)

Rating Methodology:

» Hidden Risks of Variable Rate Debt, March 2004 (81480)

Special Comments:

» Risks of Variable Rate No Longer Hidden, December 2008 (113702)

» Moody's New Liquidity Ratios Increase Transparency, March 2010 (123377)

» Liquidity and Credit Risk at Endowed U.S. Universities and Not-for-Profits, June 2010 (123460)

» New Liquidity Measures Show Healthy Liquidity Among Not-for-Profit Hospitals Report December, 2010 (129299)

» Near-Term Liquidity Stress Can Impact Long-Term Municipal Ratings, March 2008 (108140)

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» So Far So Good: Market Absorbing High Volume of U.S. Public Finance Sector Bank Facility Expirations, May 2011 (133001)

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» contacts continued from page 1

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