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OUTLOOK
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Higher education – US

Outlook shifts to negative as coronavirus outbreak increases downside risks

The outlook for the higher education sector is changing to negative from stable, reflecting both the immediate negative financial impact of the coronavirus outbreak as well as other significant downside risks. While the duration and full financial impact of the current crisis is unknown, universities' response to the outbreak will immediately reduce revenue and drive expenses higher. For fiscal 2021, universities face unprecedented enrollment uncertainty, risks to multiple revenue streams, and potential material erosion in their balance sheets.

» **Ability to respond to rapidly increasing downside risks varies widely across the sector.** The approximately 30% of universities with already weak operating performance will have greater difficulty adapting, with credit stress becoming much more material for approximately 5-10% of the sector under Moody's downside scenario. Inability to resume normal operations in the fall or material declines in enrollment would drive more severe financial stress across a much broader swathe of the sector. Universities with greater budgetary flexibility, due in part to sound operating cash flow and strong liquidity, will be better able to navigate these challenges. Universities differ in their capacity to shift to digital education platforms, underscoring the varying degrees of preparedness.

» **Coronavirus response will immediately hit revenues and drive expenses higher.** Operating performance will tighten across the sector as colleges shift to online educational delivery and incur other emergency preparedness costs.

» **Universities face multiple risks to revenue in 2021.** The sector faces disruption in enrollment patterns, state support, endowment income and philanthropy, and research grants and contracts.

» **Financial market disruption presents several immediate and longer-term challenges.** Disruption of the financial markets will hit both assets and liabilities. Significant investment losses will most immediately hit reserves, decreasing the buffer for responding to operating volatility. If sustained, market losses will also increase unfunded pension liabilities, with accompanying budgetary impacts.

» **What could change the outlook.** A sustained recovery in the financial markets, reversal of the projected economic slowdown in the latter part of the year, and stable enrollment for fall 2020 would contribute to a reversion to a stable outlook.

This outlook represents our forward-looking view on credit conditions in the sector over the next 12-18 months. This sectorwide outlook, however, does not imply the likelihood or direction of rating actions for individual issuers.

Our view of credit conditions for the higher education sector are informed by Moody's global macro outlook dated March 6, 2020. Our current baseline macro forecasts are based on two assumptions: (1) the disruption of economic activity in the first half of this year will be followed by some recovery in global factory production and consumer demand in the second half; and (2) warmer weather in the Northern Hemisphere in the spring and summer will weaken the spread of the virus. However, we will need to monitor both of these assumptions.

Several plausible developments could lead to a far more negative scenario. For example, if the infection rate increases even more rapidly and contagion lasts longer, driving sentiment ever lower, over time the demand shock is likely to dominate, potentially generating downward cyclical dynamics. Therefore, the risks to our baseline forecasts remain firmly to the downside. In particular, a sustained pullback in consumption, coupled with extended closures of businesses, would hurt earnings, drive layoffs and weigh on sentiment. Such conditions would ultimately feed self-sustaining recessionary dynamics. Heightened asset price volatility would also result, serving to magnify and transmit the shock across borders, including to emerging market countries.

As events unfold rapidly, there is a higher than usual degree of uncertainty around all macro economic forecasts. Therefore, in our analysis we are taking into consideration that there is a wider range of potential outcomes, including more severe downside scenarios, over the course of the year.

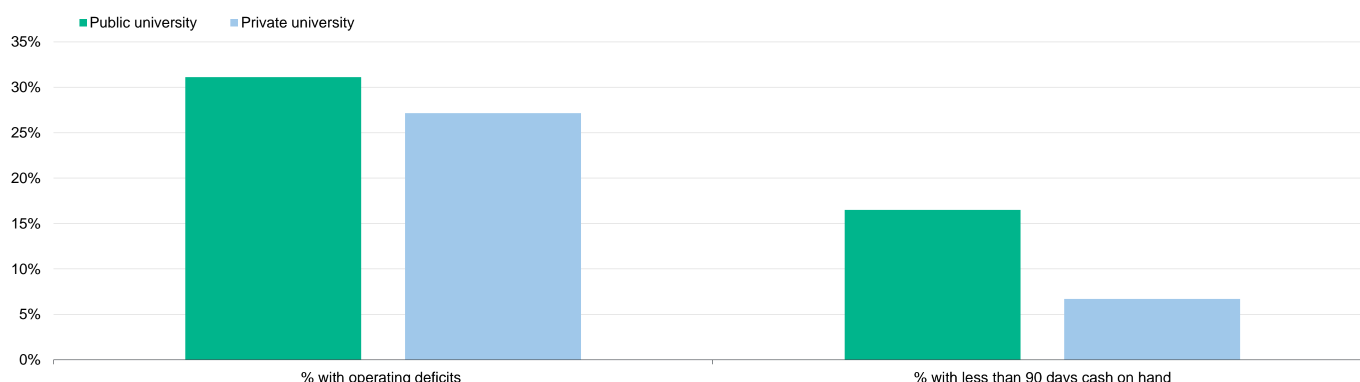
Ability to respond to rapidly increasing downside risks varies widely across the sector

Universities will differ in their ability to navigate the rapidly changing business conditions facing the higher education sector due to the coronavirus outbreak. Sectorwide results for fiscal 2020 will reflect a contraction in operating margins for most universities. Liquidity will decline at many institutions because of weaker operating performance and the current financial market instability. While the negative impact will be sectorwide, it will present a more significant financial challenge for those with already thin operating performance. As seen in Exhibit 1, just over 30% of public universities and nearly 30% of private universities were already running operating deficits. Universities with a combination of weak operating performance and low liquidity, 5-10% of Moody's rated universe, will face more critical credit stress under Moody's downside scenario. The worsening conditions will also challenge the rest of the sector, but a combination of reserves or operating cash flow strength will provide greater flexibility to respond.

Exhibit 1

Universities with thin operating performance and lower liquidity have less flexibility to respond to the outbreak

% of each sector with operating deficits or thin liquidity



Based on most recent available financial statements, fiscal 2019 for most, but fiscal 2018 in some cases

Source: Moody's Investors Service

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If there is more material disruption in the fall, including an inability to resume classes or a significant enrollment decline, a greater proportion of the sector will confront more material financial distress. This could lead to some colleges declaring financial exigency. Financial exigency is a unique mechanism used rarely that allows colleges and universities facing severe financial difficulties to relatively swiftly address fixed costs, including tenure, related to the sector's rigid employment structure.

While public universities will face similar stresses to privates, those that are significantly struggling benefit from potential state support. For example, several small public universities in West Virginia have weak operating performance and liquidity. The West Virginia Higher Education Policy Commission (Aa3 stable) has identified some internal reserves that it can use to provide some liquidity relief, and is working with the universities and the state for additional contingency plans. Private universities do not have this layer of additional oversight, support or potential liquidity infusion.

Improvement in technology enables universities to respond in new ways

Technological innovation has provided universities with a greater set of tools to continue offering educational services in alternative formats, which helps to stabilize enrollment as universities quickly ramp up their response plans. The move to solely online delivery of coursework in recent weeks underscores the responsiveness of the higher education sector to health and safety risks for students, staff, faculty and patients (for universities with academic medical centers). Additionally, the federal government has been quick to alter its rules to enable online course delivery without impairing financial aid for domestic students or the eligibility for international students to continue their coursework.

Still, the sector faces a digital divide that highlights the differing levels of potential preparedness. Universities having already substantially invested in digital delivery capabilities stand to respond better than those that have not because of resource constraints or historically not viewing such channels as mission-critical. The digital divide also extends to student access to what have become practically essential services. For example, universities serving a larger low-income population face more difficulties moving coursework online because a higher proportion of students may not have access to access to high-speed internet service.

The crisis will undoubtedly spur colleges and universities to reexamine and further strengthen their emergency management plans and preparedness. Shifting to online-only delivery will also provide valuable insight into opportunities to offer more distance-learning classes, fostering the continued transformation of the sector over an extended period of time.

Coronavirus response will immediately reduce revenue and drive expenses higher

The ramp-up of online learning in response to the coronavirus outbreak will add a variety of additional costs to already constrained budgets. At the same time, universities are bearing other increased costs and loss of revenue associated with emergency management. These include cancellation of study-abroad programs, a loss of room-and-board revenue and cancellation of athletic events, such as the NCAA basketball tournament.

Cost savings from reduced travel and services across campus will offset some of the added expenses, but not all. Some universities have instituted hiring freezes and are looking at other immediate ways to contain expenses in order to preserve performance. Significant investment declines over the last several weeks combined with weaker operating performance are eroding unrestricted liquidity. Some universities have identified the potential for business interruption insurance reimbursement, but the actual ability to collect and time frame to do so is highly uncertain.

Auxiliary facilities and privatized student housing projects face specific business challenges

Differing types of auxiliary facilities, such as housing and dining systems, parking systems, and athletic systems will have immediate revenue declines. As students leave campus, some universities are pro rata refunding room and board. Reduction or discontinuation of in-person instruction and a move to work from home for faculty and staff will lead to a drop in parking revenues. The discontinuation of athletic events, including the cancellation of March Madness and associate revenues, will cause many athletic programs to operate at a deficit for the year. Some public universities issue revenue bonds that are more narrowly secured by these revenue streams. In some cases, pledged revenues on an annual basis may be insufficient to cover debt service for the year. Accumulated reserves would

act as a mitigant to annual revenue shortfalls. Further, public universities have historically used internal loans or other mechanisms to support these systems if necessary, because of their integration with the parent, strategic importance, and strong credit links.

Privatized student housing credits are likely to be exposed to the impact of coronavirus. In the very short term, if the affiliated university closes the campus and students vacate the projects, they may be given refunds on a portion of their rental payments. For projects with adequate but not strong levels of debt service coverage this is likely to create a shortfall in funds available for payment of the upcoming debt service. Trustees would then need to draw on the debt service reserve fund to cover the shortfall impairing the credit going forward.

Looking past the spring semester, the impact on projects will depend on enrollment at the affiliated universities and whether there are declines in enrollment, resulting from the virus and changing economic conditions, that could impact occupancy. We will also be monitoring the construction status of projects scheduled to open in fall 2020.

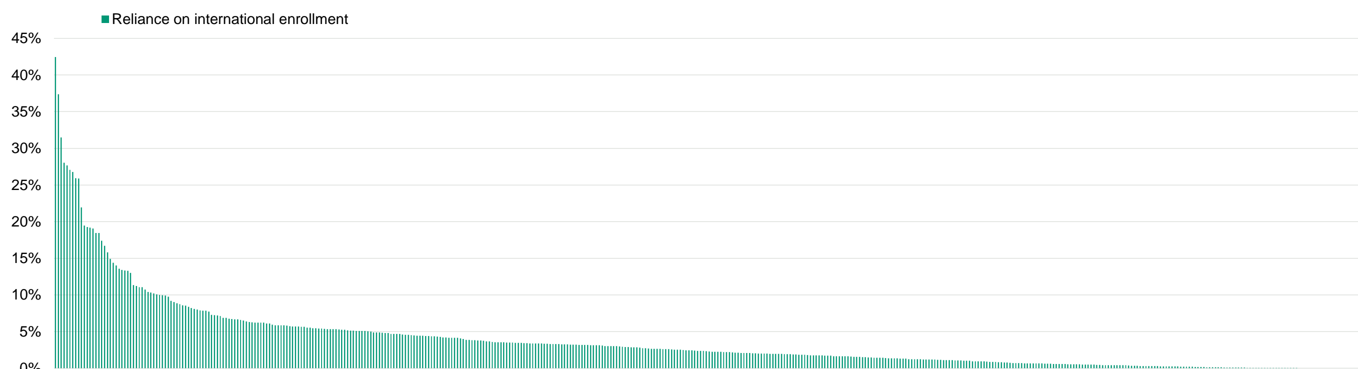
Universities face multiple risks to revenue in fiscal 2021

Downside risks will escalate in fiscal 2021, impacting multiple revenue streams. The sector faces the potential for disruption in enrollment patterns, state support, endowment income and philanthropy, and research grants and contracts.

Disruption of enrollment patterns among international students is a substantial credit risk even in Moody's base case macro scenario starting this fall (fiscal 2021). Enrollment has already been declining because of changes in immigration policy. Concerns around student health and safety, travel and other disruptions could further impair international student demand. International enrollment accounts for about 5% of total sector enrollment, as shown in Exhibit 2. Some universities have greater exposure to a decline in international students, with approximately 10% of Moody's-rated colleges garnering over 10% of their total revenue from this source. International students are an important revenue stream for many universities because they tend to pay full tuition.

Exhibit 2

International enrollment represents approximately 5% of total sector enrollment



Bars represent a significant sample set of Moody's rated universities

Source: IPEDS, Moody's Investors Service

Universities also face enrollment uncertainty in the base case macro scenario for domestic students because the coronavirus has interrupted aspects of this fall's admissions cycle. For example, some colleges are canceling or delaying events for accepted students, which will influence how many students enroll. Colleges with some vulnerabilities in student demand were already confronting potential volatility because of changes last year in the National Association for College Admissions Counseling code of ethics, which introduced the potential for additional late cycle competition.

Retention of existing students for the fall semester 2020 is an additional uncertainty for two reasons. First, many students are confronting significant disruptions in their personal lives and economic circumstances that may make it difficult for them to return to school. This would become even more exacerbated in Moody's downside macro scenario due to the duration of the disruption. Second, some students will struggle with the switch to the online format, which could negatively affect their ability to complete their coursework.

Uncertainty over the upcoming summer term will be an additional challenge for university budgets. While these terms typically enroll smaller numbers of students for most, some universities rely on tuition and room-and-board charges through the summer months. Additionally, many campuses use campus infrastructure for other revenue generating businesses during the summer.

As economic growth slows and risk of a recession rises, state funding for higher education could be at risk. State funding for public universities is often the first item to be cut when states face their own fiscal challenges. Further, the impact of the coronavirus could drive states to reallocate funding to other high-need impacted areas, such as healthcare, reducing available support for public higher education. Currently, state funding is, on the median, about a quarter of public university revenue.

Continuing volatility in the financial markets would drive a decline in endowment income available for operations. It would also drive a reduction in philanthropy, since gift revenue is correlated with both financial market performance and consumer confidence. This would be more negative for private universities, which have a greater reliance on endowment income and philanthropy, but also be a strain for public universities that have become increasingly reliant on gifts and endowment to support aid and capital projects.

For universities with significant research programs or academic medical centers, two other risks are rising. The coronavirus outbreak is interrupting research programs, with some activities halting and others being deferred. The impact could extend to fiscal 2021. Further, the financial performance of academic medical centers face a hit if optional procedures, which typically are reimbursed at higher rates, are deferred. Some of these hospitals also serve as safety net providers, with high Medicaid and indigent populations.

Financial market disruption presents several immediate and longer-term challenges

Disruption of the financial markets will hit both assets and liabilities. Significant investment losses will most immediately impact reserves, especially liquidity and spendable reserves. Since permanent endowments are meant to be held at the original gift value in perpetuity, the impact of investment losses will be magnified for more immediate reserves, as shown in Exhibit 3.

Exhibit 3
Investment losses have a magnified impact on spendable reserves

	Total cash & investments	Spendable cash & investments	Permanent endowment
Original	$500	$300	$200
With a 25% investment loss	$375	$175	$200
Operating expenses	$500		
Original spendable C&I to operating expenses	60%		
Spendable C&I to operating expenses after loss	35%		

Spendable cash and investments equals total cash and investments minus the permanent endowment
Source: Moody's Investors Service

Universities that issue short-term debt and rely on regular access to capital markets for rollover of commercial paper programs and other demand obligations may have greater difficulty placing this paper and are facing rising interest costs. Those that support this debt with their own liquidity are simultaneously face investment declines that has the potential to erode coverage of supported debt. However, most universities that rely on their own liquidity for demand obligations retain significant liquid assets.

As interest rates decline, some universities with interest rate swaps will see increasing liabilities and be required to post collateral, an additional threat to liquidity.

Additionally, sustained investment return losses would bring an increase in pension and OPEB obligations, leading in turn to near-term budget pressures as program expenses associated with the programs rise.

Some universities are issuing commercial paper, drawing on lines of credit, or adding lines of credit to bolster liquidity. Given market turbulence and unknowns about future access to liquidity, this is a credit positive action and underscores the tools available for many universities.

Some universities are already examining their forward capital plans. Despite a low interest rate environment, universities are likely to become more cautious about adding leverage or proceeding with projects that will add to their fixed cost base until the longer-term impact of the current crisis becomes clearer.

What could change the outlook

A sustained recovery in the financial markets, reversal of the projected economic slowdown in the latter part of the year, and stable enrollment for fall 2020 would contribute to a reversion to a stable outlook.

Universities with short-term or other demand debt face additional risks

The rapidly expanding coronavirus crisis presents material risks for municipal issuers' short-term debt portfolio. During market disruptions, similar to those that occurred during the global financial crisis and the September 2001 terrorist attacks, investors typically flee to the safety of US treasuries and related securities, sometimes at the expense of municipal bonds.

- In the near term, a decrease in demand for both long-term and short-term municipal bonds means that short-term debt in particular is susceptible to rapid increases in interest rates to maintain investor interest. Short-term debt susceptible to interest rate risk include variable rate demand bonds (VRBDs), floating rate notes (FRNs), bond anticipation notes (BANs) and commercial paper (CP). Daily reset rates of VRDBs spiked on Thursday and Friday, March 12-13, by nearly 100 basis points, to over 200 basis points.
- If tax-exempt money market fund balances decline, representing a decline in the demand for short-term municipal debt, this would lead to a failed remarketing of VRBDs, resulting in the bonds being put back to the issuer. If these bonds are bank-supported, the issuer will likely face a more onerous, but manageable, repayment schedule with the bank. If these bonds are backed by self-liquidity, issuers will need to have a well-managed treasury operation in order to liquidate the funds necessary to fund the put.
- Similarly, its is possible that BANs and CP, even those issued by highly rated municipal issuers, will find diminished market appetite, which presents rollover risks leading to higher interest costs or, in extreme cases, drains on internal liquidity.
- If the severity and duration of the crises worsens and there is a sustained decline in the demand for municipal bonds, banks may be unable or unwilling to extend credit or liquidity to municipal issuers, resulting in the need for refinancing away from lower short-term rates to higher long-term rates.
- Despite these risks, in most cases highly rated municipal issuers have management experience, liquidity buffers, and market access to address the most acute risks of a market disruption.
- The health of the banking sector, in contrast to 2008, can also help mitigate many risks associated with market disruptions. While there may be some tenders of VRBDs because investors are seeking cash, many of the tenders during the financial crisis occurred because investors were limiting their exposure to bank credit. Additionally, a stronger banking sector means that remarketing agents have greater capacity to hold VRDB inventory and are more able to continue to extend credit and liquidity support.

Moody's related publications

Credit Conditions – Global Coronavirus and oil price shocks: managing ratings in turbulent times, March 17, 2020

Global Macro Outlook 2020-21 (March 2020 Update) Coronavirus will hurt economic growth in many countries through first half of 2020, March 6, 2020

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