MOODY'S
INVESTORS SERVICE

CREDIT OPINION
10 January 2020

Rate this Research

Analyst Contacts

Mary Kay Cooney +1.212.553.7815
VP-Senior Analyst
marykay.cooney@moodys.com

Dennis M. Gephardt +1.212.553.7209
VP-Sr Credit Officer
dennis.gephardt@moodys.com

Meredith Moore +1.212.553.4850
AVP-Analyst
meredith.moore@moodys.com

CLIENT SERVICES

Americas	1-212-553-1653
Asia Pacific	852-3551-3077
Japan	81-3-5408-4100
EMEA	44-20-7772-5454

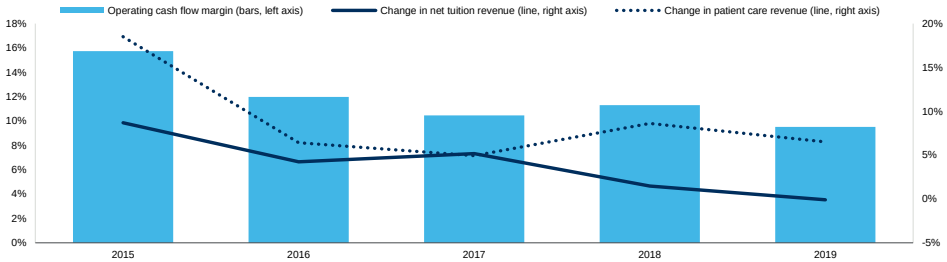
University of Kentucky, KY

Update to credit analysis

Summary

University of Kentucky's (UK, Aa2 stable) strong credit profile reflects its large scope of operations as the flagship university for the Commonwealth of Kentucky (Aa3 stable issuer rating) with steady enrollment and net tuition revenue, combined with improved student geographic diversification and rising reserves. Favorably, the rating also incorporates solid operating cash flow, from both the university and its highly integrated academic medical center. Cash flow from operations in concert with partnerships and donor support continues to fuel the university's capital investment program. Leverage is modest relative to peers, with no exposure to defined benefit pension plans. While not expected in fiscal 2020, the university may be subject to decreased state operating support as Kentucky addresses its own budgetary challenges and significant pension underfunding.

Exhibit 1
Healthcare revenue growth bolsters operating cash flow margins in light of lagging net tuition revenue



Source: Moody's Investors Service

Credit strengths

» Good student demand for Kentucky's flagship, research-intensive university, with fall 2019 enrollment of 29,189 full-time equivalent (FTE) students

» Strong total cash and investments growth, bolstered by solid donor support, reaching $2.4 billion as of fiscal 2019

» Sound operating cash flow and strong debt service coverage driven by profitable, highly integrated healthcare system and growing student charges

» Manageable leverage position, with pro forma debt to cash flow of 3.7x and no direct exposure to defined benefit pension

Credit challenges

» State budgetary challenges including the Commonwealth's large unfunded pension obligations limit prospects for appropriations keeping up with expense growth

» High exposure to more volatile healthcare revenue which comprised 57% of 2019 revenue

» Ability to address capital funding needs is constrained by legislative approval process

Rating outlook

The stable outlook reflects the university's favorable operating cash flow including performance of its patient care enterprise, good student demand and some pricing flexibility, with capacity to adjust to potential state funding cuts.

Factors that could lead to an upgrade

» Substantial improvement in financial reserves relative to debt and operations

» Significant strengthening of UK's brand and geographic reach

Factors that could lead to a downgrade

» Sustained deterioration of operating performance either at the university or UK HealthCare

» Decline in unrestricted liquidity especially if combined with softening of operating performance

Key indicators

Exhibit 2
University of Kentucky, KY

	2015	2016	2017	2018	2019	Pro Forma 2019	Median: Aa Rated Public Universities
Total Fall FTE Enrollment	29,350	29,242	28,974	28,777	29,189	29,189	29,353
Operating Revenue ($000)	2,898,178	3,071,463	3,179,345	3,377,788	3,523,408	3,523,408	1,186,906
Annual Change in Operating Revenue (%)	13.0	6.0	3.5	6.2	4.3	4.3	3.2
Total Cash & Investments ($000)	2,218,385	2,426,973	2,413,329	2,375,454	2,450,208	2,450,208	1,363,489
Total Debt ($000)	930,444	1,043,655	1,012,748	1,197,174	1,153,475	1,246,205	643,972
Spendable Cash & Investments to Total Debt (x)	1.8	1.7	1.8	1.5	1.6	1.5	1.4
Spendable Cash & Investments to Operating Expenses (x)	0.6	0.6	0.6	0.5	0.5	0.5	0.7
Monthly Days Cash on Hand (x)	177	175	168	163	157	157	169
Operating Cash Flow Margin (%)	15.7	12.0	10.5	11.3	9.5	9.5	11.2
Total Debt to Cash Flow (x)	2.0	2.8	3.0	3.1	3.4	3.7	4.7
Annual Debt Service Coverage (x)	5.9	4.7	3.9	4.4	3.6	3.2	2.9

Pro Forma 2019 reflects fiscal 2019 leverage data that includes the fiscal 2020 issued $32.5 million Series 2019A&B COPs and planned $60.2 million Series 2020 A&B bonds.
Source: Moody's Investors Service

Profile

The University of Kentucky is the flagship and land-grant public higher education institution for the Commonwealth of Kentucky, and includes UK HealthCare and the associated academic medical center and clinics. The university and the UK HealthCare hospitals are located in Lexington. In fiscal 2019, the university recorded operating revenue of $3.5 billion and enrolled a fall 2019 FTE of 29,189 students.

Detailed credit considerations

Market profile: excellent strategic positioning as Kentucky's flagship public research university with large healthcare enterprise

The university's position as the Commonwealth of Kentucky's flagship and land-grant university, with an academic medical center, supports long-term steady student demand. UK's total FTE enrollment was 29,189 for fall 2019 and has been relatively stable over the fall 2015-19 period. Very good out of state enrollment (37% of fall 2019 freshman) highlights the university's growing brand recognition, mitigating weak regional demographics and commonwealth limitations on in-state undergraduate tuition price increases.

Healthcare education, including a college of medicine and clinical research, are key components of UK's academic profile and are enhanced by UK HealthCare (UKH). UKH operates two hospitals in Lexington (Chandler, including the Kentucky Children's Hospital and Good Samaritan) which have a combined 945 licensed beds and a network of outpatient sites and clinics. UKH's leading market share partially mitigates UK's high healthcare exposure.

UK has a moderate research enterprise for a university of its size, particularly with such a large healthcare component, but is continuing make gains in research funding. In fiscal 2019, research expenses totaled $300 million or 9% of operating expenses. Research funding is relatively diverse compared to peers, because of its established schools for medicine, engineering and agriculture.

Operating performance: stable margins for both university and healthcare enterprises; 56% exposure to healthcare operations

The university will continue to produce surplus operations with ample cash flow and debt service coverage aided by revenue diversity, conservative budgeting and careful oversight. Operating cash flow margins averaged 10% for the fiscal 2017-19 period providing very strong debt service coverage averaging nearly 4x. Revenue growth has been driven largely by the 29% growth in patient care revenue over the fiscal 2015-19 period. Growth of net tuition and fees is slowing because of rising financial aid allocations and a goal for modest in-state tuition increases.

UKH's strong operations are an important credit factor for the university as it represents a significant portion of the university's consolidated operations (57% in fiscal 2019). Given favorable operating performance of the healthcare enterprise, this is currently credit additive, although the university is highly vulnerable to any negative changes in the healthcare environment. Reflecting rising demand and strong fiscal oversight, UKH's operating revenue rose 32% over the last five years, with a good fiscal 10% operating cash flow margin in fiscal 2019 and young 8.8 years age of plant. Operating performance is likely to be slightly stronger for fiscal 2020 due to incorporation of a new directed payments mode.

State operating support comprises a small but meaningful 8% of revenue. Consistently good operating performance in other revenue streams allowed UK to manage through cuts that occurred in the fiscal 2017-19 period. Favorably, UK received a 1% increase in state support for fiscal 2020, including amounts received for meeting performance outcome measures.

Wealth and liquidity: retained operating cash flow and strong fundraising bolster reserves

UK's total cash and investments will continue to rise because of retained operating cash flow and ongoing philanthropic success. Total cash and investments of $2.45 billion at fiscal 2019 are up 10% over fiscal 2015 and provide flexibility for investment in strategic priorities going forward. However, while wealth levels are high, they are moderate relative to operations. Spendable cash and investments covered expenses by 0.5x, below the Aa2 median of 0.7x.

UK's reserves will continue to grow because of its $2.1 billion "Kentucky Can." comprehensive campaign. For fiscal 2019, UK reported gift revenue of $206 million, well above the Aa2-median of $86 million. The university's $1.56 billion endowment pool at June 30, 2019 recorded a 5.5% fiscal year return. The UK Board of Trustees Investment Committee, treasurer and a chief investment officer oversee the endowment, with an external investment consultant.

Liquidity

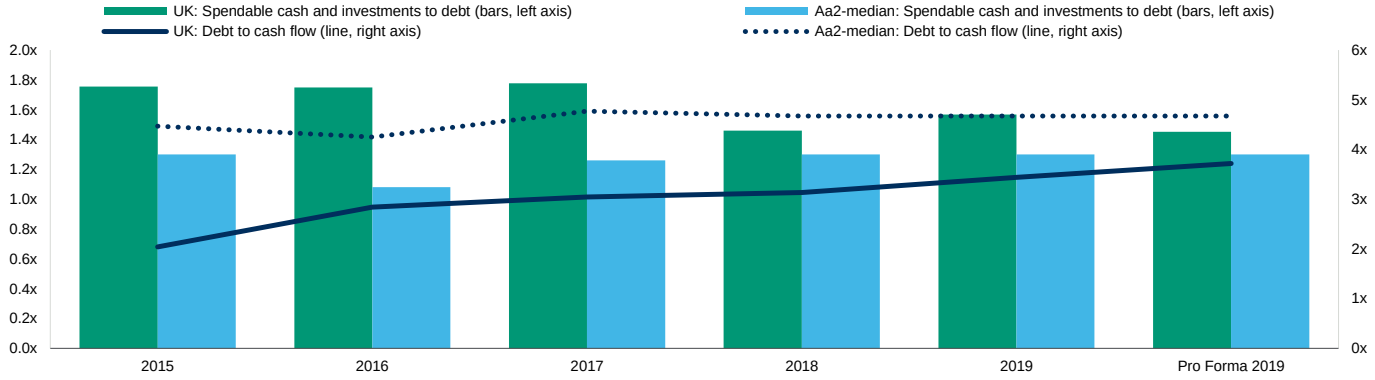
Given limited calls on liquidity from its all fixed rate debt structure, relatively low leverage and strong operations at both the university and healthcare enterprises, UK has a strong liquidity position. Monthly liquidity of $1.4 billion at fiscal year-end 2019 translates to 157 monthly days cash on hand.

Leverage: moderate leverage because of rising reserves and use of capital funding partnerships; no exposure to defined benefit pensions

The university's leverage will remain manageable, including a planned $60 million fiscal 2020 issuance, as future debt plans moderate following multiple years of sizable capital investments. Though the net debt increase for the fiscal 2015-19 period and including new obligations of $32 million in fall 2019 and a planned $60 million in January 2020, was 34% to $1.25 billion, concurrent gains in cash and investments offset this rising debt burden.

Exhibit 3

Leverage measures remain strong even as debt has increased over last five years



Pro Forma 2019 reflects fiscal 2019 data incorporating the fiscal 2020 Series 2019 COPs and planned Series 2020A&B bonds. Medians for fiscal years 2019 and Pro Forma 2019 are medians for fiscal 2018.

Source: Moody's Investors Service

UK will continue to invest in capital infrastructure, though at a slower pace than the last decade. The university funded a significant $3 billion in capital investment over the last decade using a combination of direct state support, debt financing, philanthropy, cash flow, internal reserves and public private partnerships.

State authorization is required for debt financings at Kentucky's public universities and colleges. In the most recent 2018 Legislative Session, UK received bond approval for $125 million for campus renewal and modernization, $75 million for healthcare facilities upgrades; and $100 million for housing construction and renovation. Currently, the university anticipates using only the $125 million authorization for campus modernization, with half of this issued in its planned Series 2020A&B issue and the remainder expected in fiscal 2021.

UK has notable external partnerships for housing, dining and parking services with private entities. The university has had a partnership with a housing developer, Education Reality Trust (EdR now Greystar Real Estate Partners), to replace and expand its campus student housing since 2012. Total housing stock provided in this partnership of 6,850 beds is 86.4% of overall housing. The university receives annual ground rent payments from the developer during the 75 year lease, assuming renewals at 50 and 65 years. If the EdR housing project cost (approximately $449 million) were included in the university's leverage profile, spendable cash and investments to debt would weaken to 1.1x.

While the university has limited its direct financial responsibility for the housing and auxiliary projects, the strategic importance of the housing/dining facilities and reputational risks create strong incentives for involvement should the projects not perform as expected. Currently, the housing projects are performing well, with 99.5% occupancy as of fall 2019 and are helping to enhance UK's brand. UK is considering additional housing plans that may begin construction in fiscal 2021, with completion expected in fall 2022.

Debt structure

UK's conservative debt structure of all amortizing debt provides predictability in annual debt service payments and creates debt capacity as principal is reduced each year.

Debt-related derivatives

None.

Pensions and OPEB

The university has relatively modest contingent liabilities compared to peers as it does not participate in a defined benefit pension plan and has modest expenses associated with retiree healthcare and long-term disability benefits. For fiscal 2019, UK contributed $21 million for post-employment benefits, which was less than 1% of operating expenses. UK's OPEB plan is administered through the university's OPEB trust fund as an irrevocable trust.

Environmental, social and governance (ESG) consideration

UK is subject to several social considerations that affect the higher education sector including demographic trends and affordability. Enrollment trends at the university have been relatively stable, assisted by UK's more national brand and reputation. Kentucky faces demographic pressures, including a declining number of high school graduates. The university maintains a focus on affordability given the price sensitivity of students and families.

The university plays an important role in the provision of medical services to its surrounding community and statewide as a quaternary service provider. Given this role, the university has high exposure to social risks around patient care and safety.

UK's excellent strategic positioning reflects management's demonstrated ability to implement a significant campus and healthcare transformation, while bolstering its brand, recognition and reputation. Fiscal discipline has been demonstrated through its ability to manage through moderate state appropriation cuts. Management of both standalone university and healthcare operations work synchronously to position UK for ongoing growth in research partnerships and philanthropic support. Though patient care revenue exposure will continue to remain a challenge, UKH's strategy to provide tertiary and quaternary care in the state, with strong affiliations in its service area, underlies its competitive strengths.

Like most of the higher education sector, environmental considerations have a limited impact on the credit profile of UK at this time.

Rating methodology and scorecard factors

The Higher Education Methodology includes a scorecard that summarizes the factors that are generally most important to higher education credit profiles. Because the scorecard is a summary and may not include every consideration in the credit analysis for a specific issuer, a scorecard-indicated outcome may or may not match an assigned rating. We assess strategic positioning on a qualitative basis, as described in the methodology.

Exhibit 4

University of Kentucky, KY

Rating Factors		Value	Score
Factor 1:	**Market Profile (30%)**		
	Scope of Operations (Operating Revenue) ($000)	3,523,408	Aaa
	Reputation and Pricing Power (Annual Change in Operating Revenue) (%)	4.3	A3
	Strategic Positioning	Aa	Aa
Factor 2:	**Operating Performance (25%)**		
	Operating Results (Operating Cash Flow Margin) (%)	9.5	A1
	Revenue Diversity (Maximum Single Contribution) (%)	56.7	A1
Factor 3:	**Wealth & Liquidity (25%)**		
	Total Wealth (Total Cash & Investments) ($000)	2,450,208	Aa1
	Operating Reserve (Spendable Cash & Investments to Operating Expenses) (x)	0.5	Aa3
	Liquidity (Monthly Days Cash on Hand)	157	Aa3
Factor 4:	**Leverage (20%)**		
	Financial Leverage (Spendable Cash & Investments to Total Debt) (x)	1.5	Aa2
	Debt Affordability (Total Debt to Cash Flow) (x)	3.7	Aaa
	Scorecard-Indicated Outcome		Aa2
	Assigned Rating		Aa2

Data is based on most recent fiscal year available. Debt may include pro forma data for new debt issued or proposed to be issued after the close of the fiscal year.

For non-US issuers, nominal figures are in US dollars consistent with the Higher Education Methodology.

Leverage measures reflect fiscal 2019 data that includes the $32.5 million Series 2019A&B COPs and planned $60.2 million Series 2020 A&B bonds.

Source: Moody's Investors Service

REPORT NUMBER 1209235

CLIENT SERVICES

Americas	1-212-553-1653
Asia Pacific	852-3551-3077
Japan	81-3-5408-4100
EMEA	44-20-7772-5454

MOODY'S
INVESTORS SERVICE