University of Rochester, NY

New Issue - Moody's Assigns Aa3 to University of Rochester’s (NY) up to $230M Series 2017A&B Bonds; Outlook Stable

Summary Rating Rationale
Moody's Investors Service has assigned a Aa3 rating to University of Rochester's (“UR”) proposed up to approximately $232 million of tax-exempt fixed rate Series 2017A and 2017B Revenue Bonds, expected to mature in FY 2047. Concurrently, we have also affirmed the Aa3 ratings on the university’s $1 billion of revenue bonds issued through the Monroe County Industrial Development Corporation and the Dormitory Authority of the State of New York. The outlook is stable.

The Aa3 rating reflects the university’s excellent strategic positioning stemming from its role as a large private research university with a sound and strengthening student market and leading healthcare system providing unique clinical services to the Upstate New York region. The university’s positioning is supported by a well-coordinated leadership structure in managing the large enterprise, with significant revenue and wealth. The rating also reflects UR’s high exposure and concentration of patient care related revenue (72%), a high and increasingly competitive market for students and research funding, and moderate liquidity relative to a large expense base.

Credit Strengths

» Prominent regional academic medical center and a diverse array of undergraduate, graduate, and professional academic programs with healthy student demand

» Strong and integrated fiscal and capital planning by a well-coordinated leadership team

Exhibit 1
Strong Revenue Growth Supports Moderate Increases in Debt
$ billions

Source: Moody's Investors Service
» Large and growing presence in the region, averaging annual revenue growth of 6% from FY 2012-2016

» High wealth levels, with cash and investments of $2.9 billion, bolstered by recent conclusion of a successful fundraising campaign

Credit Challenges

» High exposure to clinical care operations from owned and affiliated hospitals for 72% of revenue, a more volatile revenue source than student-related revenues

» Moderate liquidity position for a large and complex organization, mitigated by limited potential calls and availability of external bank facilities

» Thinner, but positive margins, use of cash flow to fund capital plans, and lower investment returns limit flexible reserve growth

» Constrained and highly competitive federal funding environment, with a 45% concentration in sponsored research from the National Institutes of Health

Rating Outlook

The stable outlook reflects expectations of sound cash flow performance across the consolidated academic and medical enterprises with continued momentum in fundraising to bolster reserves relative to rising debt and expenses.

Factors that Could Lead to an Upgrade

» Substantial increase in unrestricted reserves and monthly liquidity that provides a materially stronger cushion for operations

» Strengthened fundraising

» Sustained improvement in operating performance

Factors that Could Lead to a Downgrade

» Deterioration of already modest cash flow margins

» Contraction of unrestricted liquidity

» Large increase in financial leverage

This publication does not announce a credit rating action. For any credit ratings referenced in this publication, please see the ratings tab on the issuer/entity page on www.moodys.com for the most updated credit rating action information and rating history.
**Key Indicators**

Exhibit 2

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>Total FTE Enrollment</td>
<td>9,359</td>
<td>9,863</td>
<td>9,976</td>
<td>10,015</td>
<td>10,132</td>
<td>10,132</td>
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<tr>
<td>Operating Revenue ($000)</td>
<td>2,776,741</td>
<td>3,017,733</td>
<td>3,180,230</td>
<td>3,405,317</td>
<td>3,685,288</td>
<td>3,685,288</td>
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<tr>
<td>Annual Change in Operating Revenue (%)</td>
<td>2.0</td>
<td>8.7</td>
<td>5.4</td>
<td>7.1</td>
<td>8.2</td>
<td>8.2</td>
</tr>
<tr>
<td>Total Cash &amp; Investments ($000)</td>
<td>2,245,241</td>
<td>2,548,288</td>
<td>2,979,621</td>
<td>3,020,947</td>
<td>2,865,440</td>
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<tr>
<td>Total Debt ($000)</td>
<td>857,635</td>
<td>894,805</td>
<td>1,101,997</td>
<td>1,175,662</td>
<td>1,161,062</td>
<td>1,279,135</td>
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<tr>
<td>Spendable Cash &amp; Investments to Total Debt (%)</td>
<td>2.2</td>
<td>2.4</td>
<td>2.3</td>
<td>2.2</td>
<td>2.1</td>
<td>1.9</td>
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<tr>
<td>Monthly Days Cash on Hand (x)</td>
<td>158</td>
<td>168</td>
<td>211</td>
<td>180</td>
<td>143</td>
<td>143</td>
</tr>
<tr>
<td>Operating Cash Flow Margin (%)</td>
<td>8.7</td>
<td>10.2</td>
<td>10.3</td>
<td>9.2</td>
<td>8.1</td>
<td>8.1</td>
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<tr>
<td>Total Debt to Cash Flow (x)</td>
<td>3.5</td>
<td>2.9</td>
<td>3.4</td>
<td>3.7</td>
<td>3.9</td>
<td>4.3</td>
</tr>
<tr>
<td>Annual Debt Service Coverage (x)</td>
<td>3.3</td>
<td>3.8</td>
<td>4.6</td>
<td>3.9</td>
<td>3.3</td>
<td>2.6*</td>
</tr>
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</table>

*2016 Proforma Debt Annual Debt Service Coverage is calculated using maximum annual debt service of $115 million in FY 2018

Source: Moody’s Investors Service

**Detailed Rating Considerations**

**Market Profile: Large Private Research University and Growing Healthcare Network Solidify Strong Regional Presence**

UR continues to strengthen its selective student market and presence in the region with its large medical center network. Fall 2016 enrollment totaled 10,132 full-time equivalent (FTE) students across a diverse array of bachelor’s, master’s and doctorate programs. The university also has several widely recognized programs, drawing across the United States and internationally. For fall 2016, UR enrolled its largest freshmen class, with a large majority drawn from outside of New York. International students account for 25-30% of total enrollment, introducing sizeable exposure to changes in international demand. Given strong and stable selectivity and yield rates, there is some cushion against volatility from potential tightening of US policies. Management reports applications are up over the prior year for domestic and international students. As the largest employer in the City of Rochester with more than 25,700 employees, the university will continue to play a significant role in the economic vitality of the region.

The University of Rochester Medical Center (URMC) continues to expand its clinical network and market share, acquiring two regional hospitals, Nicholas Noyes and Jones Memorial Hospitals in January, 2016. URMC’s five hospitals, including Strong Memorial Hospital (SMH) and Highland Hospital (A2 stable), capture nearly 55% of the market based on CY 2016 adult discharges. The healthcare enterprise is currently a generally positive credit attribute, attracting faculty, researchers, and students to the university. URMC’s strong market presence as a tertiary care hospital also helps protect against modest to declining forecasted population growth and high competition in the region.

UR’s competitive position for research funding remains sound, evidenced by an increase in total awards received in FY 2017 relative to the same time last year. Though, sponsored research funding remains constrained at the university and the medical center from pressured federal funding and very high competition. UR is highly exposed to federal funding with 72% of total research funding being federally funded.

**Operating Performance: Closely Integrated Planning and Budgeting of Consolidated Entity Supports Ongoing Positive Operations and Healthy Debt Service Coverage**

UR will maintain its long record of balanced operating performance, heavily incorporating management’s track record of budgeting conservatively, containing expenses, and improving operating efficiencies. On a consolidated basis, the average operating margin was 2.1% during FY 2014-2016 and operating cash flow margins have historically ranged from 8% to 10% annually. Operating cash flow margin was on the lower end of the range for FY 2016, at 8.1% but still generated solid 3.3 times debt service coverage. The FY 2016 cash flow would cover maximum annual debt service ($115 million) a still healthy 2.6 times.
Based on management’s unaudited financial projections, we expect the consolidated entity to generate positive operations in FY 2017. The more modest performance in FY 2016 was driven by one-time expenses while the stronger performance in FY 2013 and FY 2014 included nonrecurring payouts and credits.

UR’s revenue sources are varied, but concentrated in healthcare activities, including patient care revenue generated at the hospitals and the faculty practice plan (72% on a Moody’s adjusted basis). The university’s ability to sustain balanced or positive operating performance is highly reliant on strong performance of the healthcare enterprises, primarily SMH and Highland Hospital. For the first six months of FY 2017, the operating margin at SMH and Highland was 4.2% and 3.6%, respectively, on par with or better than recent prior years, with the second half of the year tending to be stronger based on historical trends. Patient volume and clinical revenue overall is trending up, benefiting from the planned capital improvement and additions.

Exhibit 3
Heightened Volatility from Significant Exposure to Patient Care Revenue
Fiscal Year 2016 Revenue Sources

Source: Moody’s Investors Service

Wealth and Liquidity: Moderate Flexible Reserves and Liquidity Relative to Rising Debt and Expenses
UR’s financial reserves are a source of credit strength given the large size of university operations. Spendable cash and investments of more than $2.3 billion, sufficiently covers pro forma debt 1.9 times and expenses 0.7 times, though both are below the preliminary Aa3 private university medians of 2.7 times and 2.6 times. Growth of flexible reserves will likely be pressured given lowered retained surpluses and capital reinvestment plans, as well as the potential for investment returns below the university’s 5.7-5.9% endowment spending rate. The university intends to reduce its spend rate to 5.5% by FY 2021, which is still above the 5% industry norm.

Improved fundraising is additive to credit quality, as strong gift flow has helped bolster financial reserves and will support many key initiatives, including faculty, financial aid, and research. During the campaign, gift revenue has been elevated with average annual gift revenue of $96 million during FYs 2014-16. UR exceeded its $1.2 billion goal by 14%, raising $1.37 billion. The university is aiming to maintain the momentum, with annual cash goals set above $100 million, which it achieved over the past three years.

Endowment management is overseen by an internal investment office, a consultant, and the investment committee of the Board of Trustees. The long-term investment pool had a preliminary 4.1% return as of the first six months of FY 2017 following a 3.1% investment loss at FYE 2016. While capital commitments have been rising, management reports this trend is not expected to continue. Unfunded commitments as of June 30, 2016 were $472 million, or about 25% of the endowment.

LIQUIDITY
The university’s liquidity is sound on an absolute level, with $1.35 billion of unrestricted cash and investments which could be liquidated within a month as of June 30, 2016. However, relative to its large expense base, monthly liquidity translates to 143 days cash on hand, well below the preliminary Aa3 median of 447 days.
Stable cash flow from operations and limited potential calls on liquidity are mitigating factors, with strong oversight over capital commitments, high thresholds for swap collateral postings, and modest debt structure risk. Three committed operating lines from three separate banks totaling $175 million augment its liquidity position. There were no draws in FY 2016. In FY 2017, UR expects to draw approximately $12 million as a temporary bridge loan for one of its affiliates.

**Leverage: Manageable Debt Burden**

Following the Series 2017 debt issuance, UR’s leverage will be moderate but manageable at the Aa3 rating. UR typically issues debt every two years. The university has spent over $1.3 billion on capital over the last five years, with potential projects totaling in the $500 million range in FY 2018 and 2019, funded primarily through operations, gifts, and some use of debt. Management has demonstrated a willingness to scale back capital or postpone projects in the past in response to challenging economic environments.

Major projects being financed with the $122 million of new money debt include a residence hall (150 incremental beds) and athletics facility; a pediatric intensive care unit and operating rooms; and various renovations and expansions of classrooms, labs, offices, and research space. Some of these projects have direct revenue generating capacity, eventually offsetting some of the increase in financial leverage over the life of the projects.

Recent major projects include completion of Wegmans Hall, an Imaging Sciences Building, and renovation and reconfiguring of its last dining center and creating additional student space.

**DEBT STRUCTURE**

The majority of the university’s debt is fixed rate and amortizing. Roughly 13% of debt is variable rate demand obligations with letters of credit supporting the tender feature. Counterparty risk associated with letters of credit is diversified, with staggered expiration dates.

As part of the university’s capital structure and financing plans, the university has entered into a commitment providing for total availability of $100 million on a taxable fixed-rate note. The university has board authorization for just $49.3 million, which it intends to draw in April, 2017. That portion of the note amortizes regularly and is scheduled to mature in FY 2047. The university has the option to draw on the remaining principal amount until 2020, which it will decide upon during its next expected bond issuance in 2019. There are no mandatory or optional tenders, financial covenants, or bullet payments in the currently proposed structure. The note is on parity with the university’s revenue bonds.

**DEBT-RELATED DERIVATIVES**

The university has several swaps outstanding related to its variable rate bonds, with a combined notional amount of $243.9 million. The swaps are diversified among three counterparties and the total fair value for the swap portfolio as of December 2016 was negative $17 million to the university, with no collateral posted at that valuation date. The university could be required to post collateral if the fair value of individual swaps exceeds threshold levels, although the university has never had to post collateral to its swap counterparties to-date.

**PENSIONS AND OPEB**

UR has modest employee benefit obligations, totaling 3% of operating expenses in FY 2016. The university has a defined contribution pension plan and post-employment healthcare benefits. Highland Hospital has a defined benefit pension plan which is closed to new entrants. The liability for the post-retirement health plan was $211 million and the pension liability for Highland Hospital was $119 million, manageable given its large revenue base and wealth.

**Governance and Management: Strong Planning Across the Academic and Medical Enterprises**

A history of strong fiscal stewardship, thoughtful evaluation of the competitive landscape, and the successful execution of strategic plans support the university’s long-term credit profile as planning for the 2018-2025 strategic plan is underway. Management reports no expectation of significant shifts in its strategic direction, capitalizing on built up areas of strength. Programmatic and capital investment support strategic institutional priorities in terms of strengthening enrollment, expanding URMC’s market share and the university’s overall reputational and economic footprint in the region.

An integrated and closely aligned management team supports financial, strategic and capital planning at both the university and the medical center. The organization is run as one entity and all operations and planning are ultimately supported by one centralized management team and Board of Trustees.
**Legal Security**
All bonds are unsecured general obligations of the university.

**Use of Proceeds**
The proceeds of the Series 2017A bonds will be used to refund selected maturities of the Series 2007A, 2009A, 2009B, 2009E, 2011A and fund capitalized interest on a portion of the bonds and pay certain issuance costs. Additionally, the Series 2017B bond proceeds will be used to finance various capital projects, refund the Series 2007C, 2009C, and 2011B bonds, and fund capitalized interest on a portion of the bonds and pay certain issuance costs.

**Obligor Profile**
The University of Rochester, founded in 1850, is a comprehensive private university with significant healthcare operations and large research profile, with FY 2016 operating revenue of $3.69 billion. The University of Rochester Medical Center is part of the university, consisting of Strong Memorial Hospital; the Schools of Medicine, Dentistry, and Nursing; the faculty practice; and Eastman Institute for Oral Health. The Hospital serves as the largest acute care general hospital in Rochester and serves both as a general and national tertiary care hospital and a specialty referral center for a 14-county area.

**Methodology**
The principal methodology used in this rating was Global Higher Education published in November 2015. Please see the Rating Methodologies page on www.moodys.com for a copy of this methodology.

**Ratings**

| Exhibit 4 |
| University of Rochester, NY |

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<th>Issue</th>
<th>Rating</th>
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<tr>
<td>Revenue Bonds (University of Rochester Project), Series 2017A (Tax-Exempt)</td>
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| Revenue Bonds (University of Rochester Project), Series 2017B (Tax-Exempt) | Aa3 |
| Rating Type | Underlying LT |
| Sale Amount | $39,000,000 |
| Expected Sale Date | 03/16/2017 |
| Rating Description | Revenue: 501c3 Unsecured General Obligation |

Source: Moody’s Investors Service
University of Rochester, NY: New Issue - Moody’s Assigns Aa3 to University of Rochester’s (NY) up to $230M Series 2017A&B Bonds; Outlook Stable