

CREDIT OPINION

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New Issue

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Contacts

Erin V. Ortiz 212-553-4603
 AVP-Analyst
 erin.ortiz@moodys.com

Diane F. Viacava 212-553-4734
 VP-Sr Credit Officer
 diane.viacava@moodys.com

Case Western Reserve University, OH

New Issue - Moody's Assigns A1 to Case Western Reserve University's (OH) Series 2016; Outlook Stable

Summary Rating Rationale

Moody's Investors Service has assigned an A1 rating to [Case Western Reserve University's](#) up to \$190 million Series 2016 Revenue Refunding Bonds (maturing 2046) issued by the [Ohio Higher Educational Facility Commission](#). We also affirmed the outstanding A1 revenue bonds and P-1 commercial paper ratings. Total pro-forma rated debt is \$370 million. The outlook is stable.

The A1 rating reflects Case Western Reserve University's (CWRU) sizable balance sheet reserves and strong fundraising, with its strengthening national reputation as a large, comprehensive research university. Offsetting credit factors include limited unrestricted reserves, high competition for students and federal research funding, and modest operating performance.

The P-1 rating on CWRU's commercial paper (CP) program reflects sufficient self-liquidity coverage.

Credit Strengths

- » Considerable wealth of nearly \$1.6 billion in total cash and investments for FY 2016
- » Strong donor support, with gifts at an all-time high averaging \$101 million annually from FY 2014-FY 2016
- » Very good and growing student demand evidenced by consistent enrollment and net tuition revenue growth over the past five years
- » Deliberate leadership steps taken to improve operations and reduce debt structure risks

Credit Challenges

- » Limited financial flexibility, with a large portion of CWRU's wealth permanently restricted
- » Only moderate operational support from unrestricted monthly liquidity, with university reliance on a line of credit to bridge seasonal cash flow needs
- » Highly competitive student market and significant competition for federal research funding, the university's two key revenue streams
- » Thin operating performance relative to peers, averaging an operating margin of 1.5% from FY 2012-2015 compared to the A-rated median of 5%, and likely expense pressures

Rating Outlook

The stable outlook reflects expectations CWRU will enjoy continued donor support for strategic endeavors while generating at least balanced operating performance and no material deterioration of its liquidity profile. The outlook also incorporates the expectation of no significant additional debt or spending of reserves in the near-term.

Factors that Could Lead to an Upgrade

- » Substantial growth in non-restricted balance sheet reserves and operating liquidity
- » Sustained strengthened operating cash flow

Factors that Could Lead to a Downgrade

- » Material contraction of liquidity
- » Multi-year weakening of operating performance
- » Significant additional borrowing absent commensurate growth in financial reserves and revenue

Key Indicators

Exhibit 1

CASE WESTERN RESERVE UNIVERSITY, OH						
	2012	2013	2014	2015	2016	2016 Pro-Forma
Total FTE Enrollment	9,259	9,621	10,130	10,586	10,820	10,820
Operating Revenue (\$000)	767,725	767,459	785,208	805,129	836,428	836,428
Annual Change in Operating Revenue (%)	3.8	0.0	2.3	2.5	3.9	3.9
Total Cash & Investments (\$000)	1,450,226	1,519,129	1,694,480	1,683,882	1,595,496	1,595,496
Total Debt (\$000)	550,166	594,952	565,243	564,856	560,603	555,493
Spendable Cash & Investments to Total Debt (x)	1.6	1.5	1.9	1.8	1.6	1.6
Spendable Cash & Investments to Operating Expenses (x)	1.1	1.2	1.4	1.3	1.1	1.1
Monthly Days Cash on Hand (x)	155	165	191	180	177	177
Operating Cash Flow Margin (%)	11.8	9.9	11.2	11.8	12.2	12.2
Total Debt to Cash Flow (x)	6.1	7.8	6.4	6.0	5.5	5.5
Annual Debt Service Coverage (x)	2.9	2.0	2.9	2.9	2.8	2.8

Total FTE Enrollment is for Fall only

Source: Moody's Investors Services

Detailed Rating Considerations

Market Profile: Comprehensive Research University with Strong Graduate Reputation and Increasing Brand Recognition for its Growing Undergraduate Population

CWRU's strategic positioning is very good, anchored by a market position that will continue to strengthen as it expands academic partnerships and leverages a prominent reputation to bolster its research and academics profile nationally. CWRU has successfully increased enrollment by parlaying its strong reputation in the sciences, technology, engineering, and math (STEM) graduate programs to grow its undergraduate student market. Since fall 2011 total full-time equivalent (FTE) enrollment is up an impressive 23% to 10,820 FTEs for fall 2016. This growth occurred while many other institutions, particularly in the Midwest, suffered declines. Enrollment

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growth trend will taper as CWRU has met its undergraduate class size goal. However, its prominent graduate and professional degree programs will remain a solid growth market, particularly given high demand for STEM programs.

CWRU collaborates with nearby medical institutions for its educational programs, including [University Hospitals Health System Inc.](#) (UH) and the [Cleveland Clinic Health System](#). The relationship with the Cleveland Clinic is poised to grow from plans to co-locate its health sciences education programs on one Health Education Campus on land to be jointly owned by CWRU and the Clinic. Both organizations are fundraising jointly for the project, which is estimated at \$500 million. CWRU maintains a large research profile with significant federally sponsored research and other sources.

Operating Performance: Focus on Expense Containment Drives Improved Cash Flow

Conservative fiscal planning, strengthened forecasting, and strong expense management support the expectation that the university will continue generating balanced operations. Over the past three years, CWRU's operating margin averaged 1.3% for FY 2014-2016. The FY 2016 12.2% operating cash flow margin covers three-year average debt service a solid 2.9 times. Though improved, CWRU's cash flow margin remains below the A1-median (16.7% in FY 2015).

Given the expectation for slowed enrollment growth and high competition for research funding, we expect more pressured revenue growth following a favorable trend from net tuition revenue and unrestricted gifts over the past few years. Consequently, operating performance will remain around current levels as expense containment becomes more difficult after several years of very low growth. Expense growth jumped up nearly 4% in FY 2016 compared to an average of around 1% annually from FY 2012-FY 2015. Ability to continue above-average growth of student charges through lower discounting or gifts are factors that could drive improvements in operating performance.

Wealth and Liquidity: Substantial Wealth Driven by Strong Fundraising Success, Although Relatively Modest Unrestricted Liquidity

The university maintains considerable wealth, with total cash and investments of nearly \$1.6 billion at the end of FY 2016. Consistent and strong fundraising has partially offset softer investment returns over the past several years compared to peers and a high level of gifts used to fund capital. As a result, the five-year change in CWRU's spendable cash and investments was a 10% increase compared with the A1-median of 25%. Spendable cash and investments remain strong at \$929 million for FY 2016.

The \$1.5 billion comprehensive fundraising campaign has raised over \$1.3 billion. The university effectively garners support from a large and generous donor base to fuel investment in facilities. Strong gift revenue eases its debt burden while also improving and adding facilities to enhance its competitive position.

To manage the university's large investment portfolio, market value of \$1.41 billion at June 30, 2016, CWRU has an in-house investment office staffed with six people. The university does not utilize a consultant to select its managers and the board's investment committee remains active in overseeing the function. At the end of FY 2016, (June 30), the university reports a 3.4% investment loss, a softer return compared to those of similarly-sized investment portfolios.

LIQUIDITY

CWRU's monthly liquidity of \$366 million is adequate to support operations and absorb potential calls on liquidity, but remains relatively modest compared to A-rated peers. The university's high allocation to alternative investments (including hedge funds) coupled with the high proportion of restricted net assets places significant limitations on liquidity, with Moody's calculation of unrestricted liquidity available within 30 days covering 180 days of expenses in FY 2016. This compares to the FY 2015 A1-median of more than 400 days. Mitigating the university's liquidity profile is an uncommonly high level of research expenses (30% compared to a median of 2%), which is generally matched by sponsored research funding.

Supplementing internal liquidity, the university has two unsecured external bank lines with two counterparties of \$30 million and \$40 million. At the end of FY 2016, \$33 million was drawn on the line, up from \$20 million at FYE 2015.

In conjunction with the current debt issuance, CWRU will reduce the size of its commercial paper program to \$30 million from the current \$90 million authorized in its bond resolution. The university expects to pay or redeem CP not rolled over from a combination of its internal liquidity and a dedicated bank liquidity facility which cannot be used for other purposes. Currently, there are two bank

liquidity facilities with committed amounts of \$60 million and \$30 million with two counterparties. Both facilities expire on February 25, 2017.

As of the most recent self-liquidity filing on June 30, 2016, CWRU had \$189 million in discounted daily investments, including \$130 million in demand accounts in P-1 rated banks, \$50 million across multiple 2a-7 compliant money market funds meeting Moody's criteria for a Aaa-mf rating, and the remainder in US Treasuries & Agencies. Discounted daily assets covered \$68.1 million of outstanding CP 4.1 times with the bank facilities and 2.8 times without the backup facilities. When excluding the largest money market investment with one sponsor coverage is very good at 3.9 times and 2.6 times, respectively.

Leverage: Affordable and Manageable Debt Burden

CWRU's financial leverage is expected to remain manageable given an amortizing debt structure and no near-term plans to increase debt. The university's absolute debt level has remained relatively consistent, fluctuating between \$550 million and \$620 million since FY 2004. Spendable cash and investments of \$929 million cushion pro-forma debt by 1.6 times and debt affordability is ample, as measured by pro-forma debt to cash flow of 5.5%.

DEBT STRUCTURE

The university's deliberate strategy of revising its debt structure and liquidity risks is credit positive. CWRU's pro-forma capital structure will eliminate exposure to remarketing risk associated with variable rate demand bonds and reduce variable rate debt to roughly 37%, compared to 50%. The two bank placements are with different counterparties, do not have financial covenants or mandatory tenders in the same year, and the university is a safe distance from rating triggers. Therefore, the potential for acceleration is remote.

DEBT-RELATED DERIVATIVES

CWRU currently has five floating-to-fixed interest rate swap agreements with a total notional amount of \$175 million. The university does not plan to enter into another agreement when its \$100 million swap expires on January 3, 2017. At its current rating level, the university posts collateral if the liability to CWRU exceeds \$20 million. As of September 19, 2016, the university had posted collateral of a modest \$3 million, posing an immaterial liquidity risk.

PENSIONS AND OPEB

The university has both defined benefit (DB) and defined contribution plans. Having a defined benefit plan is highly uncommon in the private higher education sector. The liability exceeds the plan assets with a liability of \$113 million for FY 2016, up significantly from \$68 million in FY 2015. The university is reviewing the DB plan to consider modifications or restructuring of the plan. There is no other post-employment benefits (OPEB) plan.

Governance and Management: Strengthening Reputation is Driven by Stable and Collaborative Leadership

The university's very good strategic positioning stems from consistent philanthropic support, a growing brand, and financial leadership's plan to remain committed to improving operations. Its partnerships, particularly the increased collaboration with the Cleveland Clinic, allow the university to achieve strategic initiatives while stewarding resources.

Legal Security

The bonds and commercial paper are an unsecured general obligation of the university.

Use of Proceeds

The Series 2016 bond proceeds will be used to refund all or a portion of the Series 2006 and 2008A bonds, advance refund all or a portion of the Series 2008C and 2013 bonds, refund a portion of the outstanding commercial paper notes, and pay issuance costs.

Obligor Profile

Case Western Reserve University is the largest comprehensive private research university in Ohio, with research revenues of more than \$400 million. The university is located in University Circle, a 550-acre concentration of more than 50 educational, medical, cultural, religious, and social service institutions at the eastern edge of Cleveland.

Methodology

The principal methodology used in this rating was Global Higher Education published in November 2015. The additional methodology used in the short-term rating was Rating Methodology for Municipal Bonds and Commercial Paper Supported by a Borrower's

Self-Liquidity published in January 2012. Please see the Rating Methodologies page on www.moody.com for a copy of these methodologies.

Ratings

Exhibit 2

Case Western Reserve University, OH

Issue	Rating
Higher Educational Facility Revenue Refunding Bonds (Case Western Reserve University Project) Series 2016	A1
Rating Type	Underlying LT
Sale Amount	\$190,000,000
Expected Sale Date	11/01/2016
Rating Description	Revenue: 501c3 Unsecured General Obligation

Source: Moody's Investors Service

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