

**Ohio Higher Educational Facility
Commission, Ohio
Case Western Reserve University;
Private Coll/Univ - General Obligation**

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Credit Profile

Ohio Higher Ed Fac Comm, Ohio

Case Western Reserve Univ, Ohio

Case Western Reserve Univ, various rev bnds ser 1990B, ser 1994

Long Term Rating

AA-/Stable

Affirmed

Rationale

S&P Global Ratings has affirmed its 'AA-' long-term rating on various long-term bonds issued by the Ohio Higher Educational Facility Commission on behalf of Case Western Reserve University (CWRU). The outlook is stable.

We assessed CWRU's enterprise profile as very strong, characterized by stable enrollment and a healthy demand profile, with improved selectivity though mitigated by weak matriculation rates for the rating. We assessed CWRU's financial profile as strong, with consistently positive operations on a full-accrual basis, with sufficient available resources for the rating, though somewhat weaker than category medians. Combined, we believe these credit factors lead to an indicative stand-alone credit profile of 'a+'. As our criteria indicate, the final rating can be within one notch of the indicative credit level. In our opinion, the 'AA-' rating on the university's bonds better reflects CWRU's position as a comprehensive research institution with available resources that while somewhat weak, are consistent with peer institutions and have increased in recent years; we anticipate these trends to continue given the school's limited additional debt plans.

The 'AA-' rating reflects our assessment of CWRU's strengths:

- Stable undergraduate and graduate enrollment due to the university's broad range of programs, research and community medical coalitions, and healthy demand metrics despite strong competition for CWRU's high-quality students;
- Consistently positive operating results on a full-accrual basis for the past several fiscal years;
- Sizable cash and investments of \$1.7 billion at June 30, 2017; and
- A maximum annual debt service (MADS) burden of less than 3% at fiscal 2017 year-end, which we consider low.

The 'AA-' rating reflects our assessment of the following weaknesses:

- Available resource ratios that while adequate, are low for the 'AA' rating category; and
- Weak freshman matriculation rate of 15.6% in fall 2017 compared with that of peer research institutions, indicative of significant national competition for high-quality students.

CWRU, located in Cleveland, is Ohio's largest private university. It offers a wide range of undergraduate, graduate, and professional degree programs, including arts and sciences, law, business, medicine, engineering, nursing, social work, and dentistry. The university's research base is extensive, in our view. CWRU was awarded approximately \$312 million in research grant and indirect cost recovery revenue in fiscal 2016 principally related to health sciences and the medical school. We note that the university received over \$400 million when including revenue passed through to the Cleveland Clinic. CWRU's campus is one of the anchor institutions in University Circle, a 500-acre concentration of more than 40 educational, social, medical, cultural, and religious institutions at the eastern edge of Cleveland.

Outlook

The stable outlook reflects our anticipation that CWRU will maintain relatively stable enrollment and demand, continue to produce positive operations on a generally accepted accounting principles basis and, at minimum, maintain stable to improving available resources in the next two years.

Upside scenario

While an upgrade is unlikely in the next two years given the university's sufficient balance sheet ratios relative to peers, we could consider a higher rating if CWRU produces more robust full-accrual surpluses and if available resources were to increase significantly.

Downside scenario

We could consider a negative rating action in the next two years if enrollment were to decline, the university were to incur full-accrual deficits, or if available resources were to decrease from current levels.

Enterprise Profile

Industry risk

Industry risk addresses the higher education sector's overall cyclicity and competitive risk and growth by applying various stress scenarios and evaluating barriers to entry, levels and trends of profitability, substitution risk, and growth trends observed in the industry. We believe the higher education sector represents a low credit risk when compared with other industries and sectors.

Economic fundamentals

In our view, the university has good geographic diversity, with only about 34.6% of students coming from the state of Ohio. As such, our assessment of CWRU's economic fundamentals is anchored by the national GDP per capita.

Market position and demand

Enrollment has stabilized after a period of consistent enrollment growth for the past several years. Total headcount reached 11,824 (10,917 full-time equivalent [FTE]) in fall 2017. As a comprehensive research institution, CWRU has a larger proportion of graduate and professional students (approximately 56% of total headcount or 54% of FTEs) than many of its peers. Most undergraduate students enter as freshmen, and 97% attend as full-time residential students. Management reports that a concerted focus on recruitment and improved retention and student quality have supported enrollment growth. Management reports that it anticipates maintaining incoming freshman class sizes at

current levels of 1,200 to 1,300.

Applications for fall 2017 were up 9.8% over last year. Demand flexibility is marked in our opinion, with the university experiencing increasing selectivity, somewhat mitigated by weak matriculation. Management reports that it is in the third year of its early-decision component application process, which it anticipates will result in improved matriculation over time. The university is notably selective, accepting a low of 33% of undergraduate freshman applicants compared with 70% in fall 2009. Matriculation is limited at 16% for fall 2017, reflecting, in our view, a highly competitive market environment.

Student quality is also very high as measured by an average freshmen ACT score of 31. The freshman-to-sophomore retention rate has remained relatively stable in recent years and was 92.5% for fall 2017, consistent with management's goal. The six-year graduation rate has remained stable in the past few years and was at 82.6% for fall 2017. In our view, CWRU's enrollment and demand profile is healthy.

CWRU publicly announced a \$1 billion comprehensive campaign in 2011. Management reports the university has met its original campaign goal ahead of schedule through a mix of cash and pledges. We understand that management has increased the campaign goal to \$1.5 billion and has raised \$1.55 billion to date. The campaign will benefit funding for programmatic support, scholarships, capital projects, faculty chairs, and the annual fund. The university's last comprehensive campaign in 1994 raised more than \$400 million. We understand that the annual fund raised approximately \$11.5 million in fiscal 2017.

Management and governance

CWRU's regulations and bylaws do not provide for a maximum size for its board of trustees; there are 42 regular (voting) members, including the president, who is an ex officio member, and 94 member emeriti. Members are generally limited to four consecutive four-year terms, and may move to emeritus status, once their term ends. Most board members are also alumni. We understand that board turnover has been routine. The full board meets formally three times a year and has a committee system. We understand that the university anticipates conducting a search for a provost and treasurer during fiscal 2018. We anticipate smooth leadership transitions given the stability of senior leadership since our last review.

Financial Profile

Financial management policies

While the university has no formal debt policy, it does maintain formal policies for endowment and investments. In addition, the university budgets for debt service and an operating contingency, which we view as a positive credit factor. In our view, the university has good financial practices and manages in a proactive manner.

It operates according to a five-year strategic plan, and has an informal reserve liquidity policy. The university meets standard annual disclosure requirements. The financial policies assessment is neutral, reflecting our opinion that, while there may be some areas of risk, the organization's overall financial policies are not likely to negatively affect its future ability to pay debt service. Our analysis of financial policies includes a review of the organization's financial reporting and disclosure, investment allocation and liquidity, debt profile, contingent liabilities, and legal structure, and a

comparison of these policies to peer universities.

Financial performance

CWRU typically produces small operating surpluses on a full-accrual basis, with margins ranging from 0.5% to 3.4% over the past five fiscal years. Operating results on a full-accrual basis were \$21.5 million (a 1.9% operating margin) for the fiscal year ended June 30, 2017, compared with \$12 million (a 1.1% operating margin) a year earlier. We note that returns on operating investments were approximately \$19.7 million in fiscal 2017, compared with \$6.3 million in fiscal 2016, excluding endowment spending for operations. Management projects fiscal 2018 operations will be consistent with historical levels.

As of fiscal 2017, the university's endowment spending policy is based on a formula of 50% on an inflation index and 50% on 4.5% of the three-year average market value of long-term investments, resulting in an anticipated endowment draw of less than 5%. In addition, the board has approved an additional draw amount in support of the comprehensive campaign. According to management, an additional \$6 million went toward supporting the campaign in fiscal 2017. Management anticipates withdrawing \$6 million during fiscal 2018 and expects to draw a similar amount in future years to support its development campaign. The fiscal 2017 endowment draw to support operations was approximately \$62 million, not including the additional draw to support the campaign.

Operating revenue streams are relatively diverse compared with peers; however, CWRU is increasingly dependent on student-related charges to fund operations. In fiscal 2017, gross tuition and student fees represented 45% of total revenue. The university receives a concentration of National Institutes of Health funding; we understand that management has concentrated efforts on remaining competitive for federal grants and is exploring efforts to bolster foundation and industry awards. In our opinion, management is positioned to adjust its research enterprise as project funding lessens, if necessary.

Available resources

CWRU's financial resource ratios are satisfactory, in our view, though lower than the average of other 'AA-' rated private universities. We calculate expendable resources as unrestricted plus temporarily restricted net assets minus net property, plant, and equipment plus long-term debt. As of June 30, 2017, expendable resources totaled approximately \$968.5 million; we note that CWRU's expendable resources equated 85.6% annual adjusted operating expenses of approximately \$1.1 billion and 191% of total debt, compared with the 'AA' rating category medians of 202.5% and 274.9%, respectively. Total cash and investments were approximately \$1.7 billion as of fiscal year-end 2017, excluding funds held by trusts, which the university does not manage, but are shown as assets on the financial statements, equaling 152.5% of annual adjusted expenses and 340.7% of total debt. We believe that a significant growth in additional debt without commensurate growth in financial resources could pressure the rating.

At June 30, 2017, the market value of long-term pooled investments (excluding outside trusts not under direct university control) was about \$1.4 billion. The allocation was 44% global equities, 19% absolute return, 16% private equity, 12% real assets, 5% fixed income, and 4% cash. Management has structured its pooled endowment investment policy to focus on consistency of investment outcomes in a variety of economic and inflationary environments.

Many of the university's private equity and real assets investments have mandatory capital calls related to future investments. At the end of fiscal 2017, unfunded calls totaled approximately \$192.6 million; at Sept. 20, 2017, (about

13% of portfolio market value). However, the university reports that approximately 43% (\$615 million) of long-term investments could be liquidated in less than 30 days; it is our view that the university's liquidity profile mitigates its unfunded calls.

Debt and contingent liabilities

CWRU had approximately \$506.1 million of debt as of fiscal year-end 2017. The debt includes:

- Approximately \$321 million in long-term fixed-rate debt;
- \$141.2 million in direct placement variable-rate debt; and
- \$30 million in unrated commercial paper; the program is now authorized at \$30 million.

We understand that in the event of an unremarketed rollover, Northern Trust provides liquidity for the program.

The university also has two bank lines of credit, totaling \$100 million, available for working capital. There is no outstanding balance on these lines at present. Management reports no planned new debt issuances at this time; we will continue to monitor the impact of any additional debt should plans materialize. It is our opinion that CWRU has limited debt capacity at the current rating. We anticipate that any additional debt issuances will be met with commensurate growth in available resources.

On July 1, 2015, CWRU refinanced its series 2001A and 2002A bonds in the amount of \$75.48 million with a three-year direct placement with Wells Fargo Bank N.A. Based on our review of documents, we understand that with respect to the series 2014A direct placement in the amount of \$67.5 million, there are events that lead to acceleration of debt and cross-default and no additional financial-based covenants associated with the debt. We have reviewed documents associated with the series 2015B direct purchase debt and understand that while there are no additional financial-based covenants associated with the debt, there are provisions for acceleration and cross-default in the event of nonpayment. We consider the risk of nonpayment remote at this time given the university's current financial profile.

The debt profile of the university is uneven, in our opinion. We calculate MADS as the total debt service averaged over the life of the bonds, resulting in a smoothed MADS of about \$24.5 million. Approximately 35% of CWRU's debt is variable rate, with 15% of variable-rate debt swapped to fixed rate. In addition, CWRU has contingent liquidity risk exposures that we consider manageable at the current rating level. The exposures come from approximately \$141.2 million in series 2014A and 2015B direct purchase debt sold directly to refund a portion of the university's variable-rate debt.

The university has four interest-rate swap contracts with a total notional amount of \$73.4 million. The effect of the contracts, all of which are floating-to-fixed rate, is a net variable-rate exposure of about 20% currently. The contracts are all with Morgan Stanley as counterparty, and the mark-to-market value was negative \$15 million at the time of this publication. The university reports that its collateral threshold is \$20 million. In our view, CWRU's swap portfolio reflects low credit risk at this time due to counterparty credit quality, the average economic viability of the swap portfolio over stressful economic cycles, and sound debt and swap management internal procedures.

The university offers both a defined-contribution retirement plan to employees (which, by definition, is fully funded), and a defined-benefit (DB) plan based. According to management, the DB plan is now closed to new entrants. The DB plan had a funded status of negative \$101.8 million at the end of fiscal 2017 compared with negative \$113.5 million at

the end of fiscal 2016. We understand that DB contributions are made annually according to actuarial valuations. The university offers a retiree health care plan but reports no related liability on the university's balance sheet because the cost is paid entirely by retirees.

Case Western Reserve University, Ohio						
Enterprise And Financial Statistics						
	--Fiscal year ended June 30--					Medians for 'AA' rated Private Colleges & Universities
	2018	2017	2016	2015	2014	2016
Enrollment and demand						
Headcount	11,824	11,664	11,340	10,771	10,325	MNR
Full-time equivalent	10,917	10,820	10,587	10,130	9,622	6,253
Freshman acceptance rate (%)	33.1	35.4	36.3	38.3	41.9	25.7
Freshman matriculation rate (%)	15.6	15.4	15.2	15.4	16.2	MNR
Undergraduates as a % of total enrollment (%)	43.6	44.2	45.2	45.6	45.1	71.9
Freshman retention (%)	92.5	91.6	93.9	93.2	94.2	94.8
Graduation rates (six years) (%)	82.6	82.1	80.6	80.9	80.9	MNR
Income statement						
Adjusted operating revenue (\$000s)	N.A.	1,153,524	1,098,470	1,051,428	1,045,840	MNR
Adjusted operating expense (\$000s)	N.A.	1,132,070	1,086,463	1,035,105	1,011,695	MNR
Net operating income (\$000s)	N.A.	21,454	12,007	16,323	34,145	MNR
Net operating margin (%)	N.A.	1.90	1.11	1.58	3.38	1.59
Change in unrestricted net assets (\$000s)	N.A.	53,169	(49,296)	19,086	18,341	MNR
Tuition discount (%)	N.A.	38.4	40.1	40.8	40.7	37.1
Tuition dependence (%)	N.A.	39.2	38.8	37.5	35.3	MNR
Student dependence (%)	N.A.	45.4	45.2	43.7	41.2	60.0
Health care operations dependence (%)	N.A.	0.0	0.0	0.0	0.0	MNR
Research dependence (%)	N.A.	22.0	22.1	22.3	23.8	MNR
Endowment and investment income dependence (%)	N.A.	7.1	6.6	7.6	8.0	MNR
Debt						
Outstanding debt (\$000s)	N.A.	506,918	560,603	564,856	578,243	305,339
Current debt service burden (%)	N.A.	2.92	2.67	2.78	2.51	MNR
Current MADS burden (%)	N.A.	2.16	2.25	2.48	3.62	5.53
Financial resource ratios						
Endowment market value (\$000s)	N.A.	1,461,237	1,350,104	1,439,174	1,380,515	1,132,510
Cash and investments (\$000s)	N.A.	1,726,942	1,598,047	1,708,388	1,694,480	MNR
Unrestricted net assets (\$000s)	N.A.	205,826	152,657	201,953	182,867	MNR
Expendable resources (\$000s)	N.A.	968,498	853,128	970,628	1,014,400	MNR
Cash and investments to operations (%)	N.A.	152.5	147.1	165.0	167.5	331.4

Case Western Reserve University, Ohio (cont.)

Enterprise And Financial Statistics

	--Fiscal year ended June 30--					Medians for 'AA' rated Private Colleges & Universities
	2018	2017	2016	2015	2014	2016
Cash and investments to debt (%)	N.A.	340.7	285.1	302.4	293.0	446.5
Expendable resources to operations (%)	N.A.	85.6	78.5	93.8	100.3	202.5
Expendable resources to debt (%)	N.A.	191.1	152.2	171.8	175.4	274.9
Average age of plant (years)	N.A.	14.9	14.2	14.2	13.8	13.7

N.A.--Not available. MNR--Median not reported. MADS--Maximum annual debt service. Total adjusted operating revenue = unrestricted revenue less realized and unrealized gains/losses and financial aid. Total adjusted operating expense = unrestricted expense.

Ratings Detail (As Of November 20, 2017)

Ohio Higher Ed Fac Comm, Ohio

Case Western Reserve Univ, Ohio

Case Western Reserve Univ rev bnds ser 2006

Unenhanced Rating AA-(SPUR)/Stable Affirmed

Ohio Hgr Ed Fac Auth (Case Western Reserve Univ) rev var rate dem bonds ser 2008C

Long Term Rating AA-/Stable Affirmed

Ser 2012A & Ser 2013A

Long Term Rating AA-/Stable Affirmed

Many issues are enhanced by bond insurance.

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