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Massachusetts Institute of Technology; Private Coll/Univ - General Obligation

Primary Credit Analyst:
Jessica A Matsumori, San Francisco (1) 415-371-5083; jessica.matsumori@standardandpoors.com

Secondary Contact:
Nick N Waugh, Boston (1) 617-530-8342; nick.waugh@standardandpoors.com

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Massachusetts Institute of Technology; Private Coll/Univ - General Obligation

Credit Profile		
US$550.0 mil GO bnds (Taxable Bnds) ser C due 07/01/2114		
Long Term Rating	AAA/Stable	New
Massachusetts Development Finance Agency, Massachusetts		
Massachusetts Inst of Tech, Massachusetts		
Massachusetts Dev Fin Agy (Massachusetts Institute of Technology) VRDBs ser J-1, J-2		
Long Term Rating	AAA/A-1+/Stable	Affirmed
Massachusetts Hlth & Educl Facs Auth (Massachusetts Inst of Tech) ser K,L, I,N		
Long Term Rating	AAA/Stable	Affirmed

Rationale

Standard & Poor's Ratings Services assigned its 'AAA' long-term rating to the Massachusetts Institute of Technology's (MIT) approximately $550 million series C taxable general obligation (GO) bonds. Additionally, Standard & Poor's affirmed its 'AAA' long-term rating and 'AAA/A-1+' rating on MIT's outstanding debt, some of which was issued by the Massachusetts Development Finance Agency (formerly known as the Massachusetts Health and Educational Facilities Authority). The outlook is stable.

The 'AAA' rating reflects our view of MIT's substantial endowment, incredible demand for its programs, growth in research, and consistently strong operating performance. This offsets our view of the institute's lower-than-average financial resource ratios compared to the 'AAA' category and accelerated debt issuance compared to our original expectations. The university has made significant progress toward strategic and capital plans. The institute has also completed the preliminary phase of work under the president's institute-wide Task Force on the Future of MIT Education, which will inform current and future strategic and capital initiatives for the institution.

The 'A-1+' short-term rating reflects our view of MIT's general credit strengths and considerable experience in managing its own liquidity. MIT is providing its own liquidity to support its $250 million of series J-1 (swapped to fixed rate) and J-2 variable-rate demand bonds (VRDBs). We believe MIT demonstrates sufficient liquid assets of high credit quality, largely in U.S. Treasuries, as well as a bank lines that it can use, among other things, to cover the purchase price of VRDBs if any of the bonds are tendered but not successfully remarketed. Availability of liquid assets is, in our opinion, sufficient with same-day liquidity composed of high-quality U.S. government securities and cash. In our opinion, MIT has demonstrated the policies and procedures necessary to provide self-liquidity.

More specifically, the 'AAA' rating is supported by the institute's:

- Status as a pre-eminent research institute with $1.6 billion in research revenues in fiscal year 2013;
- Strong and growing endowment and similar funds of $10.86 billion as of June 30, 2013;

- Significant demand, excellent student quality, and increasingly competitive admissions; and
- Strong operating performance, supported by good revenue diversity and the demonstrated ability to raise funds.

Offsetting factors include our view of MIT's:

- Very low financial resource ratios relative to the 'AAA' rating category with expendable resources of $11.1 billion in fiscal 2013 equal to 3.5x operations and only 3.8x pro forma debt, although we expect this to improve over time;
- General uncertainty about the future of federal grant and research funding for the sector;
- Relatively high, but still manageable, debt levels with an uneven repayment structure and a moderate average annual debt burden of 5.9%; and
- Substantial capital and strategic plans and deferred maintenance needs, with possible additional debt plans in the next few years.

We expect the series C bonds will be issued as taxable, fixed rate obligations and like MIT's existing debt, will be an unsecured general obligation of the institute. Following this issuance, MIT will have a total of $2.89 billion debt outstanding, including about $177 million drawn under a $500 million bank line of credit. We understand that the institute uses this line opportunistically and periodically for various funding purposes. MIT's debt structure includes a number of bullet maturities, which make debt service quite uneven from year to year; fiscal 2013 debt service was $142.8 million for an average debt burden of 4.5%. However, the institute's maximum annual debt service (MADS) during the next 30 years is $356 million and in our view, high at 11.2% of fiscal 2013 adjusted operating expenses while overall MADS for the organization's total debt occurs in 2111 at the maturation of its century bonds, and is $771,000 million (24.3% of fiscal 2013 expenses). If level debt service and a 30-year financing term is assumed, estimated average annual debt service of the institute's total debt (assuming a 30-year maturity, 5% interest rate, and even debt service) is approximately $188 million or a still moderate 5.9% of fiscal 2013 expenses.

MIT remains conservative in its use of variable-rate debt exposure, compared with its peers, net of swaps. Of the total pro forma debt, a small portion is variable-rate debt (15% or $427 million) and the largest portion is fixed-rate debt (85%). All debt is an unsecured general obligation of MIT. In our opinion, MIT has adequate liquidity to fund its VRDBs.

In 2013, President Reif launched an institute-wide "Task Force on the Future of MIT Education," comprised of three working groups and focused on looking at the future of higher education and MIT's role as it relates to such areas as facilities, its involvement in online and global education, and its financial model. We consider this a very proactive approach to addressing some of the long-term challenges currently facing the higher education sector and understand MIT hopes to be at the forefront of any change in the industry. As the institute addresses the findings, initiatives, and strategy articulated by this task force, we anticipate MIT will devote over $200 million per year toward capital projects and comprehensive stewardship of their facilities, engage in robust fundraising efforts, and issue upward of an additional $250 million of additional debt in the next few years. To better align with the needs of the task force, the institute recently named a new chancellor, provost, vice president for research, vice president for international activities, and added a chancellor for academic advancement. Per the institute's by-laws, Mr. Reed must step down as chairman of the MIT Corporation at age 75, and the corporation has initiated a search to identify a successor.The rest of the management and board of trustees is stable.

For more information on the university, please see the article published Oct. 28, 2013, on RatingsDirect.

Outlook

The stable outlook reflects our expectation that the MIT's extremely strong demand and financial operating performance will continue and that its robust fundraising will persist. We also expect financial resources to improve and that cash and investments to debt will exceed 500% and expendable resources to debt will exceed 400% in fiscal 2014 and continue to improve going forward.

We would have a negative view of considerable deterioration of MIT's operating performance, an inability to meet its financial projections and objectives, or dilution of financial resource measures relative to either operating expenses or debt during the next one to two years. We anticipate the university may issue an additional $250 million outside the outlook period. As the exact size, timing, and purpose of this debt is still uncertain, it has not been incorporated into this rating. We will assess the effect of any additional debt on MIT's rating as those details become more defined.

Table 1

Massachusetts Institute of Technology

	-- Fiscal Year Ended --					-- Private College & University Medians --	
Enrollment and Demand	**2014**	**2013**	**2012**	**2011**	**2010**	**Rated 'AAA' in 2012**	**Rated 'AA' in 2012**
Headcount (HC)	11,301	11,189	10,894	10,566	10,384	MNR	MNR
Full time equivalent (FTE)	11,237	11,075	10,763	10,429	10,277	11,274	3,111
Freshman acceptance rate (%)	8.2	8.9	9.7	10.1	10.7	12.0	29.0
Freshman matriculation rate (%)	72.1	70.1	64.6	63.7	64.0	49.0	35.0
Undergraduates as a % of total enrollment (%)	40.1	40.2	40.2	40.7	40.8	49.0	78.0
Freshman retention (%)	NA	97.8	97.4	97.7	97.2	97.7	95.0
Graduation rates (5 years) (%)	NA	89.2	91.3	91.0	90.9	93.3	87.7
Income Statement							
Adj. operating revenue ($000s)	NA	3,445,321	3,242,006	2,990,946	2,893,399	MNR	MNR
Adj. operating expense ($000s)	NA	3,167,303	2,996,294	2,811,446	2,612,862	MNR	MNR
Net operating income ($000s)	NA	278,018	245,712	179,500	280,537	MNR	MNR
Net operating margin (%)	NA	8.8	8.2	6.4	10.7	4.1	1.7
Change in unrestricted net assets ($000s)	NA	916,439	(18,764)	843,979	199,376	MNR	MNR
Tuition discount (%)	NA	45.5	47.7	48.7	49.1	41.4	35.9
Tuition dependence (%)	NA	16.5	16.3	16.5	16.2	24.9	48.0
Debt	Pro forma						
Outstanding debt (Par Amount)	2,887,463	2,392,663	2,419,163	2,421,653	1,674,023	MNR	MNR

Table 1

Massachusetts Institute of Technology (cont.)							
Outstanding debt ($000s)	NA	2,428,215	2,460,002	2,467,825	1,728,526	1,455,874	249,020
Current debt service burden (%)	NA	4.5	3.5	2.9	3.1	6.0	3.9
Average debt burden (%)	5.9	5.0	5.3	5.7	4.3	MNR	MNR
Financial Resource Ratios							
Endowment market value ($000s)	NA	10,857,976	10,149,564	9,712,628	8,317,321	6,614,236	987,054
Cash and investments ($000s)	NA	14,130,013	13,087,243	12,368,002	10,047,850	MNR	MNR
Unrestricted net assets ($000s)	NA	5,500,955	4,584,516	4,603,280	3,759,301	MNR	MNR
Expendable resources ($000s)	NA	11,057,197	9,844,361	9,664,145	7,623,083	MNR	MNR
Cash and investments to operations (%)	NA	446.1	436.8	439.9	384.6	807.2	341.8
Cash and investments to debt (%)	489.4	581.9	532.0	501.2	581.3	679.0	414.8
Expendable resources to operations (%)	NA	349.1	328.6	343.7	291.8	586.0	202.7
Expendable resources to debt (%)	382.9	455.4	400.2	391.6	441.0	522.9	261.1
Average age of plant (years)	NA	8.8	8.4	8.2	8.5	10.5	12.2

N.A.: not available; MNR: median not reported; Total adj. operating revenue = unrestricted revenue less realized and unrealized gains/losses and financial aid; Total adj. operating expense = unrestricted expense plus financial aid expense; Net operating margin = 100*(net adj. operating income/adj. operating expense); Tuition dependence = 100*(gross tuition revenue/adj. operating revenue); Current debt service burden = 100*(current debt service expense/adjusted operating expenses); Current MADS burden = 100*(maximum annual debt service expense/adjusted operating expenses); Cash and investments = cash + short-term & long-term investments; Expendable resources = unrestricted net assets + temp. restricted net assets - (net PPE- outstanding debt); Average age of plant = accumulated depreciation/depreciation & amortization expense; Average debt burden assumes 30 year maturity, level debt service, and 5% interest rate.

Related Criteria And Research

Related Criteria

- USPF Criteria: Higher Education, June 19, 2007
- USPF Criteria: Commercial Paper, VRDO, And Self-Liquidity, July 3, 2007
- USPF Criteria: Municipal Swaps, June 27, 2007
- USPF Criteria: Contingent Liquidity Risks, March 5, 2012

Related Research

Alternative Financing: Disclosure Is Critical To Credit Analysis In Public Finance, Feb. 18, 2014

Ratings Detail (As Of March 27, 2014)		
Massachusetts Institute of Technology taxable medium term nts Series B		
Long Term Rating	AAA/Stable	Affirmed
Massachusetts Development Finance Agency, Massachusetts		
Massachusetts Inst of Tech, Massachusetts		

Ratings Detail (As Of March 27, 2014) (cont.)		
Massachusetts Dev Fin Agy (Massachusetts Institute of Technology) rev bnds ser 2008-O		
Long Term Rating	AAA/Stable	Affirmed