McMaster University

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Rationale

The ratings on McMaster University reflect the university's stand-alone credit profile (SACP), which Standard & Poor's Ratings Services assesses at 'aa-'. The ratings also reflect our opinion of a "moderately high" likelihood that the Ontario government would provide extraordinary support in the event of financial distress.

The SACP on McMaster reflects Standard & Poor's view of the university's strong enrollment and student demand profile, good consolidated financial performance, and increasing financial resources. In our opinion, McMaster's considerable postemployment liabilities, a significant deferred maintenance backlog, and growing debt prospects partially offset these strengths.

In accordance with our criteria for government-related entities, our view of the university's moderately high likelihood of extraordinary government support reflects our assessment of its "important" role in the province, given that postsecondary education is one of Ontario's priorities in both expenditure and mandate (after health care and school boards), and that there are no viable private alternatives. It also reflects the province's oversight, program approval rights, and tuition regulation over the university, which suggests a "strong" link to it. We rate the university 'AA-' in line with the 'aa-' SACP. This is equal to the rating on Ontario, although our outlook on the province is negative. Our outlook on McMaster is stable because the independence of the university's governing bodies, its considerable financial resources, and a track record of non-interference from the province convince us that there is a measurable likelihood that it would not default on its obligations under a provincial stress scenario in which all government funding was temporarily disrupted. McMaster's ability to mitigate a disruption in government funding relates to its relatively low debt burden and high financial resources. Should the university's debt rise to such levels that we believe it could default on its debt obligations under a provincial stress scenario, we could cap the ratings on it to those on the province; however, we think it is unlikely to happen during our outlook horizon.

McMaster's credit profile benefits from stable demand and enrollment, in our opinion. The university's full-time equivalent students (FTEs) increased 1.3% to 28,157 FTEs in fall 2014, with growth in both graduate and undergraduate enrollment. In our opinion, student quality metrics continued to be strong and compare well with those of similarly rated Canadian peers, except for its matriculation rate, which was low compared with that of almost all peers. The acceptance rate (offers-to-applicants) was 59% in fall 2014. The matriculation rate was stable at 26%. The average entry grade and the retention rate of first-year students were 87% and 90%, respectively.

McMaster's consolidated financial performance remained what we consider good in fiscal 2014. It posted an adjusted consolidated surplus of 5.0% of total adjusted expenses, below the 6.9% recorded in fiscal 2013. This primarily reflects continuing pressure on provincial budgets, a tighter tuition framework, and flatter FTE. Adjusted for noncash items related to changes in the fair value of investments and employee future benefits (but including amortization and depreciation revenues and expenses), the university recorded a modified accrual surplus of 9.9% of adjusted operating expenses, up from the 8.2% posted a year earlier. Although McMaster has budgeted for slight operating fund deficits in
the next two years (according to its fiscal 2015 budget), we believe the university will maintain adjusted consolidated surpluses, although slightly below 2014 levels given the operating pressures it faces.

Similar to many Canadian universities, McMaster faces significant postemployment liabilities, despite pension assets recording very positive investment returns. Based on the 2014 actuarial valuation, its defined benefit pension solvency deficit stood at C$197 million, for which the province granted it solvency relief until fiscal 2018. The university estimates the annual solvency special payments will be C$27.9 million in fiscal years 2019-2022 and C$11.6 million in fiscal 2023, when it forecasts that it will eliminate the deficit. McMaster expects to make going-concern deficit special payments of C$20.8 million (fiscal 2015) and C$30.4 million (fiscal years 2016 and 2017).

We believe the university's significant deferred maintenance gap could add pressure to its operating performance if not contained. Maintenance and upgrades backlog totaled C$324 million in fiscal 2014. McMaster has taken steps to contain this -- it has approved a base funding increase in fiscal 2014 and will add C$2 million per year until it reaches C$10 million per year. The university also expects to see its portion of provincial funding increasing in the near term, in light of the province's commitment to supplement its facility renewal funding across the system during fiscal years 2016-2020.

We expect McMaster's debt repayment requirements will increase in the next two years if the university materializes its plan to issue up to C$120 million of additional debt. This will finance the significant capital projects and deferred maintenance needs. Although McMaster's debt burden has historically been low compared with that of its domestic peers, we estimate that new debt issuance would bring some of its metrics more in line with those of rated Canadian universities. We believe McMaster's debt burden will remain manageable given its significant debt service coverage ratio of 13.7x (principal and interest) in fiscal 2014. The university had about C$159 million of gross debt at fiscal year-end 2014 (April 30). This equaled 18% of adjusted expenses or about $5,724 per FTE, while debt service costs were only 1% of adjusted expenses in 2014.

We have used "Principles Of Credit Ratings" in conjunction with "U.S. Public Finance: Higher Education" as our criteria foundation for our analysis of McMaster's creditworthiness. We feel that there is a sufficient degree of similarity between U.S. and Canadian public university systems such that we believe the U.S. higher education criteria is an appropriate methodology for evaluating Canadian universities' credit quality.

**Liquidity**

McMaster has the third-largest endowment among Ontario universities, after University of Toronto and Queen's University. The endowment had a fair value of C$533 million at April 30, 2014, up 11% from the previous year. It has significantly increased during the past 10 years, by about 59%. Consolidated cash and investments totaled C$1 billion, up 13% from fiscal 2013. Total cash and investments represented 115% of adjusted operating expenditures, or 6.4x total debt.

Unrestricted financial resources (internally restricted net assets and internally restricted endowments) stood at C$185 million, up from C$152 million in fiscal 2013. This equaled about 116% of debt and 21% of adjusted operating expenses. With new debt, we expect these ratios might fall. However, we expect that the university will maintain strong liquidity to support its debt burden throughout our outlook horizon and provide sufficient cushion to weather any likely medium-term stress scenario.
Outlook

The stable outlook reflects our expectations that, within our two-year outlook horizon, McMaster's consolidated financial performance will remain strong, the university's unrestricted financial resources will continue to increase, and its debt burden will remain manageable. We could revise the outlook to negative or lower the ratings if consolidated deficits were to emerge because of a significant reduction in government grants or substantial pressure from rising pension deficits; or if McMaster's debt burden were to increase considerably above the C$120 million that the university envisages. Conversely, significantly reduced unfunded postemployment liabilities, and a material rise in unrestricted financial resources could result in an upward revision to the outlook or the ratings.

Government-Related Entities Methodology: Moderately High Likelihood Of Extraordinary Provincial Government Support

In accordance with our criteria for government-related entities, our view of McMaster's moderately high likelihood of extraordinary government support reflects our assessment of its important role in the province, given that postsecondary education is one of Ontario's top priorities in both expenditure and mandate (after health care and school boards), and there are no viable private alternatives. Our view also reflects the university's role as one of Canada's most reputable, and its significant research capacity. The province's oversight, program approval rights, and tuition regulation over McMaster suggests a strong link to it. Also supporting the link is the university receiving 27% of total revenues from provincial operating grants, and the province's appointment of some board members. Although Ontario is facing significant fiscal challenges and projects large provincial deficits, we believe that postsecondary education will remain a top priority for the province and that overall support for the university sector will be stable.

Following our "U.S. Public Finance: Higher Education" and "Principles Of Credit Ratings" criteria, we have assessed McMaster's SACP at 'aa-'. We rate the university 'AA-' in line with the 'aa-' SACP, which is equal to the rating on the province although our outlook on the province is negative. Our outlook on McMaster is stable because the independence of its governing bodies, its considerable financial resources, and a track record of non-interference from Ontario convince us that there is a measurable likelihood that it would not default on its obligations under a short-lived provincial default scenario in which all government funding was temporarily disrupted.

Enterprise Profile

Background

Founded in 1887, McMaster is a research-intense, medical-doctoral university, dedicated to teaching, research, and service. It is in Hamilton, the fifth-largest city in Ontario. The university offers a variety of undergraduate and graduate degrees across its six faculties (engineering, humanities, sciences, business, health sciences, and social sciences). It has regional campuses in Burlington, Waterloo, and St. Catharines, Ont. It is also a member of the U15, a group of leading research-intensive universities in Canada.
Management
McMaster has a bicameral government composed of a board of governors and a senate. The board consists of 37 governors, six of which the province appoints. It is responsible for the university's conduct, management, and control of the university and of its property, revenues, business, and affairs. The senate exercises general control and supervision over academic affairs.

We expect the senior management team to be stable in the next two years. The university prepares externally audited financial statements, which have been unqualified, and operating and capital budget documents are robust and transparent. It approves annually three-year plans for its operating budget and has a number of transparent financial policies in place, including investment and debt policies.

Demand and student quality
In fall 2014, McMaster had 28,157 FTEs, up 1.3% from the previous year, with growth in both graduate and undergraduate enrollment. In fiscal 2014 (fall 2013), 88.6% of students (graduates and undergraduates) were from Ontario, while 3.3% came from the rest of Canada and 8.1% were international. McMaster's historical enrollment growth has been strong, in our view. The university expects it will be limited to about 1% in the next two years, owing to limited space constraints.

McMaster's student quality metrics remain solid, in our opinion. The acceptance rate (offers-to-applicants) was 59% in fall 2014, in line with the five-year average. The matriculation rate was stable at 26%, in line with the long-term average. The average entry grade and the retention rate of first-year students were 87% and 90%, respectively; these were fairly stable in the past five years. Overall, the university's student quality metrics compare well with those of similarly rated Canadian peers, except for its matriculation rate, which was low compared with that of almost all peers.

Financial Profile

Financial results
McMaster's consolidated financial performance remained good in fiscal 2014, in our opinion. It posted an adjusted consolidated surplus of 5.0% of total adjusted expenses, below the 6.9% recorded in fiscal 2013. This primarily reflects continuing pressure on provincial budgets, a tighter tuition framework, and flattening FTEs. Adjusted for noncash items related to changes in the fair value of investments and employee future benefits (but including amortization and depreciation revenues and expenses), the university recorded a modified accrual surplus of 9.9% of adjusted operating expenses, up from 8.2% a year earlier.

Total revenues increased 3.6% in fiscal 2014 on higher student fees, investment income, donations and other income. Total government grants decreased 3%. A decrease in research grants and contracts more than offset modest growth in operating grants. Government grants are McMaster's biggest revenue source, representing 44.5% of total revenues in fiscal 2014, followed by tuition fees, at 22.0%. Ontario operating grants represented 27.3% of the university's total revenues. The provincial government has capped tuition increases at 3% (for domestic undergraduate students) annually and its own deficits will constrain its ability to provide increased support for universities in the province. However, McMaster's strategy of increasing international enrollment could provide some uplift to revenues, given that tuition rates for international students are unregulated. On the other hand, we think it is unlikely that provincial
operating grants will decline significantly in the next two years, given postsecondary education's vital public role.

In fiscal 2014, McMaster's total expenses rose 5.5% from fiscal 2013. Similar to its rated Canadian peers, salaries and benefits continue to be McMaster's biggest source of budgetary pressure and most significant expenditure (they typically represent 60%-65% of total expenses). They increased 7.0% in fiscal 2014, reflecting negotiated increases and more faculty and staff; other non-employee-related costs rose 2.7%.

McMaster's management recently implemented new financial models, policies, and IT tools. It is also adopting a new budget model for fiscal 2015, which it expects will contribute to greater transparency and facilitate long-term planning. Under the new budget model, income flows directly to the faculties. It forecasts its 2015 operating fund deficit will be smaller than the C$33 million budgeted. Although McMaster has budgeted for slight operating fund deficits in the next two years (according to its fiscal 2015 budget), we believe the university will maintain adjusted consolidated surpluses, although slightly below 2014 levels given the operating pressures it faces.

Pension
McMaster has two defined benefits plans that provide pension and other postemployment benefits to most of its full-time employees. As of the most recent actuarial valuation (July 1, 2014), its going-concern salaried pension plan deficit was about C$252 million, up 38.5% from C$182 million at the previous actuarial valuation (July 1, 2011). This was primarily the result of an asset smoothing adjustment, actuarial assumptions changes and the cost-of-living adjustment, which excellent investment returns and employer special payments partially offset. The solvency deficit decreased 26.2% to C$197 million at July 1, 2014 from C$267 million at the previous actuarial valuation.

In fiscal 2014, McMaster's accrual deficit (on an accounting basis) for its registered pension plans was C$476.8 million, down 12.6% from C$545.6 million in fiscal 2013. The university also had a C$250.8 million nonpension postemployment deficit. Nonpension postemployment benefits include extended medical and dental coverage. Because there is no legislative requirement to maintain assets against these liabilities (unlike pensions), the university funds these on a pay-as-you-go basis, similar to other universities.

In fiscal 2014, McMaster made going-concern deficit payments of C$20.8 million and will pay the same amount in fiscal 2015. It projects these payments will increase to C$30.4 million per year in fiscal years 2016 and 2017. In early 2015, McMaster has received acceptance for stage 2 of the province's solvency relief. Ontario has allowed the university to defer the start for its net solvency payments for three additional years, to July 1, 2018. It estimates the annual solvency special payments under the amended stage 2 solvency relief will be C$27.9 million in fiscal years 2019-2022 and C$11.6 million in fiscal 2023, when it expects to eliminate its solvency deficit.

McMaster took several initiatives to manage its pension deficit, including increased employee contributions and the introduction of a defined contribution group registered retirement savings plan for new employees. The provincial government is studying initiatives regarding a university sector-wide jointly sponsored pension plan. Although we see these initiatives as a positive development, they are forward-looking and would not address the going concern and solvency deficits, which reflect past experience.
Capital program

In fiscal 2014, McMaster's total capital expenditures totaled C$101 million, down 21% from fiscal 2013. The decrease is primarily due to the completion in fiscal 2013 of a C$15 million capital project relating to an integrated enterprise-wide resource system (the Mosaic project). Of the 2014 total capital spending, 49.4% was for completed buildings projects and construction in progress, 44.5% for computers, software, furnishings and equipment, and 5.1% for library materials.

The university has updated its multiyear capital projections and is reviewing its financing options. Under the 2015 revised plan, McMaster estimates that total spending over the next ten years would increase by about C$209 million to C$1.2 billion. This is primarily due to either a change in value of existing projects, or to new projects. Funding will primarily include internal and external sources, including new debt.

The university's increased spending on deferred maintenance projects resulted in a slight decrease in its backlog, to C$324 million in fiscal 2014, from C$335 million a year earlier. McMaster has approved a significant base funding increase in fiscal 2014 and will add C$2 million per year until annual operating based funding reaches C$10 million. The university is also expecting to see its portion of provincial funding growing in the near term, in light of Ontario's commitment to supplement its facility renewal funding across the system from fiscal years 2016-2020.

Debt

McMaster's gross debt was C$159.1 million at fiscal year-end 2014, virtually unchanged from the previous year-end. The debt includes a C$120 million bullet debenture due 2052, a bank term loan and a mortgage totaling C$17.8 million, and C$21.3 million of debt on behalf of the First Longwood Innovation Trust, for which McMaster guarantees the debt service payment in case of default. The university also has a long-term obligation for a nuclear reactor decommissioning which equaled C$9.6 million in fiscal 2014. Trust funds of C$9.7 million have been accumulated to offset this obligation.

To repay its debt, McMaster sets aside principal payments into a self-imposed sinking fund. In fiscal 2014, these assets totaled C$13.7 million; the university invests these in its investment pool (endowments).

McMaster's total debt represented 18% of adjusted operating expenses and C$5,724 per FTE, which were slightly down thanks to higher FTE numbers. Removing the impact of noncash amortization and depreciation revenues and expenses, the adjusted debt service coverage ratio in fiscal 2014 was 13.7x. Interest expense during the year was a modest 1% of adjusted expense. These ratios reflect a lower debt burden compared with those of McMaster's domestic peers. However, as the university's capital projects are expanding, it is also considering issuing up to C$120 million of additional debt. If realized, we estimate the university's debt burden could increase in the next two years, but will still compare fairly well with those of its peers. Management expects that with the new debt issuance, debt burden metrics will stay well within its debt management policy limits.

Contingent liabilities

McMaster has guaranteed the debt service obligations of its research park, The First Longwood Innovation Trust, in the event of default. This equals up to C$23 million, which we include in our debt calculation. We believe that other contingent liabilities (insurance exchange, legal claims, and leases) do not have a material impact on the university's financial profile.
Financial resources
McMaster's endowment was C$533 million in fiscal 2014, up 11% from the previous year. It has significantly increased over the past 10 years, by about 59%. The university has a conservative endowment draw, in our view, with an annual spending rate targeted at 4% of the endowments' five-year average market value. In fiscal 2014, the endowments paid out C$16.5 million, which was in line with the previous years' spending.

Unrestricted financial resources available for debt service stood at C$185 million which was 22% higher than the previous year's total of C$152 million. This equaled C$6,647 per FTE and 21% of adjusted operating expenses, and covered about 116% of debt. These ratios were slightly weaker than those of most McMaster peers; however, we believe they remain fairly strong. At fiscal year-end 2014, consolidated cash and investments totaled C$1 billion, up 13% from fiscal 2013. Total cash and investments represented 115% of adjusted operating expenditures, or about 6.4x total debt.

The university's investment portfolio in fiscal 2014 included 47.3% of Canadian and international equities, 35.8% of fixed-income securities and other, and 16.9% of cash. As of April 30, 2014 endowment fund's annual return (net of investment fees and expenses) was 14.7%, which was a net improvement from the previous year's return of 10.1% and 6.5% target return. Endowment per FTE has also strengthened significantly and in 2014, it was up 10% at C$19,190.

Fundraising
McMaster raised C$73.5 million in 2014, largely exceeding its C$21 million annual internal fundraising target. Of the total, Michael DeGroote donated C$50 million. The gift will support increased focus on national and international health leadership.

Similar to other universities, the majority of the funds the university raises will likely have external restrictions; however, we believe that even these provide strength, by producing spendable endowment income. Based on donor direction, McMaster plans to allocate funds raised towards research (51%), equipment, capital expenditures and operations (22%), community service, academic divisions and library (15%), and student awards (12%).

<table>
<thead>
<tr>
<th>McMaster University -- Peer Comparison</th>
<th>--York University--</th>
<th>--University of Guelph--</th>
<th>--University of Western Ontario--</th>
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<tr>
<td>Rating at Dec. 31</td>
<td>AA-/Stable/--</td>
<td>AA-/Stable/--</td>
<td>A+/Stable/--</td>
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<tr>
<td>Enrollment and demand</td>
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<td>Full-time equivalent (FTE)</td>
<td>27,796</td>
<td>27,518</td>
<td>48,446</td>
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<tr>
<td>Acceptance rate (%)</td>
<td>59</td>
<td>59</td>
<td>83</td>
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<tr>
<td>Matriculation rate (%)</td>
<td>26</td>
<td>26</td>
<td>N.A.</td>
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<tr>
<td>Undergraduate FTEs as % of total FTEs</td>
<td>87</td>
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### Income statement

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<th>972,903</th>
<th>938,829</th>
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<td>Adjusted operating revenues (C$000s)</td>
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<tr>
<td>Adjusted operating expenses (C$000s)</td>
<td>884,932</td>
<td>867,502</td>
<td>1,012,517</td>
<td>985,881</td>
<td>668,516</td>
<td>667,072</td>
<td>1,044,229</td>
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<tr>
<td>Estimated operating gain / loss as % of operating expenses (%)</td>
<td>9.9</td>
<td>8.2</td>
<td>0.4</td>
<td>-0.3</td>
<td>10.2</td>
<td>7.9</td>
<td>5.0</td>
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<td>Tuition and student fee dependence (% of adjusted revenues)</td>
<td>22.0</td>
<td>21.3</td>
<td>46.9</td>
<td>46.1</td>
<td>31.0</td>
<td>30.7</td>
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### Debt

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<th>160,271</th>
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<td>Debt outstanding (C$000s)</td>
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<td>Current debt service burden (% of adjusted expenses)</td>
<td>1.0</td>
<td>1.1</td>
<td>2.0</td>
<td>2.0</td>
<td>3.3</td>
<td>3.0</td>
<td>2.3</td>
<td>1.8</td>
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<td>Current adjusted debt service coverage (x)</td>
<td>13.7</td>
<td>11.7</td>
<td>2.5</td>
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<td>4.5</td>
<td>3.9</td>
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### Financial resource ratios

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<th>533,412</th>
<th>480,472</th>
<th>414,901</th>
<th>372,321</th>
<th>290,035</th>
<th>251,835</th>
<th>509,659</th>
<th>431,853</th>
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<tr>
<td>Total endowment (C$000s)</td>
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<td></td>
<td></td>
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<td></td>
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<td></td>
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<tr>
<td>Endowment per FTE (C$)</td>
<td>19,190</td>
<td>17,460</td>
<td>8,564</td>
<td>7,604</td>
<td>13,461</td>
<td>11,635</td>
<td>17,310</td>
<td>14,930</td>
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<tr>
<td>Cash and investments (C$000s)</td>
<td>1,016,536</td>
<td>897,273</td>
<td>836,990</td>
<td>677,589</td>
<td>647,614</td>
<td>554,468</td>
<td>1,199,212</td>
<td>1,074,178</td>
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<tr>
<td>Cash and investments to adjusted expenses (%)</td>
<td>114.9</td>
<td>103.4</td>
<td>82.7</td>
<td>68.7</td>
<td>96.9</td>
<td>83.1</td>
<td>114.8</td>
<td>108.8</td>
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<tr>
<td>Cash and investments to debt (%)</td>
<td>639.0</td>
<td>559.8</td>
<td>206.6</td>
<td>221.5</td>
<td>275.6</td>
<td>246.3</td>
<td>386.5</td>
<td>339.7</td>
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<td>Adjusted unrestricted financial resources (UFR; C$000s)*</td>
<td>184,751</td>
<td>151,711</td>
<td>213,625</td>
<td>133,016</td>
<td>381,953</td>
<td>229,570</td>
<td>496,213</td>
<td>391,981</td>
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<tr>
<td>Adjusted UFR to adjusted expenses (%)</td>
<td>20.9</td>
<td>17.5</td>
<td>21.1</td>
<td>13.5</td>
<td>57.1</td>
<td>34.4</td>
<td>47.5</td>
<td>39.7</td>
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Adjusted UFR to debt (%): 116.1, 94.7, 52.7, 43.5, 162.5, 102.0, 159.9, 124.0

*Adjusted UFR equals adjusted internally restricted net assets plus internally restricted endowments. FTE—Full-time equivalent. N.A.—Not available.

Related Criteria And Research

Related Criteria

- Rating Government-Related Entities: Methodology And Assumptions, March 25, 2015
- Principles Of Credit Ratings, Feb. 16, 2011

Ratings Detail (As Of May 27, 2015)

McMaster University
Issuer Credit Rating: AA-/Stable/--
Senior Unsecured: AA-

Issuer Credit Ratings History
08-Dec-2010: AA-/Stable/--
09-Sep-2002: AA/ Stable/--

*Unless otherwise noted, all ratings in this report are global scale ratings. Standard & Poor's credit ratings on the global scale are comparable across countries. Standard & Poor's credit ratings on a national scale are relative to obligors or obligations within that specific country. Issue and debt ratings could include debt guaranteed by another entity, and rated debt that an entity guarantees.
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