McMaster University

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Rationale

The ratings on McMaster University, in Hamilton, Ont., reflect Standard & Poor's Ratings Services' view of the university's strong enrollment demand profile, good budgetary performance, and low debt burden. In our opinion, McMaster's rising unfunded postemployment liabilities remain a credit concern, but we believe the university is taking steps to mitigate this. In addition, McMaster has lower unrestricted financial resources than those of many rated peers. The ratings also reflect our assessment of the tight operating environment in which Canadian universities and their supporting provincial governments operate.

McMaster benefits from what we consider to be strong demand and a good research profile, due to its broad range of program offerings, high research intensity, and close proximity to the Greater Toronto Area. Its enrollment was 26,353 full-time equivalent students (FTEs) in fiscal 2013 (year ended April 30), exceeding fiscal 2012's enrollment by 1.6%. We believe student quality is good; the average entering grades are high, as are graduation rates.

McMaster's management has been effective in controlling expenditures, resulting in what we view as good budgetary performance. However, the university has budgeted for operating fund (which accounts for 58% of fiscal 2014 total expenditures) deficits through 2015, although the operating budgets are balanced before one-time expenses. In addition, McMaster has taken steps to improve its unfunded postemployment benefits, including increasing the employee contribution rate for the pension plans and changes to other postemployment benefits.

In our opinion, the university exhibits prudent debt management and benefits from a low debt burden. McMaster's debt was C$139.4 million or C$5,376 per FTE at fiscal 2012 year-end. It has steadily reduced its debt stock in every year but one since going to market with its first and only debenture issue in September 2002. McMaster has the lowest debt burden of its rated peers, although we believe it may issue debt to fund capital and strategic projects. In addition, the university has established its own debt-monitoring policy to guide financial planning, internally financed its capital projects, and created voluntary debt retirement funds for its debenture.

McMaster has large unfunded postemployment benefits, including two defined benefit pension plans. While the university has taken steps to reduce these liabilities, their ongoing funding requirements put pressure on its budget. McMaster's unfunded registered pension liability increased to C$281.5 million (up from C$211.0 million in 2011) and its total unfunded postretirement benefit obligation is C$571.0 million. The university will make special payments of C$20.8 million per year in fiscal 2013 and 2014 in respect of its pension liability and will continue to pay the other postemployment liabilities as they arise.

McMaster's unrestricted financial resources (internally restricted endowment plus internally restricted net assets) are lower than many of its rated peers. The university's unrestricted financial resources have risen in the past two years and now stand at C$123 million, or C$4,743 per FTE; however, they remain well below their highest levels at C$235.9 million (or C$10,299 per FTE) in fiscal 2007 and below the peer average. The decline was in part a result of the...
university's decision to use its internal resources to fund some one-time operating costs (going-concern pension deficit and early retirement program in fiscal 2008) and internal financing of loans for capital projects. While internal financing of capital projects has kept debt at a relatively low level, it also limited McMaster's financial flexibility. If the university continues to finance capital and strategic projects through internal loans, we would expect financial flexibility to remain limited. However, if it were to finance capital and strategic projects through external borrowing this could increase financial flexibility as well as the debt burden.

Outlook

The stable outlook reflects our expectation that McMaster's student demand and research profile will remain strong and that it will continue to generate consolidated surpluses and maintain its unrestricted financial resources around current levels. Furthermore, we assume the Province of Ontario will not significantly cut the university's funding without providing greater tuition-setting flexibility. Standard & Poor's could lower the ratings if these assumptions are not met, or if we downgrade the province. Conversely, we could raise the ratings if McMaster's unrestricted financial resources rise to their former levels and debt remains relatively low.

Government-Related Entity Methodology

In accordance with our criteria for government-related entities, our view of a "moderately high" likelihood of extraordinary government support reflects our assessment of McMaster's "important" role in the province, given that postsecondary education is the top of Ontario's priorities in both expenditure and mandate after health care and primary and secondary education. The assessment also reflects our view of the university's strong reputation in the country and its significant research capacity. In our opinion, the provincial oversight and directive McMaster receives through tuition regulation and program approval suggests a "strong" link with Ontario. Also supporting this view is that provincial operating grants account for a material portion of the university's operating revenues.

The government-related entity analysis incorporates our opinion of Ontario ongoing financial support as well as McMaster's public policy role. Grants from senior levels of government account for 46% of the university's total revenues. The province's large operating deficits have reduced its budgetary flexibility, and we expect financial support for universities could be constrained in the medium term. Nevertheless, we believe that Ontario will continue to provide solid financial support to universities and we expect that postsecondary education will continue to play a vital public policy role.

Background

Founded in 1887, McMaster is a research-intense, doctoral university in Hamilton, the fifth-largest city in Ontario. McMaster is the fourth-largest of 20 public universities in the province and has regional campuses in Burlington, Waterloo, and St. Catharines. It draws students primarily from Ontario. In fiscal 2012 (the most recent data available), 89.6% of students (graduates and undergraduates) were from Ontario, while 3.3% came from the rest of Canada and 7.2% were international students. The university celebrated its 125th anniversary in 2012.
Strong Enrollment Growth Supports Demand Profile

We believe McMaster's strong research profile contributes to its enrollment growth and strong demand profile. It was ranked as one of Canada's top research universities (achieving sixth place in a 2012 Infosource Inc. report). Moreover, McMaster has garnered international attention, placing fifth in Canada and within the top 100 universities internationally in the Times Higher Education rankings. The university's fall 2012 (fiscal 2013) FTE enrollment was 26,353, up 1.6% from the previous year. Its selectivity (offers divided by applicants) was 59% in the fall 2012, and its yield (registrants divided by applicants) was 15%. Average entering grades for McMaster are high, in our opinion, at 86.3%. We expect enrollment demand and selectivity to remain strong.

Also supporting the university's demand profile is its high first year retention rate, high graduation rate and good faculty quality. McMaster's retention is what we view as high, with 87% of first-time full-year undergraduate students of the 2010 entering class continuing to their second year of study. We believe its graduation rate is also high, at 83.5%. In 2012 (most recent data available), 91% of the full-time faculty held a doctoral degree.

Strong Operating Performance

In recent years, McMaster has improved its budgetary performance and made positive changes to its financial management. Both are contributing to a stronger credit profile, in our opinion. In fiscal 2012, the university posted a consolidated surplus of $9.1 million or 1% of revenues. Historically, McMaster has prepared separate budgets for its six funds, with the university's core operating budget being the most significant at about 58% of its forecast 2013 consolidated revenues (its other funds relate to ancillary, research, trust, endowments, and capital). McMaster's fiscal 2013 consolidated budget (approved June 2012) included budgeted operating fund deficits of C$27 million, C$6.5 million, and C$4.7 million in 2013, 2014 and 2015, respectively. These deficits are after one-time spending and were not indicative of a structural deficit, in the university's view. It is now forecasting a reduced operating fund deficit of C$14.4 million (including one-time spending), and a consolidated GAAP surplus of C$12.2 million for fiscal 2013.

In 2012, McMaster's total revenue was C$877.9 million, an increase of 2.4% from the previous year, while expenses rose to C$868.8 million (up 4%). Operating and research grants from the provincial and federal governments are the source of 46% of the university's revenues (C$404 million). Other important sources of revenues are tuition at 21% (C$184.3 million) and ancillary sales and services at 8% (C$69.8 million) of revenues. Staff compensation and benefits are the largest expense, at C$539.3 million or 62% of total expenses.

Ontario universities are facing funding challenges both in terms of the financial support received from the provincial government and their ability to increase tuition rates. We believe the Ontario government generally provides good support to its universities; however, the province is projecting a deficit of C$9.8 billion for 2012-2013 and doesn't aim to return to balance until 2017-2018. While base operating and deferred maintenance grants have been largely stable, low economic growth forecasts suggest that there will be little room for Ontario to increase its support of universities and still meet this target. Moreover, the Government of Ontario recently announced a new tuition framework which caps yearly increases for undergraduate tuition fees at 3% (down from 5% under the previous framework), and caps
the increases in graduate and professional fees at 5% (down from 8%). The new framework will be effective for four years starting in fiscal 2014. For planning purposes, McMaster had already assumed a 3% increase in domestic tuition prior to the announcement and had incorporated that assumption into its budget.

Other financial management initiatives
The university is adopting a new budget model for fiscal 2015. This new model will be partially activity-based and will allocate revenues to the faculties that generate income through their activities. McMaster believes the new budget model will contribute to greater transparency and facilitate long-term planning. The university also updated its debt policy in 2012. In 2013, it approved and began implementation of a system renewal initiative that will support students, research human resources, finance, and business intelligence, and help the university to standardize and simplify its processes. Also in 2013, management enhanced its long-term capital planning process and issued three key reports aimed at a more integrated approach, entitled Facilities Capital Plan, Energy Management Plan, and Asset Management Plan.

New Debt Under Consideration
McMaster has the lowest debt level (per FTE) of its peers, which supports its credit profile, in our opinion. In fiscal 2012, the university's debt totaled C$161.3 million and included C$139.4 million of long-term debt and a C$21.9 million loan guarantee. This represented C$6,221 per full-time equivalent and 19.1% of adjusted revenues (Standard & Poor's-calculated). McMaster's debt service coverage ratio rose to 4.6x in fiscal 2012 above the average of its peers at 3.9x, and up from 2.6x in fiscal 2011.

The university's long-term debt consists mainly of a C$120 million debenture, with principal repayment in 2052. It also includes two bank loans and a mortgage, which total C$19.4 million. McMaster has also guaranteed the debt service obligations of its research park (The First Longwood Innovation Trust) up to C$23 million. The university has indicated that it is reviewing its capital and strategic priorities and may consider issuing additional debt in the next two years.

McMaster also has two other long-term obligations, the decommissioning of its nuclear reactor and two interest rate swap agreements, which total C$15.8 million. Trust funds of C$7.7 million accumulated for the purpose largely offset the decommissioning obligation, which was valued at C$8.7 million at the end of April 2012.

The university's practice of establishing off-setting sinking funds diminishes its debt burden somewhat, including one sinking fund set up to repay the bond issue outstanding (valued at C$10.8 million at fiscal year-end). Payments to the sinking funds are voluntary. Accordingly, we include the sinking funds in internally restricted net assets, but do not consider them in our calculation of its debt burden.

Postemployment Liabilities Remain High
Many Canadian universities suffered erosion in the funded status of their pension plans in the past few years. McMaster, which maintains a defined-benefit plan as well as other postemployment liabilities, was no exception. The university has made considerable gains in managing the growth of the postemployment liabilities, such as changes in
plan design, revised eligibility rules for some new employees, the introduction of a group registered retirement savings plan for certain new employees, and increased employee contributions. Nevertheless, the funding deficit remains very large and will continue to pressure the budget greatly in the medium term.

In fiscal 2012, McMaster's pension assets continued to increase following the recession; however, a large unfunded liability remains. While the fair value of plan assets rose to C$1.20 billion from C$1.15 billion in 2012, the university estimated that its unfunded pension liability in its registered pension plans has grown to C$281.5 million, from C$211 million in 2011. Moreover, McMaster's total unfunded postretirement liability (which is primarily attributable to pensions and health benefits) stands at C$570.7 million in fiscal 2012, up considerably from C$481 million in 2011, and is one of the highest among its rated peers.

Recent solvency relief reduced payments temporarily

Until 2011, Ontario required institutions to amortize their plans' going-concern deficits over 15 years and solvency deficits over five. However, in response to the rising number of institutions with large plan deficits, it announced regulations to partially relax the more punitive solvency amortization requirement. Under the new regulations, the province requires institutions that want solvency relief to follow a two-stage process. In the first stage, institutions must submit a funding plan that includes estimated savings targets to improve their plans' sustainability in the long term. If accepted, institutions will receive a three-year delay on their solvency amortization payments (the solvency payment exemption period), although they must pay deficit interest and amortize any going-concern deficits over 15 years. At the end of three years, Ontario will require institutions to submit a report that measures progress against the original savings targets. If deemed satisfactory, the province will permit institutions to take advantage of the second stage, which lengthens institutions' required amortization period of solvency deficits to 10 years from five.

McMaster received stage 1 relief in 2012 in respect of both its hourly and salaried pension plans and is deferring its significant solvency payments. However, even with stage 1 relief, the university is facing pension special payments of C$20.8 million in fiscal 2013 and 2014 (compared with C$59.5 million without solvency relief). It plans to apply for stage 2 relief. It is planning on building a reserve to help mitigate the budgetary effect of the solvency payments, which it will begin making in fiscal 2016. The payments will be based on the pension funds' next actuarial valuation, which must be filed based on July 1, 2014, estimates.

Financial Assets Are Rising

McMaster's financial assets, which include its endowment funds and internally restricted assets, have increased in value in the past two years, but remain below both their historical high levels and the average level of their peers. The university's endowment funds stood at C$445.4 million in fiscal 2012, up 0.2% from the previous year, while its internally restricted financial assets were C$13.2 million, up 106%. McMaster's unrestricted financial resources were C$123 million in 2012, up 1.4% from 2011. This represents 76% of debt outstanding, which, while strong, is slightly below the average of its peers.

To achieve economies of scale, McMaster pools its financial assets into one common investment pool. Ongoing volatility in the capital markets continued to affect the investment fund returns in 2012. The fund's return was positive 10.2% as of Dec. 31, 2012, compared with negative 0.9% in 2011, positive 9.7% in 2010, and positive 15.8% in 2009.
The volatility could affect the university's ability to maintain the annual allocations for spending from some endowments. McMaster's payout policy for its endowed funds is an annual allocation of 4.0% of a five-year average of the endowment's market value (another 1% goes to administration). The university also manages a pool of financial assets invested in short-term assets. This fund is primarily for working capital needs.

McMaster's fundraising efforts support the growth of financial assets. In 2012, the university surpassed its fundraising targets by raising C$23.8 million in new pledges and gifts and C$6.5 million in discounted future gifts.

Current Capital Plans Are Unlikely To Put Pressure On The Ratings

McMaster undertakes a five-year capital planning exercise, and gives priority to projects that are mission-critical or self-supporting. Priorities for 2012 and 2013 include completion of the McMaster Automotive Resource Centre (C$21.6 million) and the beginning of the downtown McMaster Health Campus (C$84.6 million). In addition, the C.R. Wilson Hall for Humanities and Social Science (C$65.0 million) is to begin construction once planning is finalized and the board gives approval. The university historically used a revolving fund composed of unrestricted surpluses and residual amounts from the 2002 bond issue not permanently assigned to building projects to fund some capital expenditures. However, it could use external borrowing to fund future capital and strategic projects.

Deferred maintenance has been a challenge for McMaster. The university estimates its deferred maintenance was approximately C$150 million in 2012. While it does receive funding from the province for maintenance, it is insufficient to cover all deferred maintenance costs. To address its maintenance needs, McMaster has allocated an additional C$45 million over five years for deferred maintenance projects.
### McMaster University--Peer Comparison (cont.)

<table>
<thead>
<tr>
<th>Consolidated surplus (for calculating DSCR; %)</th>
<th>5.3</th>
<th>7.1</th>
<th>4.9</th>
<th>4.9</th>
<th>8.6</th>
<th>8.3</th>
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<tbody>
<tr>
<td>DSCR (interest and principal; x)</td>
<td>4.6</td>
<td>2.6</td>
<td>2.3</td>
<td>1.8</td>
<td>3.09</td>
<td>1.86</td>
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<tr>
<td>DSCR (interest only; x)</td>
<td>5.2</td>
<td>5.9</td>
<td>2.4</td>
<td>2.3</td>
<td>5.09</td>
<td>4.60</td>
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<td>Total debt</td>
<td>161,300</td>
<td>174,143</td>
<td>306,511</td>
<td>310,941</td>
<td>204,200</td>
<td>185,060</td>
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<td>Unfunded postemployment liabilities</td>
<td>570,656</td>
<td>480,964</td>
<td>501,149</td>
<td>361,997</td>
<td>741,327</td>
<td>484,246</td>
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<tr>
<td>Interest expense to adjusted revenue (%)</td>
<td>1.0</td>
<td>1.2</td>
<td>2.0</td>
<td>2.1</td>
<td>1.7</td>
<td>1.8</td>
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<td>Debt to FTE</td>
<td>6,221</td>
<td>6,856</td>
<td>6,343</td>
<td>6,492</td>
<td>8,105</td>
<td>7,724</td>
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<tr>
<td>Debt to adjusted revenue (%)</td>
<td>19.1</td>
<td>21.2</td>
<td>32.4</td>
<td>34.1</td>
<td>30.2</td>
<td>28.2</td>
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<tr>
<td>(Debt plus unfunded)/adjusted revenue (%)</td>
<td>86.7</td>
<td>79.6</td>
<td>85.5</td>
<td>73.8</td>
<td>140.0</td>
<td>102.0</td>
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<td>Internally restricted net assets</td>
<td>13,187</td>
<td>6,416</td>
<td>115,643</td>
<td>148,502</td>
<td>183,855</td>
<td>156,483</td>
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<td>Internally restricted endowments</td>
<td>109,806</td>
<td>114,833</td>
<td>41,087</td>
<td>40,533</td>
<td>19,886</td>
<td>20,133</td>
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<tr>
<td>Externally restricted endowments</td>
<td>335,562</td>
<td>329,272</td>
<td>290,040</td>
<td>290,799</td>
<td>198,666</td>
<td>190,242</td>
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<td>Unrestricted financial resources</td>
<td>122,993</td>
<td>121,249</td>
<td>156,730</td>
<td>189,035</td>
<td>203,741</td>
<td>176,616</td>
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<tr>
<td>As % of total debt</td>
<td>76.3</td>
<td>69.6</td>
<td>51.1</td>
<td>60.8</td>
<td>99.8</td>
<td>95.4</td>
</tr>
<tr>
<td>As % of total debt plus unfunded post-employment liabilities</td>
<td>16.8</td>
<td>18.5</td>
<td>19.4</td>
<td>28.1</td>
<td>21.5</td>
<td>26.4</td>
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<tr>
<td>As a % of operating expense</td>
<td>14.2</td>
<td>14.5</td>
<td>16.3</td>
<td>20.4</td>
<td>30.4</td>
<td>27.1</td>
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<tr>
<td>Per FTE</td>
<td>4,743</td>
<td>4,774</td>
<td>3,243</td>
<td>3,947</td>
<td>8,087</td>
<td>7,372</td>
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<tr>
<td>Total endowment value per FTE (at market value)</td>
<td>20,023</td>
<td>20,201</td>
<td>6,891</td>
<td>7,057</td>
<td>9,058</td>
<td>9,099</td>
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<td>Cash and short-term investments</td>
<td>184,153</td>
<td>167,916</td>
<td>20,400</td>
<td>48,311</td>
<td>165,585</td>
<td>125,324</td>
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<tr>
<td>As % of operating expenditures</td>
<td>21.2</td>
<td>20.1</td>
<td>2.1</td>
<td>5.2</td>
<td>24.7</td>
<td>19.2</td>
</tr>
<tr>
<td>As % of debt outstanding</td>
<td>114.2</td>
<td>96.4</td>
<td>6.7</td>
<td>15.5</td>
<td>81.1</td>
<td>67.7</td>
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</tbody>
</table>

FTE--Full-time equivalent. DSCR--Debt service coverage ratio. N.A.--Not available.

## Related Criteria And Research

- [Methodology For Rating International Local And Regional Governments, Sept. 20, 2010](#)
- [USPF Criteria: Higher Education, June 19, 2007](#)

## Ratings Detail (As Of May 28, 2013)

### McMaster University

<table>
<thead>
<tr>
<th>Issuer Credit Rating</th>
<th>AA-/Stable/--</th>
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<tr>
<td>Senior Unsecured</td>
<td>AA-</td>
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### Issuer Credit Ratings History

- **08-Dec-2010**: AA-/Stable/--
- **09-Sep-2002**: AA/Stable/--

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