Rating Report

McMaster University

Ratings

<table>
<thead>
<tr>
<th>Debt</th>
<th>Rating</th>
<th>Rating Action</th>
<th>Trend</th>
</tr>
</thead>
<tbody>
<tr>
<td>Issuer Rating</td>
<td>AA (low)</td>
<td>Confirmed</td>
<td>Stable</td>
</tr>
<tr>
<td>Senior Unsecured Debt</td>
<td>AA (low)</td>
<td>Confirmed</td>
<td>Stable</td>
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Rating Update

On October 27, 2015, DBRS Limited (DBRS) confirmed the Issuer Rating and Senior Unsecured Debt rating of McMaster University (McMaster or the University) at AA (low) with Stable trends. The ratings and trends are reflective of a high level of expendable resources, a track record of prudent financial management as well as a strong academic profile and favourable catchment area that should help to offset broader enrolment challenges associated with a weak demographic outlook. The University has taken steps to address financial risks, including the significant special payment cash requirements associated with employee pension and non-pension benefits that must be funded by operating units out of existing allocations in addition to normal current service costs and baseline inflation for negotiated compensation increases. Funding strategies have been implemented to smooth the costs of these obligations over time and the new modified activities budget model is facilitating greater transparency and driving further efficiencies.

McMaster recently issued $120 million in new long-term debentures maturing in 2065 that rank pari passu with all other present and future unsecured and unsubordinated obligations. DBRS understands that net proceeds of the issuance will be used to replenish cash resources used to internally finance approved capital projects, such as the Living-Learning Centre, and to fund future capital needs, including a proposed graduate student residence. DBRS expects that, by issuing the new long-term debt, McMaster’s leverage will peak this fiscal year at just over $9,000 per full-time equivalent student (FTE), up from $4,872 in 2014–2015, before receding for some time thereafter. This higher level of debt was anticipated for some time and is deemed manageable for the ratings. Interest coverage remains robust at 14.5 times (x), among the highest of rated institutions, and interest charges as a share of expenditures are low at less than 1.0%. On a pro forma basis with the additional long-term debt, interest coverage is expected to remain solid and interest charges manageable as a share of overall expenditure over the medium term.

Operating performance in 2014–2015 was solid with the University reporting a consolidated surplus of $78.6 million, down slightly from a restated surplus of $86.6 million in the prior year. DBRS notes, however, that the transition to new accounting standards for employee future benefits somewhat overstates the financial strength of the University as reaching a balanced position on a cash-budget basis remains challenging with some faculties experiencing structural deficits. One-time and strategic spending are also pressuring the operating envelope and necessitating drawdowns of prior appropriated surpluses. In 2015–2016, McMaster projects a cash operating deficit of $12.7 million and a consolidated surplus of $54.3 million, with revenue gains of 1.8% supported by projected FTE enrolment growth of 1.0% and maximum fee increases under the provincial framework, while government funding remains flat following two years of base grant cuts. Spending growth will outpace revenues at 4.6% year over year (YOY), driven primarily by higher labour costs and increases for utilities, maintenance, renovations and equipment.

Financial Information

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<tr>
<td>Consolidated balance (DBRS-adjusted, $ millions)</td>
<td>78.6</td>
<td>86.6</td>
<td>60.7</td>
<td>9.1</td>
<td>22.0</td>
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<tr>
<td>Surplus-to-revenue</td>
<td>7.9%</td>
<td>8.9%</td>
<td>6.5%</td>
<td>1.0%</td>
<td>2.6%</td>
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<tr>
<td>Interest coverage ratio (times) 1</td>
<td>14.5</td>
<td>14.6</td>
<td>12.5</td>
<td>6.4</td>
<td>8.8</td>
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<tr>
<td>Long-term debt per FTE ($)</td>
<td>4,872</td>
<td>4,957</td>
<td>5,028</td>
<td>5,155</td>
<td>5,732</td>
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1 Cash flow from operations plus interest divided by interest charges
2 Full-time equivalent (FTE), excluding continuing education.

Issuer Description

McMaster was founded in 1887 by the merger of the Toronto Baptist College and Woodstock College and is located in Hamilton, Ontario, a city of 756,200 residents that is 60 kilometres west of Toronto. The University is a comprehensive, research-intensive institution offering a broad range of undergraduate, graduate and continuing education programs. In 2014–2015, McMaster had enrolment of 28,157 students (FTEs).
Rating Considerations

**Strengths**

1. **Stable revenue base of provincial funding and student tuition**
McMaster’s substantial funding from the Ontario government and student tuition revenues provide a stable revenue base totalling approximately 67% of overall revenues in 2014–2015. Successful fundraising efforts and ancillary revenues add further diversification to the University’s revenue mix.

2. **High level of expendable resources and endowments**
The University's credit profile is strengthened by its considerable level of expendable resources, which amounted to $228.3 million or 166% of total debt at April 30, 2015, and will likely remain sizable despite volatility in capital markets. Expendable resources consist of more than $136 million in internally restricted endowment assets, which can be unendowed by the Board of Governors to meet debt servicing needs, if necessary.

3. **Strong academic profile**
The University benefits from a solid academic profile and reputation, ranking among the top four universities in Canada and among the top 100 globally, according to the 2015 Academic Ranking of World Universities. McMaster offers programming in all of the major high-demand disciplines (except law) and boasts the second-largest medical school in Ontario, the largest co-operative education Master of Business Administration program in the country and has a top-ranked school of engineering. These attributes as well as research-intensive activities translate into strong student applications and lend considerable support to enrolment and fundraising.

**Challenges**

1. **Labour cost inflation, including pension and benefit liabilities**
McMaster’s operating performance will be constrained by continuing inflationary pressures related to employee salaries, benefits and pensions. Compensation costs represent the largest portion of University spending, and annual increases in salary and benefit expenditures have averaged 2.0% per year over the past five years, while recent accounting standards, solid investment returns and plan changes have been holding down growth in pension expenses in recent years. Achieving relatively lean targets for future compensation increases will be an important area of focus for management. Based on the latest actuarial valuations, unfunded pension liabilities are $253 million on a going-concern basis and $197 million on a solvency basis, necessitating significant special payments over the forecast horizon to address the deficiencies.

2. **Limited fee-setting autonomy and constrained funding**
In 2013–2014, the cap on annual undergraduate tuition fee increases was reduced to 3% for a period of four years from an average of 5%. This policy change further limited the flexibility of a key revenue source; however, the University has made conservative assumptions in response to the revised framework. The University has raised tuition rates to the maximum amount permitted for regulated programs and has also increased the share of international students on campus not subject to the tuition rate cap. The Province also moved to reduce operating funding beginning in 2013–2014 and in 2014–2015 by roughly 1.0% through a series of policy lever reductions and other targeted grant cuts, which are now assumed to be permanent base reductions.

3. **Large backlog of deferred maintenance**
McMaster has sizable deferred maintenance needs, totalling approximately $322 million as of 2014–2015, relatively stable YOY. The considerable backlog of maintenance and critical upgrades presents risks to the University's budget and medium-term operating performance. A base annual operating funding increase of $2 million for deferred maintenance needs was approved in 2013–2014, which will rise incrementally over five years until it reaches roughly $10 million per year. Planned increases in capital renewal funding announced in recent provincial budgets will also provide some limited support.
Operating Performance

McMaster reported a solid consolidated surplus of $78.6 million, or 7.9% of revenues, a positive variance from budget projections of $5.1 million, reflecting the adoption of updated accounting standards for employee future benefits that reduced pension expenses and stronger-than-budgeted investment returns. Despite strong results on a consolidated accrual basis, within the Operating Fund, which comprises roughly 59% of University spending, a deficit of $12.2 million was recorded against a budgeted deficit of $28.6 million. The budgeted deficit was mostly related to significant one-time expenditure for the continued roll-out of the Mosaic enterprise resource planning platform, with the positive variance attributable to project timing delays. Absent one-time strategic spending, the Operating Fund is structurally balanced.

Total revenues rose by 1.8%, supported by strong growth in tuition fee income as well as research grants and contracts. Tuition fee growth of 7.6% was underpinned by the maximum tuition fee increases permitted under the provincial tuition framework (overall cap of 3%), higher international student volumes and FTE enrolment growth of 1.3% YOY. In the context of system-wide demographic decline for the University-age population, realizing enrolment growth while maintaining high entering averages is encouraging and speaks to McMaster’s continued demand as a first-choice institution within the provincial network and nationally. Applications for undergraduate programs were up by 1.9% with stable offer and yield rates. International students now comprise 8.8% of the student body, up slightly YOY, but well below levels at some other DBRS-rated universities. Higher tuition fee revenue offset a 1.0% decline in government operating grants, with the final $2.2 million provincial efficiency cut outweighing modestly higher accessibility funding tied to enrolment growth. Research grants and contracts, including grants for research overhead provided by the provincial and federal governments, increased by $16.4 million or 9.8% from the prior year but are matched by higher levels of research spending. Recognized investment income was above budget, but declined by 11.1% or $7.0 million from the prior year, with the portfolio generating an annual return of 10.5% (against a benchmark of 10.9%) while investment income posted directly to external endowments was also down. Ancillary income rose modestly while donations and grants recognized in revenue fell moderately.

Expense growth outpaced revenues at 2.9% YOY, a higher rate than recent years, driven primarily by growth in supplies and other services, which increased by $19.7 million or 11.7%, and includes one-time outlays related to the Mosaic system. Spending on utilities and the cost of goods sold declined moderately while the allocation for student aid increased by 12.6%. Spending on salaries and benefits, which comprise 61.5% of consolidated expenditure, were fairly well contained – up by a modest 0.6% – as 3.0% growth in salaries and wages was offset by an 8.0% decrease in employee benefit spending from a lower recognized pension expense, largely the result of updated accounting standards. Amortization charges rose moderately while interest expenses declined by 0.4% and fell as a share of overall expenditure to a very manageable 0.9%.

DBRS notes that, in 2014–2015, McMaster adopted updated accounting standards for not-for-profit organizations related to employee future benefits, with actuarial gains and losses as well as past service costs on pension plans no longer amortized into future periods on the statement of operations. The current benefit costs are expensed on the statement of operations, with actuarial gains and losses flowing directly as a change to net assets. The updated standard also require the full actuarial liability of pension and benefit plans, net of assets, to be recorded on the statement of financial position. This net pension liability adjustment resulted in a decrease in net assets of $311.4 million as of the transition date and a writedown of the deferred previous pension asset.

Operating Outlook

The University presents a consolidated budget that includes all six of its funds: operating, ancillary, research, trust, endowment and capital.

Budget 2015–2016

The F2016 consolidated budget forecasts an accrual surplus of $54.3 million and a cash operating fund shortfall of $12.7 million. The cash deficit includes $19.2 million in one-time spending for strategic or unavoidable items such as targeted renovations, faculty renewal, pay-equity measures, campus-wide technology upgrades and utilities costs. For ongoing operations, the Operating Fund is projected to realize a $6.5 million surplus after accounting for revenue gains from tuition increases and enrolment growth, and as moderate growth in salary and benefits, utilities and maintenance, equipment and renovations are offset by the wind-down of the Mosaic system implementation, which will result in significant savings versus the prior year.

On a fully consolidated basis, revenue in 2015–2016 is budgeted to rise by 1.8% from 2014–2015 results. Within the Operating Fund, government operating grants are set to rise by a very modest 0.2% over 2014–2015 levels projected at mid-year as the basic operating grant is set to remain flat and accessibility funding for enrolment gains rises only modestly. The final provincial efficiency cut of approximately 0.9% was incorporated into the 2014–2015 budget and are now permanent base reductions,
which will hold grant revenues steady over the outlook period through 2017–2018. Tuition fees, conversely, are expected to provide considerable revenue support in 2015–2016, with projected FTE enrolment growth of 1.0% combined with maximum permitted fee increases within the provincial framework leading to a budgeted 8.0% increase in tuition revenue over 2014–2015 projected levels.

Consolidated expenditure growth is budgeted to outpace revenues at 4.6% YOY from reported results. Within the Operating Fund, key expense drivers include 1.8% growth in salary, wages and benefits over levels projected at mid-year for F2015 as well as moderate growth in utilities, maintenance, renovations and equipment expenses. A mid-year update is to be completed in November 2015 outlining budget performance through the first half of the year. A notable change to the outlook from the original budget is a stronger opening position to start the year based on final 2014–2015 results, which will likely result in annual performance tracking ahead of projections.

Medium-Term Outlook
The budget outlook at McMaster appears relatively stable through 2017–2018 with structural balance maintained in the Operating Fund, excluding one-time and strategic items. For 2016–2017, the University anticipates a small cash deficit of $1.2 million before posting a $7.8 million surplus in 2017–2018, with favourable accrual adjustments resulting in stronger consolidated results. Although the budget outlook is structurally balanced, DBRS notes that non-recurring investments are being funded primarily through the drawdown of prior appropriated surpluses, a practice that will likely remain sustainable as additional needs arise over the long term. The University intends to make annual $3.0 million draws of interest income from an internal investment reserve through 2019–2020 to support the academic mission and maintain balance, along with a variety of other cost-containment and resource-allocation measures. The University will need to pursue additional budget efforts and is seeking to diversify revenue sources to fund strategic or one-time items without drawing down internal resources.

The transition to a new modified activities-based budget model at McMaster whereby faculties receive revenues based on the income they generate has resulted in a more transparent budgeting process; however, the University still faces a significant challenge in achieving a balanced operating position within the Operating Fund at the institutional level, given structural shortfalls within certain faculties, persistent inflationary pressures and one-time spending on strategic initiatives. The Faculty of Humanities, Faculty of Health Sciences and Faculty of Science are all currently in hold harmless positions within the budget model, receiving top-up allocations to maintain 2013–2014 funding levels. Over the medium term, faculties in this position will need to generate additional revenues through a higher level of activity to receive incremental funding, creating an incentive to realign costs and pursue strategies to enhance revenue potential.

The operating environment and funding outlook is expected to remain tight in the years ahead, with cuts to base operating grants made in 2013–2014 and 2014–2015 becoming permanent base reductions. The tuition fee framework that holds average fee increases to 3.0% per annum will expire in 2017; however, it is not anticipated that the next iteration of the framework will provide for greater fee-setting autonomy. Moreover, unlike some DBRS-rated universities, McMaster has not explicitly pursued a strategy of increasing international enrolment to compensate for revenues lost from domestic softness, given the high costs associated with providing support services to international students. Although the share of international students has been rising, it has been doing so at a rate lower than most peers. A significant change to the funding formula for Ontario universities is also being contemplated, with the Ministry currently in discussions with stakeholders across the sector. McMaster anticipates that 2017–2018 will be a transitional year to a new formula, with 2018–2019 the first year of full implementation of any final changes. A new formula could result in further refinements to the current budget model depending on the pool of at-risk funding that may be tied to performance measures articulated in institutional Strategic Mandate Agreements or elsewhere rather than current methodologies based primarily on enrolment.

Compensation and post-employment benefits remain the principal source of financial pressure for the University. On the collective bargaining front, McMaster is set to enter another bargaining cycle with fairly lean mandates for compensation increases. The Faculty Association has a collective agreement in place until June 2017 and sessional faculty have an agreement in place until August of the same year, providing some stability to the largest component of the University’s compensation spending. The University is set to enter bargaining with the employee group representing approximately 2,500 non-management, non-academic staff whose agreement expires in April 2016 while agreements with teaching assistants and post-doctorate fellows expire in September 2016.

Although McMaster has made good progress in reigniting pension-related costs through increased employee contributions and the creation of a defined contribution RRSP plan for new members of certain labour groups, it will continue to pursue additional negotiated improvements to the plans. DBRS is encouraged by funding strategies whereby faculties and service units are charged directly to fund both current service payments and any special payments for actuarial deficiencies to fully fund and smooth cash requirements. In 2014–2015, based on realized plan savings, McMaster’s salaried plan was approved for Stage 2 provincial solvency relief related to the $197 million deficit as of July 1, 2014. The smaller hourly pension plan, comprising ap-
Operating Outlook (CONTINUED)

Approximately 3% of total pension assets, has already qualified for Stage 2. Relief provisions allow the University to amortize the deficit repayment over a period of ten years rather than the normal five years, and allow for the further deferral of payments for three years to July 1, 2017. For this fiscal year and next, the University will make special payments of $30.4 million related to the going-concern deficit, which will fall off to $0.7 million in F2018 and F2019. Beginning in 2018–2019, the University will commence making solvency payments of $27.9 million based on current projections, amortizing the deficit over the remaining seven years of the relief period. The next official valuation will be filed as at July 2017.

DBRS also notes that McMaster remains involved in sector-wide discussions and modelling around the creation of a multi-employer jointly-sponsored pension plan (JSPP), which could achieve a solvency exemption and likely move to a 50:50 contribution and risk-sharing model between employers and employees. DBRS does not anticipate that significant progress will be achieved on a JSPP during the current budget outlook period through 2017–2018, given the inherent hurdles in agreeing on a plan design, administrative structure and negotiated acceptance from the multiple of employee groups at universities across the Province.

Capital Plan

Gross capital spending in 2014–2015 was the highest recorded at the University at $135.9 million, a 35% increase from the prior year, owing in part to the roll-out of the Mosaic system as well as a number of other large projects, including ongoing construction on L.R. Wilson Hall and the McMaster Downtown Health Campus.

The University’s long-term capital plan encompasses approximately $1.2 billion in approved or contemplated capital spending over the next ten years. The plan includes major flagship projects that have been approved, most notably the Living Learning Centre – a multi-purpose facility that will have residence, teaching and ancillary services space – that is scheduled to open in 2020. The University plans to issue up to $120 million in new long-term debentures to fund immediate and future capital needs, namely the Living Learning Centre and a potential equity share in the graduate student residence. An amount will also be set aside to create a debt sinking fund to retire the bullet debenture at maturity. The University has issued a request for proposals for the new apartment-style graduate student residence building with 400 beds, parking facility and commercial space. The University is contemplating various financing strategies for the facility, including a public-private partnership model whereby McMaster would act as an equity investor and receive a share of revenue streams associated with the facility, which would be designed and built by a private partner. The University anticipates operating the residence as part of its portfolio of existing housing facilities; however, the private operator may be responsible for certain aspects of operations and maintenance, depending on the winning proponent.

The 2015–2016 capital budget projects in-year expenditure of $105.9 million to be funded through a combination of $58.6 million externally sourced funds and $18.2 million in internal fund transfers, with repayments of internal capital loans and contributions from reserves reducing the net negative impact to the capital fund to $17.4 million. Cash outflows in 2015–2016 are primarily tied to the completion of major projects such as L.R. Wilson Hall and the McMaster Downtown Health Campus as well as finishing the fourth floor renovation of the Business School building in Burlington, Ontario, relocation of offices from the Downtown Centre location, the deferred maintenance and facilities renewal program as well as other smaller projects. Capital budget expenses do not include those related to operations and for support of ancillaries, including many expenses related to the Mosaic system.

Deferred maintenance remains a challenge for the University, with the latest comprehensive estimate putting the backlog total at $322 million, down slightly from $324 million the prior year. The Facilities Condition Index is 16.5%, a slight improvement over the prior year, but above the provincial average of 11%. McMaster put a funding plan in place in 2014 to increase incremental funding for deferred maintenance by $2.0 million per year until reaching $10.2 million annually in 2016–2017; however, the backlog presents potential risks to the operating budget over the medium term as infrastructure failures could cause unforeseen and unbudgeted expenditures. The current cost within the Operating Fund of maintaining and operating the physical infrastructure is 5.5%, expected to rise in the years ahead with the higher contributions for deferred maintenance.
Debt and Liquidity

For greater consistency across the sector, DBRS now presents McMaster's FTE enrolment figures based on a calculation of student standard credit loads rather than a previous Statistics Canada calculation formula. This has resulted in a one-time retroactive adjustment in McMaster’s debt burden to $5,028 from $5,251 per FTE in 2012–2013. Going forward, all enrolment statistics and related metrics will be presented on a credit load basis. In 2014–2015, McMaster’s debt burden declined slightly to $137.2 million from $137.8 million the prior year as a bank term loan and small mortgage continued to amortize. Per FTE student, debt fell to $4,872 in 2014–2015 from $4,957 the prior year, a very manageable level for the current ratings. DBRS notes that McMaster also guarantees the debt of its research park, First Longwood Innovation Trust, which totalled $22.1 million in 2014–2015, although this figure is not included in the calculation of long-term debt and does not represent a future cash requirement barring an event of default. Interest costs as a share of total expenditures were very manageable at 0.9%, while interest coverage was a very solid 14.5x, owing to strong consolidated operating results.

McMaster enjoys a high level of liquidity, providing further support to the credit profile. Expendable resources, which include debt sinking funds, net unrestricted assets, unexpended departmental carry-forwards and internally-restricted endowment assets were largely stable YOY at $228.3 million. At 166% of long-term debt, essentially stable from the prior year, this provides a material degree of financial flexibility to the institution and is a comfortable level for the ratings. Cash and cash equivalents total 104% of current liabilities. In 2014–2015, the market value of total endowment assets grew by 7.6% to $655.5 million or $23,281 per FTE, one of the highest levels among DBRS-rated universities.

As anticipated by DBRS for some time, in 2015, the University recently issued $120 million in 50-year senior unsecured debentures to fund immediate and future capital needs, including the Board-approved Living Learning Centre and contemplated graduate student residence. McMaster estimates that annual debt servicing costs associated with the debentures will total approximately $4.9 million. The proposed projects should generate ancillary revenues that would at least partially self-support higher interest charges and expand revenue potential through increased enrolment capacity. The issuance is expected to lead to a new peak in debt per FTE at just over $9,000 in 2015–2016 before declining thereafter, a level that is deemed to be manageable but that exhausts much of the remaining debt room in the rating. A sinking fund has been established for principal repayment on the $120 million debenture maturing in 2052, totalling $15.1 million in 2014–2015, and it is expected that a sinking fund will also be established for the recently issued debentures maturing in 2065.

McMaster's pension and benefit liabilities remain sizable and an area of downside risk. As of July 1, 2014, the salaried pension plan (Plan 2000) had a funding shortfall of approximately $253 million on a going-concern basis and $197 million solvency shortfall. Pension plan deficiencies will necessitate approximately $186 million in special payments over the next eight years in addition to current service costs, funds that will not be available to support the academic mission. On an accounting basis, the transition to new accounting standards for employee future benefits resulted in the fully funded liability being reported on the balance sheet, with a write down of the pension asset and a decrease in net assets of $311.4 million as at the transition date of May 1, 2014. The current pension benefit liability totals $63.3 million, down from $165.9 million the prior year because of strong investment returns, and non-pension benefit liabilities total $217.2 million, a moderate increase from the prior year. Updated mortality assumptions that had a negative effect on the funded status of plans in 2013–2014, but were unchanged in 2014–2015; however, future mortality updates are anticipated to have a negative effect on plan liabilities.
University Funding in Ontario

Canadian universities generally have access to three key sources of revenue for their core teaching and research activities: (1) government grants, (2) student fees and (3) fundraising/endowment income. For McMaster, these accounted for approximately 76% of total revenues in 2014–15.

Provincial government funding remains the primary source of revenue for universities across the country, although its relative importance remains under pressure in most provinces as a result of accelerating costs in competing areas of provincial responsibility, notably health care. In Ontario, the lack of indexation in base operating grants has also contributed to this trend.

Government Funding (provincial and federal, 45%): This includes operating grants, research grants and contracts and capital grants, of which operating grants are by far the most important and stable revenue source. They are provided exclusively by the Province, totalling $265 million for McMaster in F2015, primarily through a formula that allocates a certain number of basic income units to each student based on the program in which they are enrolled. Targeted funding, which is aimed at expanding enrolment in high-demand programs, and performance-based grants also account for a small portion of provincial operating funding. No inflation adjustment is provided for base operating funding in Ontario, although the Province continues to provide full average funding for enrolment growth.

In 2011, the Ontario government introduced refinements to its post-secondary education plan that embraced a number of priorities, including 60,000 additional spaces by 2015–16 (of which 41,000 would go to the university sector), tuition and financial assistance for students, long-term capital funding to support expansion and renewal of campus infrastructure as well as renegotiation of multi-year accountability agreements.

Government grants for research and capital projects are also an important source of funding. The federal government typically provides 65% to 75% of all public research funding while the Province provides the bulk of capital funding; however, the provincial government’s increased emphasis on spending restraint to address its own budgetary challenges suggests limited flexibility for funding increases, making cost containment at universities that much more crucial.

Student Fees (23%): From 2006–2007 to 2012–2013, the Province permitted universities to raise average tuition fees by 5% annually, with fee increase limits varying across programs and years of study. For example, arts and sciences tuition could be increased by 4.5% for the first year of study and 4.0% for the following years, while graduate and professional program tuition fees could be increased by 8.0% for the first year of study and 4.0% per year thereafter. In March 2013, the Province announced that, starting with the 2013–2014 academic year and for the next four years, the cap on annual undergraduate tuition fee increases would be reduced to 3%. Additionally, tuition fee increases for graduate and professional programs were also reduced and are now capped at 5%. The compound annual growth rate of total tuition revenue at McMaster from 2009–2010 to 2014–2015 was 8.5%.

Fundraising and Endowment Contributions (8%): Unrestricted donations are recognized as revenue when received while funds accepted with external restrictions or designated by the Board of the University are added directly to endowments and reported as revenue when related expenses are incurred. The success of McMaster’s past fundraising efforts is exhibited by the growth of the endowment fund since 2002. In September 2010, McMaster successfully completed its largest fundraising campaign in history, raising $473 million over a four-year period, surpassing its $400 million target.

As of April 30, 2015, endowment assets stood at $655.5 million or $23,281 per FTE, up 7.6% following very strong investment performance during the year. In 2014–2015, $73 million in new pledges and future expectancies were received, including a major gift of $50 million at the Michael G. DeGroote School of Medicine, exceeding the annual goal of approximately $21 million set by University Advancement for the year. McMaster boasts the third-largest endowment in Ontario after the University of Toronto and Queen’s University, providing considerable support to the operating fund.

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### Consolidated Financial Summary (DBRS-Adjusted)

**For the year ended April 30**

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<tr>
<td><strong>Total revenue</strong></td>
<td>990,831</td>
<td>972,903</td>
<td>938,829</td>
<td>880,532</td>
<td>857,398</td>
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<td><strong>Total expenditures</strong></td>
<td>912,242</td>
<td>886,332</td>
<td>878,114</td>
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<td><strong>Recurring Surplus (Deficit)</strong></td>
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<td>60,715</td>
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<td>21,951</td>
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<td><strong>Non-recurring revenue (expenses)</strong></td>
<td>-</td>
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<td>-</td>
<td>-</td>
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<td><strong>Net contributions from (to) endowments</strong></td>
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<td>(5,927)</td>
<td>5,027</td>
<td>(7,016)</td>
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<td><strong>Net contributions from (to) committed funds</strong></td>
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<td>(6,771)</td>
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</tr>
<tr>
<td><strong>Change in investment in capital assets</strong></td>
<td>(31,052)</td>
<td>(13,308)</td>
<td>(28,955)</td>
<td>(6,427)</td>
<td>(6,279)</td>
</tr>
<tr>
<td><strong>Net change in unrealized losses on interest rate swaps</strong></td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>(406)</td>
</tr>
<tr>
<td><strong>Net change in unrestricted assets</strong></td>
<td>271</td>
<td>63</td>
<td>(173)</td>
<td>932</td>
<td>94</td>
</tr>
</tbody>
</table>

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<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
<td><strong>Tuition fees</strong></td>
<td>232,025</td>
<td>215,691</td>
<td>200,140</td>
<td>184,275</td>
<td>167,474</td>
</tr>
<tr>
<td><strong>Government operating grants</strong></td>
<td>265,214</td>
<td>267,881</td>
<td>259,485</td>
<td>237,248</td>
<td>232,938</td>
</tr>
<tr>
<td><strong>Research grants and contracts</strong></td>
<td>183,823</td>
<td>167,450</td>
<td>186,536</td>
<td>180,165</td>
<td>170,235</td>
</tr>
<tr>
<td><strong>Ancillary operations</strong></td>
<td>68,635</td>
<td>67,161</td>
<td>68,123</td>
<td>68,006</td>
<td>67,922</td>
</tr>
<tr>
<td><strong>Investment income</strong></td>
<td>56,332</td>
<td>63,353</td>
<td>47,103</td>
<td>18,428</td>
<td>40,306</td>
</tr>
<tr>
<td><strong>Donations &amp; other grants</strong></td>
<td>49,171</td>
<td>58,000</td>
<td>44,789</td>
<td>44,903</td>
<td>35,527</td>
</tr>
<tr>
<td><strong>Earned capital contributions</strong></td>
<td>37,897</td>
<td>37,604</td>
<td>35,779</td>
<td>33,840</td>
<td>34,688</td>
</tr>
<tr>
<td><strong>Other revenue</strong></td>
<td>97,734</td>
<td>95,763</td>
<td>96,874</td>
<td>113,667</td>
<td>108,308</td>
</tr>
<tr>
<td><strong>Total Revenue</strong></td>
<td>990,831</td>
<td>972,903</td>
<td>938,829</td>
<td>880,532</td>
<td>857,398</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
<td><strong>Salaries and benefits</strong></td>
<td>561,344</td>
<td>558,048</td>
<td>558,420</td>
<td>539,317</td>
<td>524,029</td>
</tr>
<tr>
<td><strong>Student aid</strong></td>
<td>47,893</td>
<td>42,519</td>
<td>46,236</td>
<td>42,970</td>
<td>43,512</td>
</tr>
<tr>
<td><strong>Cost of goods sold</strong></td>
<td>10,942</td>
<td>14,298</td>
<td>14,365</td>
<td>11,972</td>
<td>13,428</td>
</tr>
<tr>
<td><strong>Utilities</strong></td>
<td>25,931</td>
<td>27,272</td>
<td>25,290</td>
<td>24,276</td>
<td>24,792</td>
</tr>
<tr>
<td><strong>Other supplies and expenses</strong></td>
<td>188,751</td>
<td>168,961</td>
<td>159,866</td>
<td>183,201</td>
<td>159,880</td>
</tr>
<tr>
<td><strong>Amortization</strong></td>
<td>68,844</td>
<td>66,599</td>
<td>63,317</td>
<td>60,999</td>
<td>61,115</td>
</tr>
<tr>
<td><strong>Interest</strong></td>
<td>8,537</td>
<td>8,575</td>
<td>8,620</td>
<td>8,694</td>
<td>9,900</td>
</tr>
<tr>
<td><strong>Total Expenditures</strong></td>
<td>912,242</td>
<td>886,332</td>
<td>878,114</td>
<td>871,429</td>
<td>835,447</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
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<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Gross Capital Expenditures</strong></td>
<td>135,876</td>
<td>100,574</td>
<td>127,759</td>
<td>62,293</td>
<td>90,189</td>
</tr>
</tbody>
</table>

1 Internally restricted funds set aside for specific purposes.

### Statement of Cash Flow (DBRS-Adjusted)

**For the year ended April 30**

<table>
<thead>
<tr>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td><strong>Amortization</strong></td>
<td>68,844</td>
<td>66,659</td>
<td>63,317</td>
<td>60,999</td>
<td>61,115</td>
</tr>
<tr>
<td><strong>Other non-cash adjustments</strong></td>
<td>(32,355)</td>
<td>(36,204)</td>
<td>(25,167)</td>
<td>(23,061)</td>
<td>(5,683)</td>
</tr>
<tr>
<td><strong>Cash flow from operations</strong></td>
<td>115,078</td>
<td>117,026</td>
<td>98,865</td>
<td>47,041</td>
<td>77,383</td>
</tr>
<tr>
<td><strong>Change in working capital</strong></td>
<td>29,825</td>
<td>27,272</td>
<td>25,290</td>
<td>24,276</td>
<td>24,792</td>
</tr>
<tr>
<td><strong>Net capital expenditures</strong></td>
<td>(62,494)</td>
<td>(41,782)</td>
<td>(55,464)</td>
<td>(20,843)</td>
<td>(33,190)</td>
</tr>
<tr>
<td><strong>Free cash flow</strong></td>
<td>82,409</td>
<td>80,200</td>
<td>15,375</td>
<td>38,819</td>
<td>39,471</td>
</tr>
</tbody>
</table>

* Defined as gross capital expenditures less contributions restricted for capital purposes.
### Consolidated Balance Sheet
($ thousands) For the year ended April 30

<table>
<thead>
<tr>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>Cash and short-term investments</td>
<td>162,624</td>
<td>172,294</td>
<td>156,914</td>
<td>184,153</td>
<td>167,916</td>
</tr>
<tr>
<td>Receivables</td>
<td>127,709</td>
<td>155,205</td>
<td>158,553</td>
<td>140,888</td>
<td>144,456</td>
</tr>
<tr>
<td>Inventories and prepaid expenses</td>
<td>10,581</td>
<td>11,597</td>
<td>11,412</td>
<td>12,447</td>
<td>9,997</td>
</tr>
<tr>
<td>Deferred pension asset 1</td>
<td>-</td>
<td>-</td>
<td>197,356</td>
<td>200,230</td>
<td>198,995</td>
</tr>
<tr>
<td>Long-term investments</td>
<td>967,009</td>
<td>844,242</td>
<td>740,359</td>
<td>673,311</td>
<td>658,020</td>
</tr>
<tr>
<td>Other investments</td>
<td>18,787</td>
<td>15,738</td>
<td>14,888</td>
<td>14,687</td>
<td>13,436</td>
</tr>
<tr>
<td>Capital assets</td>
<td>955,369</td>
<td>888,337</td>
<td>854,422</td>
<td>789,980</td>
<td>744,235</td>
</tr>
<tr>
<td><strong>Total Assets</strong></td>
<td><strong>2,242,079</strong></td>
<td><strong>2,087,413</strong></td>
<td><strong>2,133,904</strong></td>
<td><strong>2,015,696</strong></td>
<td><strong>1,937,055</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Liabilities and Equity</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Payables and other current liabilities</td>
<td>155,801</td>
<td>149,096</td>
<td>156,975</td>
<td>156,365</td>
<td>146,432</td>
</tr>
<tr>
<td>Employee future benefits 1</td>
<td>280,492</td>
<td>372,702</td>
<td>280,894</td>
<td>273,156</td>
<td>261,142</td>
</tr>
<tr>
<td>Deferred contributions - endowment 2</td>
<td>80,477</td>
<td>75,559</td>
<td>72,617</td>
<td>73,815</td>
<td>68,990</td>
</tr>
<tr>
<td>Other deferred contributions</td>
<td>228,481</td>
<td>238,791</td>
<td>232,951</td>
<td>244,492</td>
<td>247,747</td>
</tr>
<tr>
<td>Deferred capital contributions</td>
<td>455,778</td>
<td>420,293</td>
<td>399,105</td>
<td>362,589</td>
<td>354,979</td>
</tr>
<tr>
<td>Long-term debt</td>
<td>137,175</td>
<td>137,792</td>
<td>138,371</td>
<td>139,400</td>
<td>152,143</td>
</tr>
<tr>
<td>Other long-term liabilities 3</td>
<td>11,206</td>
<td>9,810</td>
<td>9,155</td>
<td>8,720</td>
<td>13,405</td>
</tr>
<tr>
<td><strong>Total liabilities</strong></td>
<td><strong>1,349,410</strong></td>
<td><strong>1,403,843</strong></td>
<td><strong>1,290,068</strong></td>
<td><strong>1,258,537</strong></td>
<td><strong>1,244,838</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Fund balances</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Unrestricted</td>
<td>8,459</td>
<td>8,188</td>
<td>8,125</td>
<td>8,298</td>
<td>2,268</td>
</tr>
<tr>
<td>Internally-restricted 4</td>
<td>(54,444)</td>
<td>(190,599)</td>
<td>35,978</td>
<td>13,187</td>
<td>6,416</td>
</tr>
<tr>
<td>Endowment - internally restricted</td>
<td>136,609</td>
<td>127,746</td>
<td>115,733</td>
<td>109,806</td>
<td>114,833</td>
</tr>
<tr>
<td>Endowment - externally restricted</td>
<td>438,424</td>
<td>405,666</td>
<td>364,739</td>
<td>335,562</td>
<td>329,272</td>
</tr>
<tr>
<td>Equity in capital assets</td>
<td>363,621</td>
<td>332,569</td>
<td>319,261</td>
<td>290,306</td>
<td>239,428</td>
</tr>
<tr>
<td><strong>Total Liabilities and Equity</strong></td>
<td><strong>2,242,079</strong></td>
<td><strong>2,087,413</strong></td>
<td><strong>2,133,904</strong></td>
<td><strong>2,015,696</strong></td>
<td><strong>1,937,055</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Contingencies and Commitments</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Capital commitments</td>
<td>221,200</td>
<td>240,700</td>
<td>208,187</td>
<td>208,240</td>
<td>102,965</td>
</tr>
<tr>
<td>Legal claims</td>
<td>31,000</td>
<td>31,000</td>
<td>31,000</td>
<td>31,000</td>
<td>31,000</td>
</tr>
<tr>
<td></td>
<td>252,200</td>
<td>271,700</td>
<td>239,187</td>
<td>239,240</td>
<td>133,965</td>
</tr>
</tbody>
</table>

* As of May 1, 2014, the University adopted accounting standards for not-for-profit organizations, moving to an immediate recognition approach for employee future benefits, with annual actuarial gains and losses flowing through the Statement of Net Assets and the full funded status of plans reported on the Statement of Financial Position. As of May 1, 2011, the University adopted accounting standards for not-for-profit organizations, electing to re-value land at fair value and adopt hedge accounting for interest rate swap agreements.

1 As of May 1, 2014, the University reports the full actuarial liability net of assets of employee future benefit plans directly on the Statement of Financial Position, resulting in a write down of the deferred pension asset and a decrease in net assets.

2 Endowment-related deferred contributions represent expendable externally restricted grants and donations.

3 Nuclear reactor decommissioning costs. As at transition date of May 1, 2011, University elected to apply hedge accounting and has eliminated deferred unrealized losses on interest rate swap agreements.

4 Funds set aside for specific purposes (e.g. employee future benefits, departmental carry-forwards, sinking funds etc.).
Summary Statistics (DBRS-Adjusted)

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<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>Total Enrolment (FTE) 1</td>
<td>28,157</td>
<td>27,796</td>
<td>27,518</td>
<td>27,042</td>
<td>26,543</td>
</tr>
<tr>
<td>Total Enrolment (FTE) - Previous method 2</td>
<td>n/a</td>
<td>n/a</td>
<td>26,353</td>
<td>25,929</td>
<td>25,399</td>
</tr>
<tr>
<td>- Undergraduate</td>
<td>87%</td>
<td>87%</td>
<td>87%</td>
<td>87%</td>
<td>87%</td>
</tr>
<tr>
<td>- Graduate</td>
<td>13%</td>
<td>13%</td>
<td>13%</td>
<td>13%</td>
<td>13%</td>
</tr>
<tr>
<td>- Total annual change</td>
<td>1.3%</td>
<td>1.0%</td>
<td>1.8%</td>
<td>1.9%</td>
<td>2.3%</td>
</tr>
<tr>
<td>Total Employees 3</td>
<td>5,220</td>
<td>5,171</td>
<td>5,120</td>
<td>5,041</td>
<td>4,932</td>
</tr>
<tr>
<td>- Full-time faculty</td>
<td>1,432</td>
<td>1,425</td>
<td>1,394</td>
<td>1,377</td>
<td>1,330</td>
</tr>
</tbody>
</table>

Operating Results

| Surplus (deficit) ($ millions) | 78.6   | 86.6   | 60.7   | 9.1    | 22.0      |
| - As % of revenues             | 7.9%   | 8.9%   | 6.5%   | 1.0%   | 2.6%      |

Revenue Mix (as % of total DBRS-adjusted revenue)

<table>
<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>- Government funding (federal+provincial)</td>
<td>44.6%</td>
<td>43.8%</td>
<td>45.8%</td>
<td>46.9%</td>
<td>44.7%</td>
</tr>
<tr>
<td>- Tuition fees</td>
<td>23.4%</td>
<td>22.2%</td>
<td>21.3%</td>
<td>20.9%</td>
<td>19.5%</td>
</tr>
<tr>
<td>- Ancillary</td>
<td>6.9%</td>
<td>6.9%</td>
<td>7.3%</td>
<td>7.7%</td>
<td>7.9%</td>
</tr>
<tr>
<td>- Endowment and expendable donations</td>
<td>7.6%</td>
<td>9.1%</td>
<td>7.2%</td>
<td>6.4%</td>
<td>6.3%</td>
</tr>
<tr>
<td>- Other</td>
<td>17.4%</td>
<td>18.0%</td>
<td>18.5%</td>
<td>18.0%</td>
<td>21.6%</td>
</tr>
</tbody>
</table>

Debt and Liquidity Analysis

| Total long-term debt ($ millions) | 137.2 | 137.8 | 138.4 | 139.4 | 152.1 |
| - Per FTE student ($) 2           | 4,872 | 4,957 | 5,028 | 5,155 | 5,732 |
| - Per FTE student ($) - previous method 2 | n/a     | n/a     | 5,251  | 5,376  | 5,990  |
| Long-term debt, contingencies & commitments ($ millions) 4 | 669.9 | 782.2 | 658.5 | 651.8 | 547.3 |
| - Per FTE student ($)             | 23,790 | 28,141 | 23,928 | 24,103 | 20,617 |
| Cash and cash equivalents ($ millions) | 162.6 | 172.3 | 156.9 | 184.2 | 167.9 |
| - As % of total expenditures      | 18%    | 19%    | 18%    | 21%    | 20%      |
| - As % of current liabilities     | 104%   | 116%   | 100%   | 118%   | 115%     |

Expendable Resources

| Expendable Resources              | 228.3  | 229.9  | 216.0  | 222.7  | 217.7   |
| - As % of total debt              | 166%   | 167%   | 156%   | 160%   | 143%    |

Interest costs as % of total expenditures

| Interest costs as % of total expenditures | 0.9%  | 1.0%  | 1.0%  | 1.0%  | 1.2% |
| Interest coverage ratio (times)         | 14.5  | 14.6  | 12.5  | 6.4   | 8.8   |

Endowment Funds

| Total market value ($ millions)         | 655.5  | 609.0  | 553.1  | 519.2  | 513.1  |
| - Per FTE student ($)                  | 23,281 | 21,909 | 20,099 | 19,199 | 19,331 |
| - Annual change                        | 7.6%   | 10.1%  | 6.5%   | 1.2%   | 11.4%  |
| - Payout ratio (% of three-year average market value) | 4.0%  | 4.0%  | 4.0%  | 4.0%  | 4.0%  |

1 Full-time equivalent, excluding continuing education.
2 In 2015, DBRS shifted reporting of FTE enrolment to a standard credit load approach to better reflect revenue potential of enrolment and to provide greater consistency across the sector. This has resulted in an adjustment to ratios linked to enrolment, including debt per FTE. Historical figures for the previous Statistics Canada calculation method are included for reference.
3 Headcount; excludes teaching assistants and sessional lecturers.
4 Includes employee future benefit liabilities.
Rating History

<table>
<thead>
<tr>
<th></th>
<th>Current</th>
<th>2014</th>
<th>2013</th>
<th>2012</th>
<th>2011</th>
<th>2010</th>
</tr>
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<tbody>
<tr>
<td>Issuer Rating</td>
<td>AA (low)</td>
<td>AA (low)</td>
<td>AA (low)</td>
<td>AA (low)</td>
<td>NR</td>
<td>NR</td>
</tr>
<tr>
<td>Senior Unsecured Debt</td>
<td>AA (low)</td>
<td>AA (low)</td>
<td>AA (low)</td>
<td>AA (low)</td>
<td>AA (low)</td>
<td>AA (low)</td>
</tr>
</tbody>
</table>

Previous Action

• Confirmed, September 18, 2014.

Related Research

• Rating Public Universities, June 2015.

Previous Report

• McMaster University, Rating Report, September 18, 2014.

Notes:
All figures are in Canadian dollars unless otherwise noted.


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