University of Ottawa, Canada
Update to Discussion of Key Credit Factors

Summary Rating Rationale
The University of Ottawa's Aa2 stable rating is supported by key credit strengths including a strong balance sheet which offers protection to bondholders, a modest debt burden relative to peers and strong market position which will assist the university in overcoming the current financial difficulties. These will help mitigate pressures the university is expected to face over the next 2-3 years as it adjusts to a declining domestic enrolment level, new government funding environment and continued cost pressure.

The current challenge facing the university is a short-period of operating pressure. For 2017/18 the university budgeted an operating deficit of CAD4.6 million on a modified cash basis, a slight improvement from the budgeted deficit of CAD4.9 million for 2016/17. However, on a Moody's adjusted basis, the university finished 2016/17 with a positive, albeit weak, operating margin of 0.5%, aided by a number of initiatives undertaken by the university during the year. Despite this positive result, the university has recorded negative operating margins in 4 of the past 5 years. We believe that the university's forward looking, multi-year planning approach will allow it to limit the current phase of small operating deficits, given the strong track record of positive operating outcomes pre-2013.

Exhibit 1
Despite volatile operating margins in recent years, debt affordability and debt service coverage remain strong

National Peer Comparison
The University of Ottawa is rated in the upper band of the rating range of Canadian universities, whose ratings span the range Aa1-A3. The University of Ottawa's position relative to peers reflects a strong market position, solid debt affordability and high levels of total wealth. While the university has historically posted strong levels of spendable cash and
investments, the coverage these offered relative to debt fell following the CAD200 million bond issuance in October 2016 to 1.4x debt. As with other Canadian rated universities, pressures from restrictions to provincial funding are leading to greater difficulty in balancing budgets.

**Credit Strengths**

» Manageable debt and debt service levels expected to continue

» Strong balance sheet providing substantial liquidity

» Strong market position backed by high reputation as a premier research institution offering bilingual academic courses

**Credit Challenges**

» Operating pressure leading to current period of modest deficits

» Slowly evolving provincial funding framework putting Ontario universities in a transition period

» Continued pressure from pension plan liability special payments

**Rating Outlook**

The outlook is stabler reflecting our assumption that the University will be able to manage the short-term pressures and return to healthy fiscal balances over the medium-term.

**Factors that Could Lead to an Upgrade**

» Higher levels of spendable cash and investments

» Sustained improvement in operating cash flow margins

» Strong growth in annual operating revenue

**Factors that Could Lead to a Downgrade**

» Evidence of an inability to stem the current period of operating deficits

» Weakening of cash and financial reserves

» An increase in funding pressure arising from pension liability

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This publication does not announce a credit rating action. For any credit ratings referenced in this publication, please see the ratings tab on the issuer/entity page on www.moodys.com for the most updated credit rating action information and rating history.
Key Indicators

Exhibit 2
University of Ottawa
Year ending April 30

<table>
<thead>
<tr>
<th>Key Indicators</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
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<tbody>
<tr>
<td>Operating Revenue (CAD$, Millions) [1]</td>
<td>833,307</td>
<td>881,191</td>
<td>873,960</td>
<td>884,879</td>
<td>931,798</td>
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<tr>
<td>Annual Change in Operating Revenue (%)</td>
<td>3.1</td>
<td>5.7</td>
<td>-0.8</td>
<td>1.2</td>
<td>5.3</td>
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<tr>
<td>Operating Cash Flow Margin (%)</td>
<td>5.4</td>
<td>5.4</td>
<td>4.6</td>
<td>7.3</td>
<td>8.4</td>
</tr>
<tr>
<td>Reliance on Tuition and Auxiliaries (% of Operating Revenue)</td>
<td>45.7</td>
<td>43.6</td>
<td>44.0</td>
<td>43.3</td>
<td>40.8</td>
</tr>
<tr>
<td>Total Cash and Investments (CAD$, Millions)</td>
<td>703,904</td>
<td>746,853</td>
<td>788,254</td>
<td>754,066</td>
<td>777,651</td>
</tr>
<tr>
<td>Spendable Cash and Investments to Operating Expenses (x)</td>
<td>0.59</td>
<td>0.57</td>
<td>0.55</td>
<td>0.58</td>
<td>0.55</td>
</tr>
</tbody>
</table>

[1] Revenue is net of scholarship expense
Source: Moody’s Investors Service, University of Ottawa financial statements

Profile

Located in Canada’s capital, the University of Ottawa is a bilingual medical/doctoral university giving it a niche market position. The university offers a full range of academic and professional programs in 10 faculties, including Arts, Science, Management, Engineering, Medicine and Law. The University of Ottawa is one of Canada’s most research intensive universities and has notable research programs in several faculties.

Detailed Rating Considerations

The rating assigned to debt issued by the University of Ottawa combines (1) a baseline credit assessment (BCA) for the university of aa2, and (2) a high likelihood of extraordinary support coming from the Province of Ontario (Aa2, stable outlook) in the event that the university faces acute liquidity stress.

Baseline Credit Assessment

MANAGEABLE DEBT AND DEBT SERVICE LEVELS EXPECTED TO CONTINUE

Following the CAD200 million 40 year debenture issued in October 2016, the university’s long-term debt level rose to CAD368 million. This represented 35.6% of the university’s total revenues in 2016/17, a level that is considered manageable. Despite the university facing operating pressures, cash flow generation has remained robust resulting in a total debt to cash flow metric (4.7x in 2016/17) that is also considered strong relative to peers. We forecast that debt affordability will remain within the 4.0-6.0x cash flow across the medium-term.

As with the 2003 debenture issuance, the university has set up a sinking fund to help ensure funds are available upon maturity. We do not anticipate further material accumulation of debt over the medium-term as the latest debenture is sufficient to cover the medium-term financing requirements under the university’s Campus Master Plan.

Interest expense is manageable and does not impose undue financial burden on the university. Three year average debt service coverage remains solid at 5.2x and is expected to remain above 4x over the medium-term as this measure fully incorporates the impact of higher annual interest expense resulting from the latest debenture.

STRONG BALANCE SHEET PROVIDING SUBSTANTIAL LIQUIDITY

We anticipate that the university will increase its level of spendable cash and investments despite the operating pressure it faces over the short-term. Despite the issuance of the CAD200 million in October 2016, which more than doubled the university’s debt level (net of sinking funds), the university’s level of spendable cash and investments (net of unspent bond proceeds) provides 1.4x coverage of total debt, a sufficient level that ensures bondholder security. This will likely increase slowly over the medium-term as the university has a track of good management of its cash and investments, having achieved a level of spendable cash and investments equal to 3x debt over the period 2012-2015.
STRONG MARKET POSITION BACKED BY HIGH REPUTATION AS A PREMIER RESEARCH INSTITUTION OFFERING BILINGUAL ACADEMIC COURSES

The University of Ottawa’s market position is enhanced by its status as Canada’s premier bilingual university as well as a top-rated medical doctoral institution. Its location in the nation’s capital, which is on the border between the provinces of Ontario and Quebec, also helps to differentiate it from other institutions. The university’s official bilingualism does not mean that students have to be bilingual to be admitted, but rather that most courses and programs are offered in both languages, which increases its market to include both Anglophone and Francophone students. The University of Ottawa’s student body is approximately two-thirds English-speaking and one-third French-speaking, while three-quarters of the faculty members are bilingual.

The University of Ottawa is one of Canada’s most research intensive universities and has notable research programs in several faculties, including Medicine and Health Sciences. Through these faculties, and the relationship the university has with affiliated hospitals, the university has been successful in attracting research funding from the federal government’s granting councils and other sources. The university is in the process of bolstering its research activities by the addition of 67 new strategic positions for professors.

OPERATING PRESSURE LEADING TO CURRENT PERIOD OF MODEST DEFICITS

The 2017/18 budget for the University of Ottawa forecasts an operating deficit (modified cash basis) of CAD4.6 million, which at the time was only a modest improvement over the CAD4.9 million operating deficit forecasted for 2016/17. However, the university did record a Moody’s-adjusted positive operating margin of 0.5% for 2016/17, suggesting that some of the anticipated pressures facing the university have been offset. Nonetheless, the university is expected to continue to face pressure over the course of the next 2 years.

The university’s revenues are constrained by the provincially mandated limits on annual tuition growth to an average of 3% for domestic students. A decision by the province to lengthen the education program from one to two years, while keeping the funded seats in the program constant, has also had a negative impact. Finally, low annual growth rates of provincial funding grants has also tempered the university’s revenue growth profile. While the university has seen operating revenue growth increase 11.8% over the period 2012/13-2016/17, government operating grants were unchanged. This has led to a fall in the share of revenue attributed to government operating grants to 40.8% in 2016/17 from 45.7% in 2012/13.

As with other Ontario universities, the University of Ottawa is also facing pressure from a decline in the 18-20 year old co-hort in Ontario, which will put downward pressure on domestic enrolment levels. The university is forecasting a slight decline in enrolment over the period 2017/18-2020/21, resulting in a cumulative decline of 2.7% across the period 2014/15-2020/21. This includes positive growth from increased efforts to attract international students. To help offset some of this downward pressure, the province is introducing a new provincial funding formula in 2017/18 which is expected to result in stable provincial operating grants over the period 2017/18-2019/20 if enrolment levels stay within +/-3% of 2016/17 levels.

The university will also continue to face pressure from operating costs as salaries, benefits and pension costs continue to increase faster than provincial funding. Given an increase in competition arising from a decrease in the student pool, the university has increased the number of professors to improve its professor to student ratio. This will lead to an increase in salary expense, which is expected to account for 72% of operating costs in 2017/18.

SLOWLY EVOLVING PROVINCIAL FUNDING FRAMEWORK PUTTING ONTARIO UNIVERSITIES IN A TRANSITION PERIOD

The University of Ottawa will face challenges through the period 2017/18-2019/20 as it adopts new guidelines to be presented in the second Strategic Management Agreement (SMA2) with the province. Ontario continues to slowly transition universities across the province to a new funding formula which will ultimately result in greater differentiation of programs across the schools. The SMA2 will push each university further along the differentiation path as funding will be focused on thee components: 1) base funding for a specific level of enrolment, 2) funding based on performance in each area of strength as negotiated between the university and the province and 3) specific grants to help achieve government and system-wide priorities.

As with other universities, the University of Ottawa entered the 2017/18 fiscal year without having a signed SMA2 yet in place which will impact funding allocations across the three year agreement period (2017/18-2019/20).
These funding allocations will put more pressure on universities to increase performance, as measured by specific metrics, to ensure the maximum level of provincial funding is attained. This will require universities to divert resources to specific programs from other programs, which may be difficult to achieve given the rigid structure of many faculties and labour contracts. While the province has signaled that the SMA2 will offer protection on funding levels, beginning the coverage period without final funding allocations will nonetheless be a challenge for each university.

CONTINUED PRESSURE FROM PENSION PLAN LIABILITY SPECIAL PAYMENTS

To improve the funding on the ongoing deficit in its pension, the University of Ottawa continues to make special contributions (CAD8.6 million in 2017/18). These were in addition to regular contributions which are forecasted to cost CAD46 million annually.

With new mortality tables to be incorporated into pension liabilities, it is expected that this will place additional pressure on the university’s pension fund. Given the recent fluctuations in the pension liability, owing to poor returns of late and updates to certain assumptions, we will continue to monitor the university’s progress at establishing a long-term plan to reduce this contingent liability.

Ratings

<table>
<thead>
<tr>
<th>Category</th>
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<tbody>
<tr>
<td>UNIVERSITY OF OTTAWA, CANADA</td>
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</tr>
<tr>
<td>Outlook</td>
<td>Stable</td>
</tr>
<tr>
<td>Senior Unsecured - Dom Curr</td>
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Source: Moody’s Investors Service
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