CREDIT OPINION
23 April 2018

Update following rating affirmation

Summary
The credit profile of the University of Toronto (Aa2 positive) (U of T) reflects its flagship status and very strong market position as Canada’s largest post-secondary institution and international leader in research, consistently strong operating performance and high enrolment demand. The university also has a strong balance sheet with large endowment holdings and a consistently improving debt burden. These positives are balanced against provincially imposed revenue constraints for domestic student fees and large although improving unfunded pension liabilities.

Credit strengths
» Excellent international reputation as a leading teaching and research institution
» Consistently strong operating results supported by diversified revenues
» Financial flexibility from low leverage and high levels of liquidity with a large endowment relative to Canadian peers
» Strong governance and management that provide stability

Credit challenges
» Operating challenges from provincial funding pressures and demographic shifts
» Sizeable, although improving, unfunded pension liabilities

Exhibit 1
We expect continued improvement in U of T’s debt burden and cash flow generation

Please see the ratings section at the end of this report for more information. The ratings and outlook shown reflect information as of the publication date.
Rating outlook
The outlook is positive, reflecting our assessment that the university's balance sheet, including its liquidity levels, pension liability and debt burden, will continue to improve in the medium term. We also believe that the university's increasing liquidity levels and ability to benefit from additional sources driven by market demand (international students, new programs, and new teaching streams) will cushion it against any potential provincial pressures or legislative changes that would result in a decline in funding sources for the university.

Factors that could lead to an upgrade
Continued positive fiscal results under the new provincial funding framework and continued enrolment growth despite enrolment pressures could lead to an upgrade in the rating. Further improvements in liquidity or the university's continued success in addressing its unfunded pension liabilities would also put upward pressure on the rating.

Factors that could lead to a downgrade
A sustained deterioration in financial performance leading to operating deficits, a significant decline in the asset value or returns of the university's endowment, or an inability to successfully address its sizeable unfunded pension liabilities could lead to a downgrade in the rating.

Key indicators

| Exhibit 2 |
| University of Toronto |
| (Year Ending April 30) | 2013 | 2014 | 2015 | 2016 | 2017 |
| Operating Revenue (CAD Million) [1] | 2330.0 | 2427.0 | 2540.8 | 2697.7 | 2905.2 |
| Annual Change in Operating Revenue (%) | 5.2 | 4.2 | 4.7 | 6.2 | 7.7 |
| Operating Cash Flow Margin (%) | 13.2 | 12.6 | 15.2 | 15.4 | 18.1 |
| Total Cash and Investments (CAD Million) | 3152.8 | 3359.5 | 3794.7 | 3886.6 | 4558.0 |
| Spendable Cash and Investments to Operating Expenses (x) | 0.79 | 0.76 | 0.84 | 0.85 | 0.98 |
| Total Debt to Cash Flow (x) | 2.3 | 2.4 | 1.9 | 1.7 | 1.4 |

[1] Revenue is net of scholarship expenses.
Source: Moody's Investors Service, University of Toronto

Detailed credit considerations

Baseline credit assessment
On 20 April 2018, we affirmed the University of Toronto's Aa2 rating and positive outlook. The decision to affirm the university's rating reflects our view that the pressures behind the negative rating outlook of the Province of Ontario (Aa2 negative) are not expected to impact the university's intrinsic credit profile. We do not anticipate any change to the funding of the higher education sector in Ontario, nor the relationship between the province and the university.

The credit profile of U of T, as expressed by its Aa2 positive rating, combines a baseline credit assessment (BCA) for the university of aa2, and a high likelihood of extraordinary support coming from the Province of Ontario in the event that the university faced acute liquidity stress.

Excellent international reputation as a leading teaching and research institution
U of T is Canada's largest post-secondary institution across its three campuses in downtown Toronto, Mississauga and Scarborough. U of T is Canada's preeminent research university and consistently places as the top ranked Canadian school and one of the top 25 global schools in international rankings, underpinning its international brand.

U of T's excellent market profile is reflected in its ability to attract consistently high global demand and increase enrolment and revenue numbers in the face of provincial funding and enrolment constraints. In the 2016/17 academic year, enrolment exceeded 78,200 students on a full-time equivalent (FTE) basis, up 1.5% from the prior year. The increase in enrolment and the corresponding rise in
operating revenue grew primarily on the strength of an increase in international students, who now represent approximately one fifth of total FTEs. Given U of T’s strong academic reputation and strong student demand, we expect the university can easily reach its target of over 80,000 FTEs by the 2018/19 academic year and will continue its growth in the subsequent years.

U of T, along with its affiliations, including several hospitals, continues to be the leader among Canadian universities in securing federal government research funding from the three granting councils and from other federal programs. Aided by a 10% increase in research revenue to CAD419 million in 2016/17, research funding from all sources remains substantial and the university continues to rank highly in terms of research output and international rankings. In addition to this amount, there are also substantial research grants and contracts awarded to university faculty and administered by the affiliated teaching hospitals.

Consistently strong operating results supported by diversified revenues
U of T consistently generates positive fiscal results from diversified revenues comprising mainly of student fees, provincial operating grants, research grants, donations and investment income. In recent years the university was able to maintain operating revenue growth, which averaged 5.6% over the last five years, above the growth in operating expenditures (average 4.0%). For 2016/17, the university generated Moody’s-adjusted operating surplus of CAD323 million.

U of T operates at arm’s-length from the province and retains autonomy to carry out its activities. Although the university relies on the province for ongoing operating funding support, the amount of provincial funding remained relatively flat in recent years. As a result, provincial funding represents a declining share of revenues, falling to 24.5% of revenues in 2016/17, down from 30.2% in 2012/13. The decline in the share of provincial funding, and the university’s ability to rely on other, market demand-driven revenue sources including higher fees from international students, new programs, and new teaching streams, ensures that the university’s exposure to provincial funding pressures has been declining.

Financial flexibility from low leverage and high levels of liquidity with a large endowment relative to Canadian peers
U of T benefits from low levels of leverage. The university issued its latest debenture in 2011 and as a result its debt burden steadily declined to 24.6% of revenue in 2016/17, from 30.9% in 2012/13. We do not expect new debenture issuances for the next 2-3 years, as the university’s practice in recent years is to fund and finance capital projects to a significant degree with solid internal operating cash flow generation. Debt affordability will also remain strong, following an improving trend which saw debt to cash flow falling to 1.36x in 2016/17 from 2.35x in 2012/13.

U of T’s credit strength is also supported by strong levels of spendable cash and investments, which rose from 2.41x total debt in 2012/13 to 3.54x in 2016/17. Moody’s-adjusted operating cash flows covered 18% of operating revenue and around 74% of debt in 2016/17.

At April 30, 2017, the university's endowment assets totaled CAD2.4 billion and comprised approximately 44% of the university's net assets. The university's endowment value has grown significantly, increasing by more than 50% over the last five years. We expect that
the endowment growth will remain positive in the medium term given the significant endowment assets donated to the university annually and strong investment returns. The Long-Term Capital Appreciation Pool, which includes assets of the endowment fund, posted very strong investment returns of 15.4% (net of interest fees and expenses) in 2016/17 and has averaged over 11% over the last five years. While we expect pool investment returns to remain strong over the next few years, recent experience has shown that returns may exhibit significant volatility from one year to the next.

The university has also been successful in its fundraising activities. Its CAD2 billion Boundless campaign, launched in November 2011, reached its campaign goal by November 2016, and was subsequently expanded with a revised goal of CAD2.4 billion. Supported by its strong market position, we expect that U of T's brand name and profile will allow it to remain successful in its fundraising campaigns despite competition for fundraising dollars both domestically and internationally.

**Strong governance and management that provide stability**

U of T, similar to other universities in Ontario, targets a balanced budget every year. The university has been successful in recent years in balancing its core operations, and annual surpluses and deficits are largely a result of changes in investment return and savings from divisions.

The success of U of T in maintaining a strong balance sheet, while meeting academic goals, is underpinned by strong governance and management and the development and execution of multi-year frameworks for academic and financial planning. Each faculty is responsible for developing its own budget and adhering to self-imposed revenue and expense targets, which allows the faculties to be more entrepreneurial in areas where they see greater demand and by extension generate positive operating results. The university itself still maintains control over collective bargaining, however, which takes a certain amount of expenditure control out of the hands of individual faculties.

The University of Toronto Asset Management Corporation (UTAM), a non-share capital corporation whose members are appointed by the university, manages the investment assets of the university’s Long-Term Capital Appreciation Pool (which includes assets of the endowment fund), the Expendable Funds Investment Pool (including short- to medium-term funds) and assets of the university’s pension plan. The university made changes to the governance arrangements of UTAM following the 2008 financial crisis to improve oversight over investment activities and also modified its investment strategies, placing greater emphasis on risk management and stress-testing the portfolio from both a liquidity and an asset allocation standpoint.

**Operating challenges from provincial funding pressures and demographic shifts**

Pressures on the revenue side mainly arise from government operating grants, which have been stagnant over the last five years, as well as regulatory limits on tuition fee increases, which are capped at 3% for domestic students. Beginning in 2017/18, the province implemented a new “corridor” funding model. Under the new model, operating funding grants will remain stable at 2016/17 levels over the next three years as long as enrolment remains within +/- 3% of 2016/17 levels. Nevertheless, the university anticipates continued overall enrolment growth from growth at its Mississauga and Scarborough campuses and rising international enrolment. International students, to which tuition fee caps do not apply, have supported an average tuition revenue growth of 10.9% over the last five years.

Similar to other Ontario universities, U of T also faces pressure from a shift in student demography as the 18-20 year old population in Ontario is expected to decline over the next 5 years. The university is partly sheltered from a decline since it attracts strong demand from the Greater Toronto Area, where the population decline is expected to be the smallest relative to the rest of the province.

**Sizeable, although improving, unfunded pension liabilities**

U of T’s financial profile remains pressured by significant pension expenses arising from the university’s pension plan deficit (both a going concern deficit and a solvency deficit). U of T recorded a pension deficit of CAD296 million as of April 30, 2017 (10.2% of Moody’s adjusted operating revenue). The pension deficit was significantly better than the CAD797 million (29.5%) recorded in the prior year, mainly driven by substantial 2016/17 pension plan asset returns and special going concern payments made into the plan and has improved significantly over the past five years from CAD1.1 billion in 2012/13. Nevertheless, despite the improvement in the pension plan deficit, unfunded liabilities remain sizeable and continue to pressure the university’s balance sheet.

U of T was previously granted entrance into the provincial solvency funding relief program, and received additional solvency funding relief under Stage 3. This allows the university to make minimum special payments sufficient to liquidate 25% of the solvency deficiency over 7 years starting in 2018 and to cover interest applied on the remaining 75% of the solvency deficit, barring any further
changes to pension solvency rules from the provincial government. The potential impact of these future solvency payments continues to be reflected in the university's credit profile.

**Extraordinary support considerations**
Moody's assigns a high likelihood that the Province of Ontario would act to prevent a default by the university. The high support level reflects a perceived risk to the province's reputation as regulator of the university sector if the University of Toronto or any Ontario university were to default.

**Rating methodology**
*Higher Education, December 2017*
*Government-Related Issuers, August 2017*

**Ratings**

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<thead>
<tr>
<th>Category</th>
<th>Moody's Rating</th>
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<td>Outlook</td>
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*Source: Moody's Investors Service*
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