

MOODY'S INVESTORS SERVICE

Credit Opinion: University of Toronto

Global Credit Research - 03 Dec 2015

Canada

Ratings

Category	Moody's Rating
Outlook	Stable
Issuer Rating	Aa2
Senior Unsecured -Dom Curr	Aa2

Contacts

Analyst	Phone
Kathrin Heitmann/New York City	1.212.553.1653
Michael Yake/Toronto	1.416.214.1635
David Rubinoff/Moody's Investors Service EMEA LTD	44.20.7772.5454

Key Indicators

University of Toronto (Year Ending April 30)	2011	2012	2013	2014	2015
Operating Revenue (CAD\$, Millions) [1]	2,102,928	2,210,455	2,295,277	2,411,240	2,657,518
Annual Change in Operating Revenue (%)	4.2	5.1	3.8	5.1	10.2
Operating Cash Flow Margin (%)	4.5	4.3	11.9	12.0	18.9
Reliance on Tuition and Auxiliaries (% of Operating Revenue)	42.0	43.8	45.6	47.7	46.8
Total Cash and Investments (CAD\$, Millions)	2,712,800	2,872,800	3,152,800	3,359,500	3,794,700
Spendable Cash and Investments to Operating Expenses (x)	0.6	0.7	0.8	0.8	0.8

[1] Revenue is net of scholarship expenses.

Opinion

SUMMARY RATING RATIONALE

The University of Toronto's (U of T) Aa2 senior unsecured ratings reflect (1) the university's solid operating performance and operating cash flow generation, (2) a low debt burden and (3) strong balance sheet. These positives are balanced against (4) notable unfunded pension liabilities as well as (5) a continued modest decline in provincial funding as a percentage of revenue. The university retains strong fiscal flexibility and is able to make ongoing adjustments to its budgets in order to ensure the posting of satisfactory fiscal outcomes. The ratings also take into account U of T's strong market position as Canada's largest post-secondary institution and as a national and international leader in research.

Credit Strengths

- Excellent market profile, noted by its strong market position and extensive research programs that support the university's reputation

- Low debt burden, solid operating results and endowments provide financial flexibility and balance sheet strength
- Good governance and management practices that drive positive operating results

Credit Challenges

- Provincially imposed revenue constraints limit the university's ability to fully capture market position
- Unfunded pension liabilities weighing down the university's balance sheet

Rating Outlook

The rating outlook is stable.

What Could Change the Rating - Up

Increased ability to set tuition fees, leading to higher revenue growth and greater financial flexibility, combined with growth in the university's endowment could apply upward pressure on the rating. If the university were to also successfully resolve its unfunded pension liabilities, this could put upward pressure on the rating.

What Could Change the Rating - Down

Sustained deterioration in financial performance and/or sustained losses in the asset value of the university's endowment, leading to a deterioration of the university's financial and liquidity profile, could exert downward pressure on the rating. An inability to address the significant unfunded pension liabilities could also put downward pressure on the rating.

Issuer Profile

The University of Toronto (U of T), Canada's largest post-secondary institution, is a comprehensive teaching and research university offering programs in 18 faculties, including Applied Science & Engineering, Arts & Science, Medicine, Law and Management. Enrolment exceeds 74,000 full-time-equivalents (FTE).

Like other universities in the Province of Ontario, the U of T was created by a separate act of the provincial legislature. While the province is ultimately responsible, constitutionally, for the delivery of post-secondary education, U of T operates at arm's-length from the province, as do other Ontario universities. The provincial government establishes broad strategies and targets for each university, provides operating grants and has the authority to control tuition fees, but each university retains autonomy to carry out its activities. While the Ontario Ministry of Training, Colleges and Universities monitors developments at individual universities and demands that universities be accountable, the "hands-off" approach to the university sector in Ontario is unlike that in some other Canadian provinces, such as Quebec and British Columbia, where the level of provincial control and oversight is considerably greater. U of T's strong standalone characteristics including strong governance and management mitigate any concerns posed by the relative independence of Ontario universities from the provincial government.

DETAILED RATING CONSIDERATIONS

U of T's rating combines (1) a baseline credit assessment (BCA) for the entity of aa2, and (2) a high likelihood of extraordinary support coming from the Province of Ontario (Aa2 negative) in the event that the entity faced acute liquidity stress.

Baseline Credit Assessment

EXCELLENT MARKET PROFILE, NOTED BY ITS STRONG MARKET POSITION AND EXTENSIVE RESEARCH PROGRAMS THAT SUPPORT THE UNIVERSITY'S REPUTATION

U of T possesses a strong market profile, reflected in its ability to consistently increase enrolment. In the 2014-15 academic year, enrolment reached 74,516 on a full-time equivalent (FTE) basis, up 3% from the prior year. The increase in enrolment was largely driven by a 14.7% increase in international students, which represent approximately 17% of total FTEs, as well as a 4% increase in domestic graduate students. On a year over year basis the university's operating revenue grew by over 10% in 2014-15, driven by the increase in international students as a proportion of total FTEs.

Despite its ongoing fiscal pressures, the government of Ontario continues to support the creation of 60,000 new post-secondary spaces. As these spaces are largely expected to be created with the Greater Toronto Area, one of the few regions in the province that exhibits a growing 15-25 year old cohort, it is expected that the U of T would benefit from these additional spaces, due to U of T's status as a flagship university. Due to this support, in combination with U of T's strong academic reputation and consistently strong domestic and international student demand, we expect the university can reach its target of over 80,000 FTEs by the 2018-19 academic year.

U of T, and its affiliated institutions, 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. Research funding from all sources is substantial and the university continues to rank highly in terms of research output and international rankings. The total value of research revenue recorded by the university in 2014-15 grew to CAD397 million, an increase of 2.7% over 2013-14 (CAD387 million). In addition to this amount, there are also substantial research grants and contracts awarded to university faculty and administered by the affiliated teaching hospitals.

LOW DEBT BURDEN, HEALTHY OPERATING RESULTS AND ENDOWMENTS PROVIDE FINANCIAL FLEXIBILITY AND BALANCE SHEET STRENGTH

U of T's credit profile benefits from the university's adequate level of spendable cash and investments to total debt (2.74 in 2014-15) and low level of total debt to cash flow (1.4x in 2014-15). Spendable cash and investments excludes permanently restricted net assets of the university, debt service funds that the university holds as well as any unspent bond proceeds. We currently do not expect any new debt issuance in the next 12 months as the university prefers to finance capital projects with internal reserves wherever possible, and capital projects have been financed in recent years to a significant degree with internal operating cash flow generation. Over the last five years, annually generated funds from operations were around 7% of revenue and around 25% of debt on average.

On a Moody's-adjusted basis, which makes adjustments to the university's annual fiscal outcomes to smooth the impact of investment returns and remove scholarships, fellowships and bursaries from both revenues and expenses (reflecting the "flow-through" nature of these expenses), U of T generated over CAD311 million in operating income in 2014-15, supported by CAD192 million in investment income.

At April 30, 2015, the university's endowment assets totaled CAD2.1 billion, up from CAD1.9 billion a year earlier. The university's Long-Term Capital Appreciation Pool, which includes assets of the endowment fund, had a formidable investment return of 15% in 2014-15, which compares to a ten-year rolling average return of 5.2%. The spending rate of the endowment fund is set between a range of 3-5% of the fair value of the endowment. The University of Toronto has traditionally been successful in its fundraising activities. Its CAD2 billion Boundless campaign is nearing conclusion and the university has now secured more than CAD1.8 billion in donations. Supported by its strong market position, we expect U of T will continue to be successful in its fundraising campaigns despite international and national competition for fundraising dollars.

GOVERNANCE AND MANAGEMENT PRACTICES THAT DRIVE POSITIVE OPERATING RESULTS

The success of U of T in maintaining a strong balance sheet, while meeting academic goals, is underpinned by 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 controlled by the university, is tasked with managing 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 plans. The university made changes to the governance arrangements of UTAM following the financial crisis to improve oversight over investment activities and has 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.

PROVINCIAL IMPOSED REVENUE CONSTRAINTS LIMIT THE UNIVERSITY'S ABILITY TO FULLY CAPTURE ITS MARKET POSITION

U of T, similar to other universities in Ontario, targets a balanced budget every year. Annual surpluses and deficits are largely a result of investment return and savings from divisions while the university has been successful in

most years to balance its core operations.

Pressures on the revenue side mainly arise from government operating grants, which have seen minimal growth over the last two years, as well as regulatory limits on tuition increases for domestic students imposed by the Ontario government. These tuition limits, which are set at 3% for domestic students in Ontario, prevent the university from raising tuition to a level that is comparable to other global institutions with similar reputations. Despite these limits, the university's growth in enrolment and focus on international students, to which tuition caps do not apply, have supported a cumulated average growth rate in tuition revenue of 10.6% over the last five years. Operating transfers from the provincial government represented almost 27% of revenues in 2014-15, down from 29% in 2013-14.

Due to the need to remain competitive with other top institutions and attract academic talent, the University of Toronto continues to face challenges from rising costs of salaries and benefits, the university's largest expense item (around 60% of operating expenditures). This is further pressured by significant pension expenses arising from the university's pension plan deficit in recent years. The university's prudent budgetary policies have helped to manage these cost pressures and over the last two years the university was successful in maintaining personnel expenditure growth below revenue growth.

UNFUNDED PENSION LIABILITIES WEIGHING DOWN THE UNIVERSITIES BALANCE SHEET

U of T recorded a pension deficit of CAD617 million as of April 30, 2015 (23% of revenue). While this was an improvement compared to the prior fiscal year (CAD684 million, 28% of revenue), the unfunded liabilities continue to place downward pressure on the rating. The stronger pension position was driven by higher asset returns partly offset by a slightly lower discount rate. In addition, the incorporation of new mortality tables in 2014-15 resulted in a retroactive increase of the university's actuarial pension liability.

U of T has been granted entrance into the provincial solvency funding relief program, and is currently in stage 2. The university was given the option of being allowed to amortize special pension payments required to address the solvency deficiency over either 7 years starting in 2018 or 10 years starting in 2015. U of T chose the 7 year option, and will begin making payments starting in 2018 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 rating.

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.

Moody's also assigns a very high default dependence between the university and the Province of Ontario reflecting our assessment of the university's and the province's joint exposure to the impact of prolonged economic shocks. It also reflects the university's reliance on provincial government grants for a sizeable portion of its overall revenues.

ABOUT MOODY'S SUB-SOVEREIGN RATINGS

National and Global Scale Ratings

Moody's National Scale Ratings (NSRs) are intended as relative measures of creditworthiness among debt issues and issuers within a country, enabling market participants to better differentiate relative risks. NSRs differ from Moody's global scale ratings in that they are not globally comparable with the full universe of Moody's rated entities, but only with NSRs for other rated debt issues and issuers within the same country. NSRs are designated by a ".nn" country modifier signifying the relevant country, as in ".za" for South Africa. For further information on Moody's approach to national scale credit ratings, please refer to Moody's Credit rating Methodology published in June 2014 entitled "Mapping Moody's National Scale Ratings to Global Scale Ratings".

The Moody's Global Scale rating for issuers and issues allows investors to compare the issuer's/issue's creditworthiness to all others in the world, rather than merely in one country. It incorporates all risks relating to that country, including the potential volatility of the national economy.

Baseline Credit Assessment

Baseline credit assessments (BCAs) are opinions of entity's standalone intrinsic strength, absent any

extraordinary support from a government. Contractual relationships and any expected ongoing annual subsidies from the government are incorporated in BCAs and, therefore, are considered intrinsic to an issuer's standalone financial strength.

BCAs are expressed on a lower-case alpha-numeric scale that corresponds to the alpha-numeric ratings of the global long-term rating scale.

Extraordinary Support

Extraordinary support is defined as action taken by a supporting government to prevent a default by a Government Related Issuer (GRI) and could take different forms, ranging from a formal guarantee to direct cash infusions to facilitating negotiations with lenders to enhance access to needed financing. Extraordinary support is described as either low (0 - 30%), moderate (31 - 50%), strong (51 - 70%), high (71 - 90%) and very high (91 - 100%).

Default Dependence

Default dependence reflects the likelihood that the credit profiles of two obligors may be imperfectly correlated. Such imperfect correlation, if present, has important diversifying effects which can change the joint-default outcome. Intuitively, if two obligors' default risks are imperfectly correlated, the risk that they would simultaneously default is smaller than the risk of either defaulting on its own.

In the application of joint-default analysis to GRIs, default dependence reflects the tendency of the GRI and the supporting government to be jointly susceptible to adverse circumstances leading to defaults. Since the capacity of the government to provide extraordinary support and prevent a default by a GRI is conditional on the solvency of both entities, the more highly dependent -- or correlated -- the two obligors' credit profiles, the lower the benefits achieved from joint support. In most cases GRIs demonstrate moderate to very high degrees of default dependence with their supporting governments, which reflects the existence of institutional linkages and shared exposure to economic conditions that draw credit profiles together.

Default dependence is described as either low (30%), moderate (50%), high (70%) and very high (90%).

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 <http://www.moodys.com> for the most updated credit rating action information and rating history.



© 2015 Moody's Corporation, Moody's Investors Service, Inc., Moody's Analytics, Inc. and/or their licensors and affiliates (collectively, "MOODY'S"). All rights reserved.

CREDIT RATINGS ISSUED BY MOODY'S INVESTORS SERVICE, INC. AND ITS RATINGS AFFILIATES ("MIS") ARE MOODY'S CURRENT OPINIONS OF THE RELATIVE FUTURE CREDIT RISK OF ENTITIES, CREDIT COMMITMENTS, OR DEBT OR DEBT-LIKE SECURITIES, AND CREDIT RATINGS AND RESEARCH PUBLICATIONS PUBLISHED BY MOODY'S ("MOODY'S PUBLICATIONS") MAY INCLUDE MOODY'S CURRENT OPINIONS OF THE RELATIVE FUTURE CREDIT RISK OF ENTITIES, CREDIT COMMITMENTS, OR DEBT OR DEBT-LIKE SECURITIES. MOODY'S DEFINES CREDIT RISK AS THE RISK THAT AN ENTITY MAY NOT MEET ITS CONTRACTUAL, FINANCIAL OBLIGATIONS AS THEY COME DUE AND ANY ESTIMATED FINANCIAL LOSS IN THE EVENT OF DEFAULT. CREDIT RATINGS DO NOT ADDRESS ANY OTHER RISK, INCLUDING BUT NOT LIMITED TO: LIQUIDITY RISK, MARKET VALUE RISK, OR PRICE VOLATILITY. CREDIT RATINGS AND MOODY'S OPINIONS INCLUDED IN MOODY'S PUBLICATIONS ARE NOT STATEMENTS OF CURRENT OR HISTORICAL FACT. MOODY'S PUBLICATIONS MAY ALSO INCLUDE QUANTITATIVE MODEL-BASED ESTIMATES OF CREDIT RISK AND RELATED OPINIONS OR COMMENTARY PUBLISHED BY MOODY'S ANALYTICS, INC. CREDIT RATINGS AND MOODY'S PUBLICATIONS DO NOT CONSTITUTE OR PROVIDE INVESTMENT OR FINANCIAL ADVICE, AND CREDIT RATINGS AND MOODY'S PUBLICATIONS ARE NOT AND DO NOT PROVIDE RECOMMENDATIONS TO PURCHASE, SELL, OR HOLD PARTICULAR SECURITIES. NEITHER CREDIT RATINGS NOR MOODY'S PUBLICATIONS COMMENT ON THE SUITABILITY OF AN INVESTMENT FOR ANY PARTICULAR

INVESTOR. MOODY'S ISSUES ITS CREDIT RATINGS AND PUBLISHES MOODY'S PUBLICATIONS WITH THE EXPECTATION AND UNDERSTANDING THAT EACH INVESTOR WILL, WITH DUE CARE, MAKE ITS OWN STUDY AND EVALUATION OF EACH SECURITY THAT IS UNDER CONSIDERATION FOR PURCHASE, HOLDING, OR SALE.

MOODY'S CREDIT RATINGS AND MOODY'S PUBLICATIONS ARE NOT INTENDED FOR USE BY RETAIL INVESTORS AND IT WOULD BE RECKLESS FOR RETAIL INVESTORS TO CONSIDER MOODY'S CREDIT RATINGS OR MOODY'S PUBLICATIONS IN MAKING ANY INVESTMENT DECISION. IF IN DOUBT YOU SHOULD CONTACT YOUR FINANCIAL OR OTHER PROFESSIONAL ADVISER.

ALL INFORMATION CONTAINED HEREIN IS PROTECTED BY LAW, INCLUDING BUT NOT LIMITED TO, COPYRIGHT LAW, AND NONE OF SUCH INFORMATION MAY BE COPIED OR OTHERWISE REPRODUCED, REPACKAGED, FURTHER TRANSMITTED, TRANSFERRED, DISSEMINATED, REDISTRIBUTED OR RESOLD, OR STORED FOR SUBSEQUENT USE FOR ANY SUCH PURPOSE, IN WHOLE OR IN PART, IN ANY FORM OR MANNER OR BY ANY MEANS WHATSOEVER, BY ANY PERSON WITHOUT MOODY'S PRIOR WRITTEN CONSENT.

All information contained herein is obtained by MOODY'S from sources believed by it to be accurate and reliable. Because of the possibility of human or mechanical error as well as other factors, however, all information contained herein is provided "AS IS" without warranty of any kind. MOODY'S adopts all necessary measures so that the information it uses in assigning a credit rating is of sufficient quality and from sources MOODY'S considers to be reliable including, when appropriate, independent third-party sources. However, MOODY'S is not an auditor and cannot in every instance independently verify or validate information received in the rating process or in preparing the Moody's Publications.

To the extent permitted by law, MOODY'S and its directors, officers, employees, agents, representatives, licensors and suppliers disclaim liability to any person or entity for any indirect, special, consequential, or incidental losses or damages whatsoever arising from or in connection with the information contained herein or the use of or inability to use any such information, even if MOODY'S or any of its directors, officers, employees, agents, representatives, licensors or suppliers is advised in advance of the possibility of such losses or damages, including but not limited to: (a) any loss of present or prospective profits or (b) any loss or damage arising where the relevant financial instrument is not the subject of a particular credit rating assigned by MOODY'S.

To the extent permitted by law, MOODY'S and its directors, officers, employees, agents, representatives, licensors and suppliers disclaim liability for any direct or compensatory losses or damages caused to any person or entity, including but not limited to by any negligence (but excluding fraud, willful misconduct or any other type of liability that, for the avoidance of doubt, by law cannot be excluded) on the part of, or any contingency within or beyond the control of, MOODY'S or any of its directors, officers, employees, agents, representatives, licensors or suppliers, arising from or in connection with the information contained herein or the use of or inability to use any such information.

NO WARRANTY, EXPRESS OR IMPLIED, AS TO THE ACCURACY, TIMELINESS, COMPLETENESS, MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE OF ANY SUCH RATING OR OTHER OPINION OR INFORMATION IS GIVEN OR MADE BY MOODY'S IN ANY FORM OR MANNER WHATSOEVER.

Moody's Investors Service, Inc., a wholly-owned credit rating agency subsidiary of Moody's Corporation ("MCO"), hereby discloses that most issuers of debt securities (including corporate and municipal bonds, debentures, notes and commercial paper) and preferred stock rated by Moody's Investors Service, Inc. have, prior to assignment of any rating, agreed to pay to Moody's Investors Service, Inc. for appraisal and rating services rendered by it fees ranging from \$1,500 to approximately \$2,500,000. MCO and MIS also maintain policies and procedures to address the independence of MIS's ratings and rating processes. Information regarding certain affiliations that may exist between directors of MCO and rated entities, and between entities who hold ratings from MIS and have also publicly reported to the SEC an ownership interest in MCO of more than 5%, is posted annually at www.moodys.com under the heading "Investor Relations — Corporate Governance — Director and Shareholder Affiliation Policy."

For Australia only: Any publication into Australia of this document is pursuant to the Australian Financial Services License of MOODY'S affiliate, Moody's Investors Service Pty Limited ABN 61 003 399 657 AFSL 336969 and/or Moody's Analytics Australia Pty Ltd ABN 94 105 136 972 AFSL 383569 (as applicable). This document is intended to be provided only to "wholesale clients" within the meaning of section 761G of the Corporations Act 2001. By

continuing to access this document from within Australia, you represent to MOODY'S that you are, or are accessing the document as a representative of, a "wholesale client" and that neither you nor the entity you represent will directly or indirectly disseminate this document or its contents to "retail clients" within the meaning of section 761G of the Corporations Act 2001. MOODY'S credit rating is an opinion as to the creditworthiness of a debt obligation of the issuer, not on the equity securities of the issuer or any form of security that is available to retail clients. It would be dangerous for "retail clients" to make any investment decision based on MOODY'S credit rating. If in doubt you should contact your financial or other professional adviser.

For Japan only: MOODY'S Japan K.K. ("MJKK") is a wholly-owned credit rating agency subsidiary of MOODY'S Group Japan G.K., which is wholly-owned by Moody's Overseas Holdings Inc., a wholly-owned subsidiary of MCO. Moody's SF Japan K.K. ("MSFJ") is a wholly-owned credit rating agency subsidiary of MJKK. MSFJ is not a Nationally Recognized Statistical Rating Organization ("NRSRO"). Therefore, credit ratings assigned by MSFJ are Non-NRSRO Credit Ratings. Non-NRSRO Credit Ratings are assigned by an entity that is not a NRSRO and, consequently, the rated obligation will not qualify for certain types of treatment under U.S. laws. MJKK and MSFJ are credit rating agencies registered with the Japan Financial Services Agency and their registration numbers are FSA Commissioner (Ratings) No. 2 and 3 respectively.

MJKK or MSFJ (as applicable) hereby disclose that most issuers of debt securities (including corporate and municipal bonds, debentures, notes and commercial paper) and preferred stock rated by MJKK or MSFJ (as applicable) have, prior to assignment of any rating, agreed to pay to MJKK or MSFJ (as applicable) for appraisal and rating services rendered by it fees ranging from JPY200,000 to approximately JPY350,000,000.

MJKK and MSFJ also maintain policies and procedures to address Japanese regulatory requirements.