UNIVERSITY OF TORONTO

OFFICE OF THE GOVERNING COUNCIL

FOR INFORMATION **PUBLIC** **OPEN SESSION**

TO: Business Board

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DATE: January 18, 2022 for February 2, 2022

AGENDA ITEM: 4(a)

ITEM IDENTIFICATION:

Debt Strategy - Annual Review.

JURISDICTIONAL INFORMATION:

Pursuant to Section 5 (1.) (b.) of the Business Board *Terms of Reference*, the Business Board has responsibility for reviewing regular reports on matters affecting the finances of the University and on financial programs and transactions.

GOVERNANCE PATH:

1. **Business Board [For Information] (February 2, 2022)**

PREVIOUS ACTION TAKEN:

The borrowing strategy was initially approved by Governing Council in June 2004. A revision of this debt strategy was approved in November 2012. The latest annual review was presented on February 3, 2021.

HIGHLIGHTS:

The debt strategy approved by Business Board in November 2012 established a single debt policy limit including both internal and external debt, with fungibility between them. The debt policy limit is calculated annually using the 5% debt burden ratio (debt service cost divided by total expenditures) as a key determinant, and the 0.8 viability ratio (total expendable resources divided by total debt) be taken into consideration in setting that debt policy limit. The purpose of this report is to assess the continued prudence and effectiveness of this debt strategy.

At April 30, 2021, the 5% debt burden ratio resulted in a total debt policy limit of $1,940.1 million. The associated viability ratio with this debt policy limit was 1.7, higher (which is better) than the desired lower threshold of 0.8. Of the $1,940.1 million, $890.1 million is set to be issued from internal sources with the remaining $1,050 million to be obtained from external debt. Actual outstanding debt at December 31, 2021 was $982.4 million, of which $272.4 million was internal and $710 million was external. At December 31, 2021, $1,588.8 million of borrowing room has been allocated to capital projects and other requirements, leaving $351.3 million ($1,940.1 million less $1,588.8 million) for future initiatives. Future capital projects under active consideration will require approximately $914.3 million, which is $563 million above what is currently available for allocation.

Based on projected financial factors such as total expenditures and expendable resources, the debt policy limit, determined using a 5% debt burden ratio, is projected to increase by an additional $481.8 million to $2,421.9 million by April 30, 2027. This increase in debt limit plus the reduction of $150 million allocation for pension, would provide a total unallocated debt of $631.8 million by 2027. Based on the current estimated timing of the debt requirement for capital projects under active consideration, the debt policy limit would deliver enough debt to support the University's capital needs.

Sensitivity analysis shows that increases in interest rates and slower growth in expenditures would negatively affect this projection and would lower the debt limit. For our projections, a 5.5% borrowing rate was used for future debt. It is about 2% higher than borrowing rates of recent debt issued by some Canadian universities. Therefore, the 5.5% already builds in a margin for future rate increases. It should be noted that an increase of 1% in the interest rate (from 5.5% to 6.5%) would lower the debt policy limit at April 30, 2027 to $2,309 million, rather than $2,421.9 million (a reduction of $112.9 million). However, a 1% decrease in the interest rate (from 5.5% to 4.5%) would increase the debt policy limit at April 30, 2027 to $2,566.9 million rather than $2,421.9 million (an increase of $145 million). In terms of total expenditures, for each $10 million reduction of total expenditures, the debt policy limit would decline by $6.2 million.

To assess the prudence of the debt policy, the University benchmarked actual and planned external debt and key financial ratios to those of selected Canadian universities and to Moody's U.S. Public College and University Medians (Fiscal 2020). In summary, compared to selected Canadian universities, at April 2021, U of T had lower debt service costs to total expenditures than most of its peer Canadian universities. In terms of expendable resources to pay outstanding debt, U of T had higher expendable resources to debt ratios than all its peer Universities. Compared to U.S. universities, U of T has a lower debt service cost than the median of universities with our same credit rating and higher spendable cash and investments to debt than the median of universities with our same credit rating.

The current debt strategy has been in place for over nine years. This report on the functioning of the strategy demonstrates that, provided interest rates remain relatively stable and provided the University grows as expected, it will deliver steady increases of debt policy limit that would likely be sufficient to meet the borrowing needs for capital projects that are currently under active consideration.

It should be noted that in recent years, the University, as well as other institutions in the higher education sector, have explored other innovative financing structures for acquiring capital assets (or the use of capital assets), beyond using traditional external or internal debt due to pressures caused by changes in the funding environment, but also as a result of the desire to leverage the expertise that other industries can bring to the partnership. As the University moves forward in its development strategy for on campus housing and other key services (including commercial space rentals) with a plan that also creates a future source of revenue to help fund the University's academic mission, these new projects are bound to require long-term debt that may be shared with the partner. The current debt strategy will need to take into account the impact of these arrangements, where the partner's share of the debt may not be recorded on the University's balance sheet, nor is the University legally liable for the debt. However, due to the University's association with the project, the University may be exposed to political and financial risks. The University is currently in the process of developing an amendment to the current debt strategy so that off balance sheet debt generated through partnerships are incorporated in the policy and their impact on the University's financial health is monitored and managed to ensure the University's future financial sustainability. This work is expected to be completed later this year.

FINANCIAL IMPLICATIONS:

None

RECOMMENDATION:

For information.

DOCUMENTATION PROVIDED:

- Debt Strategy review December 31, 2021

Debt Strategy Review 2021-22

December 31, 2021
University of Toronto Financial Services

UNIVERSITY OF
TORONTO

University of Toronto
Borrowing at a Glance to December 31, 2021

Financial Ratios in accordance with Policy	Total	External Component	Internal Component Other Debt	Pension Debt
Debt burden ratios:				
Debt policy limit at April 30, 2021	**5.0%**			
Actual debt outstanding at December 31, 2021*	**2.7%**	1.8%	0.5%	0.4%
Viability ratios:				
Debt policy limit at April 30, 2021	**1.7**			
Actual debt outstanding at December 31, 2021*	**3.4**	4.7	18.3	37.4
Monitoring debt burden + pension special payments				
Actual debt outstanding at December 31, 2021 plus minimum required special pension payments as % of total expenditures*	**3.4%**			

*Calculated using the Total expenditures or Total expendable resources at April 30, 2021 and minimum required special pension payments for the year ended April 30, 2021

Debt Policy Limit April 30, 2021	Total in Millions	External Component	Internal Component Other Debt	Pension Debt
Debt Policy Limit	**1,940.1**	1,050.0	740.1	150.0

Allocations	Total in Millions	External Component	Internal Component Other Debt	Pension Debt
Opening balance at October 31, 2021	**1,608.9**	718.8	740.1	150.0
Change of allocation on previously approved projects	**(20.1)**	(20.1)	-	-
Closing balance at December 31, 2021	**1,588.8**	698.7	740.1	150.0
Unallocated	**351.3**	351.3	-	-

Actual Debt Outstanding	Total in Millions	External Component	Internal Component Other Debt	Pension Debt
Opening balance at October 31, 2021				
Debentures due 2031 to 2051	**710.0**	710.0		
Internal debt	**275.2**	-	184.7	90.5
	985.2	710.0	184.7	90.5
Changes	**(2.8)**	-	(1.7)	(1.1)
Closing balance at December 31, 2021	**982.4**	710.0	183.0	89.4

Definitions:

Debt includes all long-term external and internal borrowed funds obtained by any means (e.g. debentures, bank loans) and excludes letters and lines of credit and all short-term and medium term internal financing for purposes such as construction financing and fund deficits.

Debt burden ratio, key determinant of debt policy limit, equals interest plus principal divided by total expenditures.

Debt policy limit is the maximum debt that can be taken on based on a debt burden ratio of 5%.

Viability ratio, to be taken into consideration in setting debt policy limit, equals expendable resources divided by debt. The debt strategy has set a preference of a viability ratio of 0.8 or greater.

Allocations include borrowing approved by Business Board, plus contingency for donations targets and pledges.

Actual debt outstanding is the sum of internal loans issued from internal debt plus actual external debt issuance.

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INTRODUCTION

The University of Toronto's debt programme is as an integral component of the University's overall financial strategy. It is the primary mechanism by which the University can leverage resources to enable capacity growth and quality enhancements of physical facilities in support of the academic mission. Debt is strategically managed as a scarce resource that must be carefully utilized to support revenue generating assets to the greatest extent possible.

In November 2012, a revised debt strategy was approved by the Business Board, replacing the strategy in place since 2004. The revised strategy takes into account the need for debt financing, the University's appetite for carrying debt, and the availability of funds for internal borrowing. It sets appropriate financial parameters to assess debt capacity and monitor overall affordability of the debt programme.

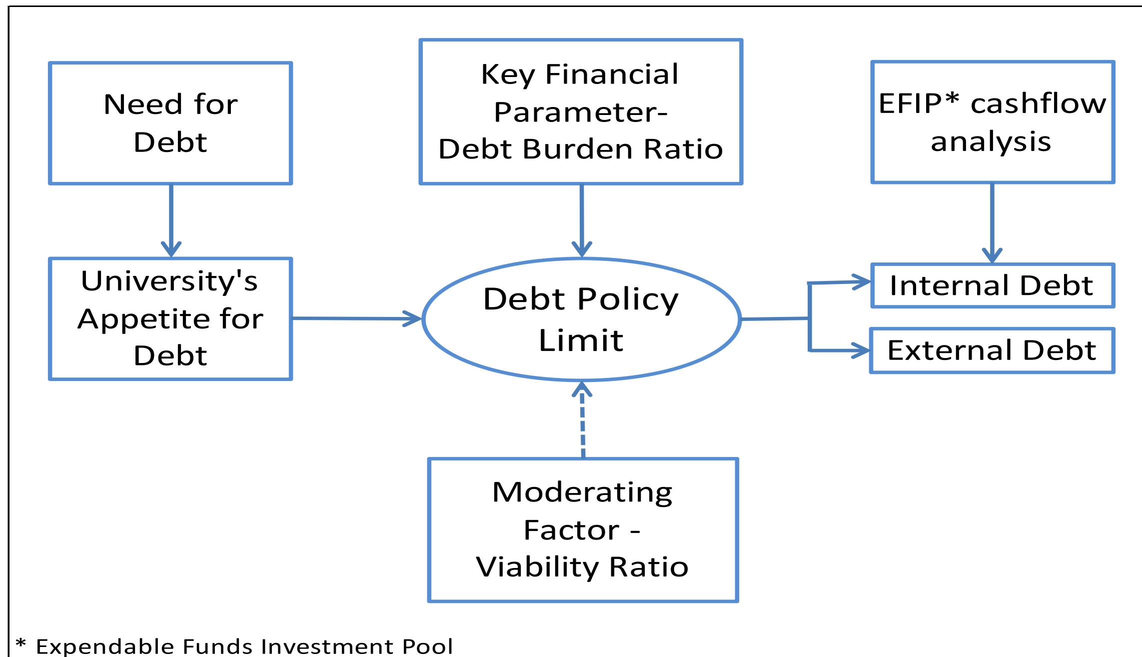
The debt strategy establishes a single debt policy limit including both internal and external debt, with fungibility between them. **This debt policy limit is determined primarily on the basis of debt affordability (measured using a debt burden ratio of 5%) and moderated when necessary and appropriate by an assessment of overall debt capacity (measured using a viability ratio of 0.8).**

The key elements of the current strategy are:

- **Debt** includes all long-term external and internal borrowed funds obtained by any means (e.g. debenture, bank loan), and excludes letters and lines of credit and all short-term and medium term internal financing for purposes such as construction financing and fund deficits.
- **External debt** includes all funds borrowed from third party lenders while **internal debt** includes funds borrowed by the University from its Expendable Funds Investment Pool (EFIP).
- **The total maximum debt limit** is calculated annually using the debt burden ratio (principal plus interest divided by total adjusted expenditures) of 5%.
- **Consideration is given to moderate the debt policy limit** if the viability ratio (expendable resources divided by debt) associated with that maximum debt limit is below 0.8.
- **The internal debt component** is currently set at 25% of the EFIP balance at April 30 ($890 million for fiscal year 2021-22). An upper limit of 40% of EFIP has been established to recognize the need for liquidity and to provide for any possible future changes in cash flow patterns.
- **The monitoring ratio** is an additional metric calculated to monitor the combined impact of debt service on borrowed funds plus special pension payments, given the obligation to fund the pension deficit.
- **Credit ratings are** excluded from policy determination.
- **A self-imposed internal sinking fund** accumulates funds to repay debentures at maturity.
- **The borrowing method** (e.g. private placement or other method) is determined by the senior officer responsible for financial matters.
- **The internal borrowing programme** is determined, managed and operated by the University's administration. The senior officer responsible for financial matters is authorized to issue internal

loans from either internal or external debt for projects where borrowing has been authorized by the Business Board.

All other elements of the debt strategy, its associated processes and procedures, and the Business Board approvals that were in place remained unchanged. The purpose of this report is to assess the continued prudence and effectiveness of this debt strategy.



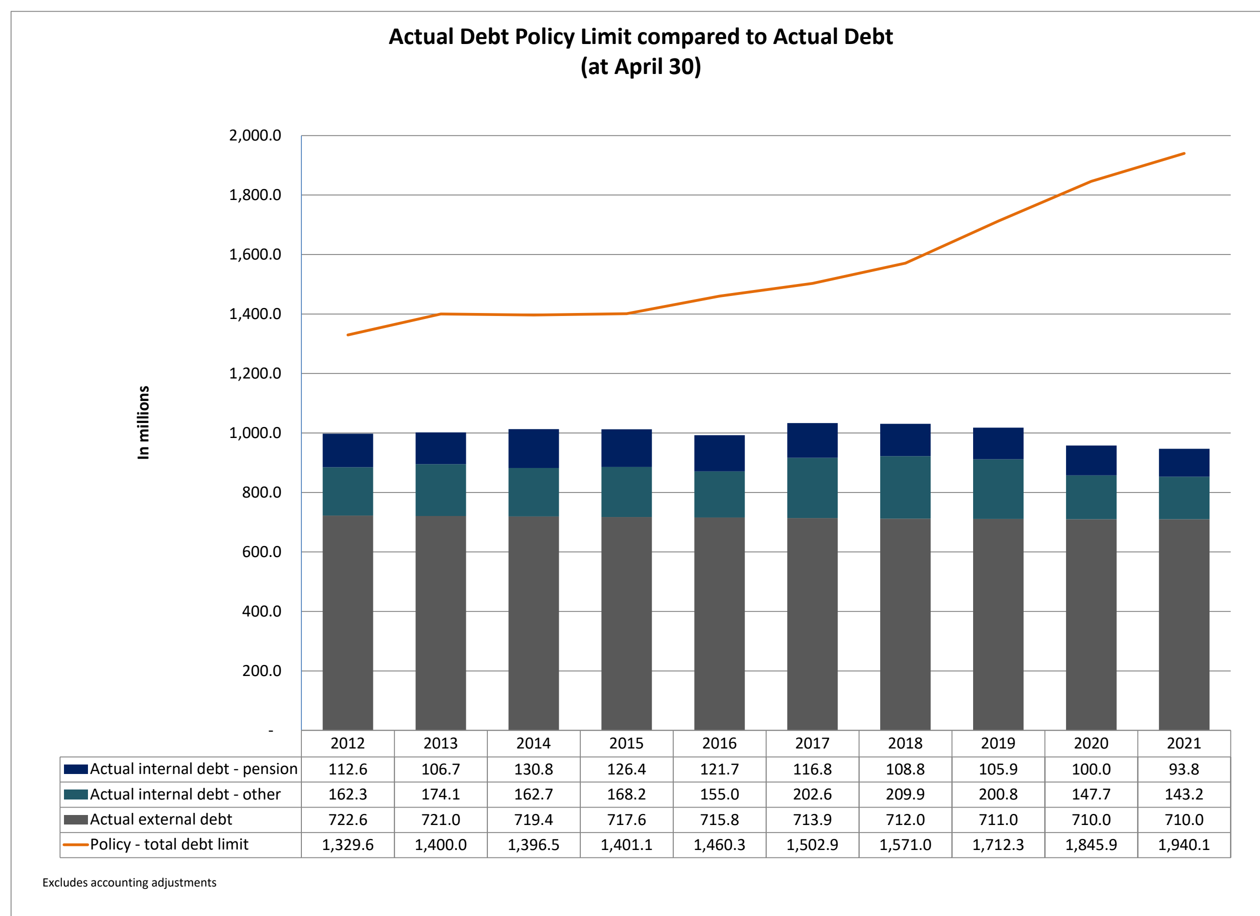
In recent years, the University, as well as other institutions in the higher education sector, have explored other innovative financing structures for acquiring capital assets beyond using traditional external or internal debt due to pressures caused by changes in the funding environment, but also as a result of the desire to leverage the expertise that other industries can bring to the partnership. The University launched "Four Corners", a development strategy for on campus housing and other key services with a plan that also creates a future source of revenue to help fund the University's academic mission. Many of these new projects are bound to require long-term debt that involve a partner who may either share in the exposure of the debt or have their own debt for their ownership stake. The University may not be liable for this debt or it may not be recorded in the University's balance sheet. However, due to the University's association with the project, the University may be exposed to political and financial risks. The University is currently in the process of developing an amendment to the current debt strategy so that off balance sheet debt generated through partnerships are incorporated in the policy and can be monitored.

1. CURRENT STATUS

Debt Policy Limit

The debt policy limit is updated annually at April 30 and is used in the following fiscal year as the maximum amount of debt available for future projects. At April 30, 2021, the 5% debt burden ratio resulted in a total debt policy limit of $1,940.1 million[1]. The viability ratio associated with the debt policy limit was 1.7, which is higher (better) than the desired lower threshold of 0.8; and therefore, no adjustment was made to the $1,940.1 million debt limit.

Internal debt is set at $890.1 million for 2021-22 (25% of the EFIP balance at April 30, 2021), which is below the 40% upper limit for EFIP. Of this amount, $150 million has been allocated for pensions and the remaining amount is allocated for other projects. This leaves an external debt component of $1,050 million ($1,940.1 million minus $890.1 million).



	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Actual internal debt - pension	112.6	106.7	130.8	126.4	121.7	116.8	108.8	105.9	100.0	93.8
Actual internal debt - other	162.3	174.1	162.7	168.2	155.0	202.6	209.9	200.8	147.7	143.2
Actual external debt	722.6	721.0	719.4	717.6	715.8	713.9	712.0	711.0	710.0	710.0
Policy - total debt limit	1,329.6	1,400.0	1,396.5	1,401.1	1,460.3	1,502.9	1,571.0	1,712.3	1,845.9	1,940.1

[1] The calculation assumes a borrowing rate of 5.5% for future debt issuance, which is about 2% higher than borrowing rates of recent debt issued by some Canadian universities. It therefore builds in a margin for future interest rate increases. Please refer to page 3 of appendix II of this link: https://governingcouncil.utoronto.ca/system/files/agenda-items/20210617_BB_10.pdf for detailed calculation.

Allocations to capital projects and other requirements

At December 31, 2021, the Business Board has allocated[2] $1,588.8 million to capital projects and other requirements. With the $1,940.1 million debt limit set as at April 30, 2021, this leaves $351.3 million to be allocated to future capital projects.

Actual outstanding internal and external debt

At December 31, 2021, there was $982.4 million of total outstanding debt (all carrying fixed rates): $710.0 million (excluding accounting adjustments) in external long-term debt and $272.4 million in internal debt, as follows:

	Internal Debt for Capital and Other	Internal Debt for Pensions	Total Internal Debt	External Debt	Total
Policy Limit	740.1	150.0	890.1	1,050.0	1,940.1
Allocations	740.1	150.0	890.1	698.7	1,588.8
	-	-	-	351.3	351.3
Actual outstanding debt:					
Series A debenture*				160.0	160.0
Series B debenture*				200.0	200.0
Series C debenture*				75.0	75.0
Series D debenture*				75.0	75.0
Series E debenture*				200.0	200.0
Internal debt	183.0	89.4	272.4	-	272.4
Total outstanding	183.0	89.4	272.4	710.0	982.4

* These debentures are unsecured with principal to be repaid on maturity dates ranging from 2031(A) to 2051(E).

At December 31, 2021, the debt burden ratio for the total outstanding debt is 2.7% and the associated viability ratio is 3.4. The ratio for debt burden plus pension special payments is 3.4%.

[2] Allocations include borrowing approved by Business Board, plus contingency for donations targets and pledges.

2. FUTURE DEBT REQUIREMENTS

Projecting Debt Needs

Debt primarily supports capital projects and pensions. In assessing the appropriateness of a debt strategy, we consider the need for debt together with the need to remain affordable, and for debt servicing to continue to be financially responsible.

Over the next several years to April 30, 2027, we estimate that approximately $914 million of additional debt will be needed for new capital projects not yet approved by the Business Board, but that are under active consideration. Included in this estimate are projects that are in the very early stages of planning, which may not materialize or may be deferred depending on other available funding sources. It is unlikely they will all be completed within the six-year time frame. Debt is allocated to academic divisions based on the general principle that long-term borrowing makes up no more than 20% of the total project cost.

Over the next five years, academic divisions have plans for several major capital projects, including a new multi-use parking structure at UTSC; a new interdisciplinary building at UTM's Site F2; renovations in several Arts & Science buildings at the St. George Campus; development of the James and Louise Temerty Building on the site of the current MSB west wing; and a new Data Sciences Centre. In addition, the University is planning major capital investments under the Four Corners strategy, with the dual goals of developing amenities that support the academic mission and increasing revenues for the University's operating budget. Projects under consideration include faculty and student housing development on all three campuses, the Site 1 Gateway Project at Bloor and Spadina, and the second phase of the Schwartz Reisman Innovation Centre (SRIC). As the planning process advances each year in response to divisional and institutional priorities, changes may be made to the envelope of planned projects. The table below shows the estimated timing of new debt needed for these projects.

Need for Debt (Projects not yet Approved)

(in Millions of Dollars)		
	Tentative Approval Date	Tentative Loan Date
2021-22	46.7	
2022-23	206.4	
2023-24	163.1	46.7
2024-25	107.2	206.4
2025-26	290.9	163.1
2026-27	100.0	107.2
Total to 2027	914.3	523.4

During the construction period, financing is absorbed by EFIP as short-term bridge financing and is not included as debt.

Projecting Debt Capacity

Up to December 31, 2021, the Business Board has approved $1,588.8 million of debt for capital and other projects, leaving $351.3 million for future projects. To meet the estimated future debt requirements of $914.3 million, an additional debt capacity of $563 million would be needed by 2026-27. The table below shows the projected increases of debt available for allocation by fiscal year based on an estimated borrowing interest rate of 5.5%[3]. The University also plans to retire the remaining balance of the pension loan by May 2022. This will free up $150 million of debt capacity that can be re-allocated to other priorities.

Projected Debt Available for Allocation by Fiscal Year*
(in millions)

Fiscal Year	Debt Policy Limit available during the Fiscal Year	Annual Debt Limit Increase	Opening Unallocated Debt Available	Reduction of Allocation for Pension	Debt Required for Not Yet Approved Projects under Consideration (based on approval date)	Remaining Debt Available for Allocation
2021-22	1,940.1		351.3**	143.8	(46.7)	448.4
2022-23	2,061.4	121.3	448.4	6.2	(206.4)	369.5
2023-24	2,114.4	53.0	369.5		(163.1)	259.4
2024-25	2,210.9	96.5	259.4		(107.2)	248.7
2025-26	2,291.4	80.5	248.7		(290.9)	38.3
2026-27	2,363.9	72.5	38.3		(100.0)	10.8
2027-28	2,421.9	58.0	10.8			68.8

* Sensitivity: Note that an increase of 1% in borrowing interest rate would reduce the debt policy limit between $99 million (2022: from $2,061.4 million to $1,962.4 million) and $112.9 million (2027: from $2,421.9 million to $2,309.0 million). A 1% decrease in the interest rate would increase the debt policy limit between $128 million (2022: from $2,061.4 million to $2,189.4 million) and $145 million (2027: from $2,421.9 million to $2,566.9 million). In addition, at the borrowing rate of 5.5%, for each $10 million reduction in total expenditures, the debt policy limit would decline by $6.2 million. See page 12 for further details.

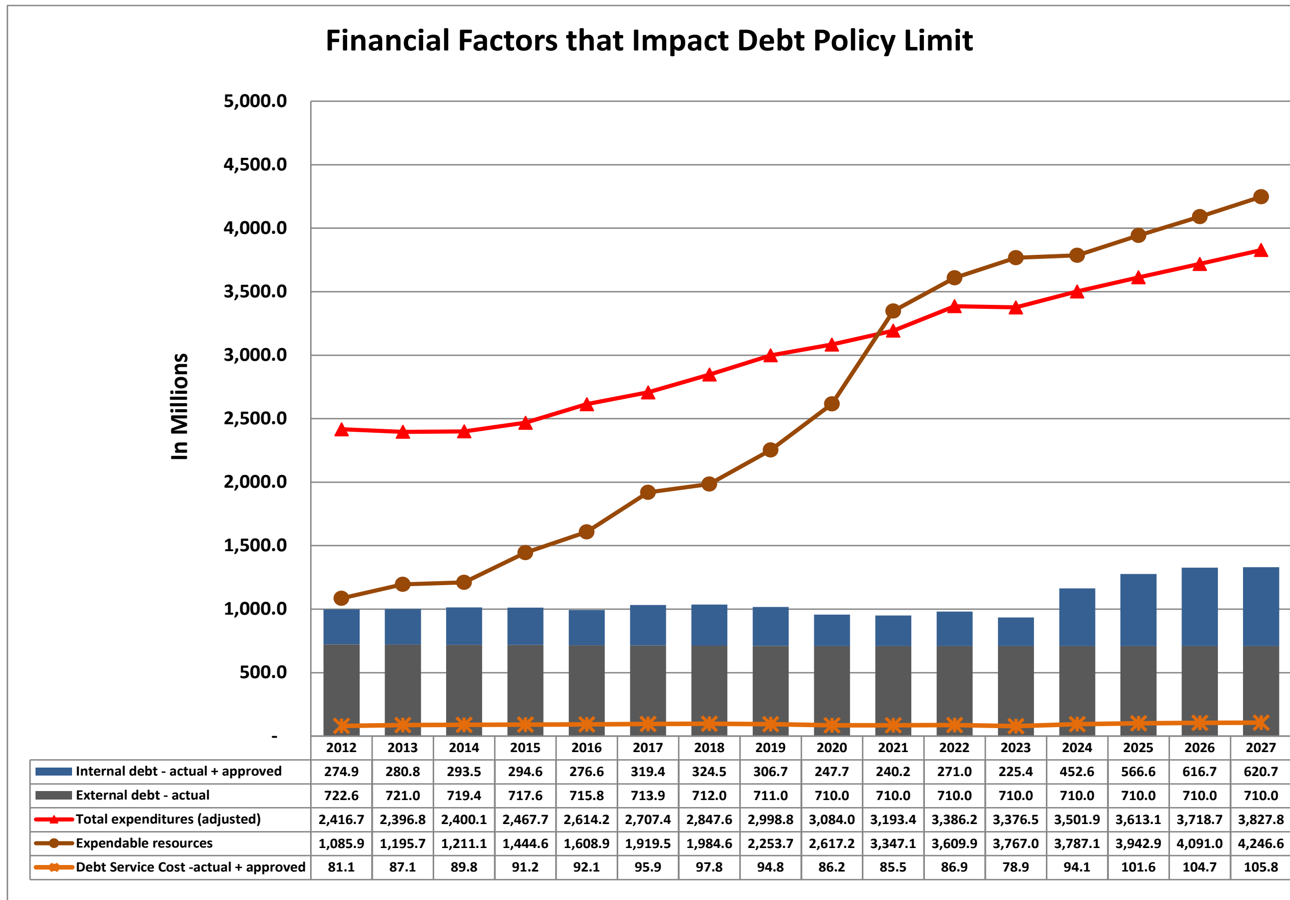
** At December 31, 2021

Based on the table above, debt available is projected to increase steadily over the next few years due to the projected growth of the university's operations and expenditures. This growth, together with the $150 million reduction of allocation for pension would deliver debt policy limits needed to support the

[3] The 5.5% interest rate includes a margin for future interest rate increases. Ottawa, York and Queen's issued debentures of $300 million, $100 million and $125 million for 2.635%, 3.394% and 2.889% in February, March and April 2020. More recently, Ryerson issued a debenture of $250 million for 3.542% in April 2021, and McMaster and Carlton issued debentures of $125 million and $220 million for 3.405% and 3.264% in June 2021.

University's capital needs that are currently under active consideration. As indicated above, some of these projects may not materialize or may be deferred depending on other available funding sources.

To forecast future growth of the debt policy limit, we have projected the key financial factors that impact the debt policy limit. The following graph shows a steady increase in total expenditures, as well as increases of expendable resources to April 30, 2027.



	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
Internal debt - actual + approved	274.9	280.8	293.5	294.6	276.6	319.4	324.5	306.7	247.7	240.2	271.0	225.4	452.6	566.6	616.7	620.7
External debt - actual	722.6	721.0	719.4	717.6	715.8	713.9	712.0	711.0	710.0	710.0	710.0	710.0	710.0	710.0	710.0	710.0
Total expenditures (adjusted)	2,416.7	2,396.8	2,400.1	2,467.7	2,614.2	2,707.4	2,847.6	2,998.8	3,084.0	3,193.4	3,386.2	3,376.5	3,501.9	3,613.1	3,718.7	3,827.8
Expendable resources	1,085.9	1,195.7	1,211.1	1,444.6	1,608.9	1,919.5	1,984.6	2,253.7	2,617.2	3,347.1	3,609.9	3,767.0	3,787.1	3,942.9	4,091.0	4,246.6
Debt Service Cost -actual + approved	81.1	87.1	89.8	91.2	92.1	95.9	97.8	94.8	86.2	85.5	86.9	78.9	94.1	101.6	104.7	105.8

These projections reflect the following assumptions:

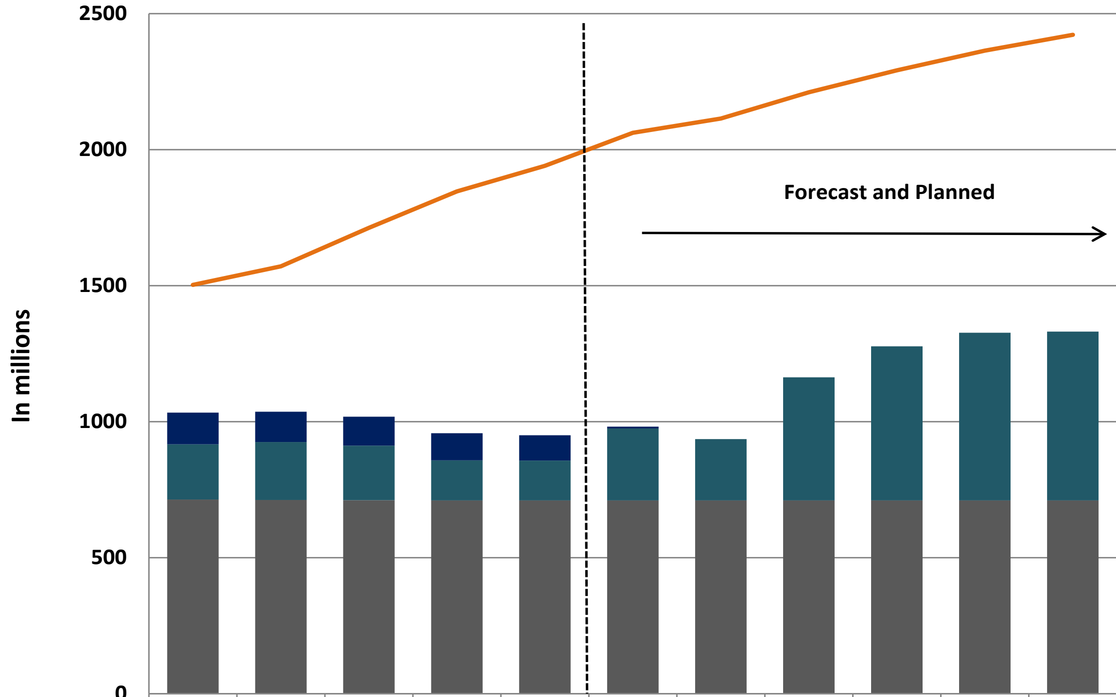
- 2021-22 financial forecast and 2021-22 long-range operating budgets with particular focus on the anticipated growth rates of both the operating expense and revenue budgets.
- Preliminary ancillary budgets 2022 to 2027.
- Divisional reserves to increase, with annual allocations from operating fund towards capital projects under consideration and matching programs.
- We have incorporated capital construction costs for projects that have been approved by Business Board. For the outer years, we have also attempted to model future capital construction costs for projects currently under consideration, which have not yet approved. Furthermore, we have incorporated the effect of potential bridge financing of donations and future debt issuance.
- Investment return on endowments and other long-term funds beyond 2022 is forecasted using target return rates.

- We have built in modest growth in internally designated endowments and a large increase for deferred contributions in 2020-21 and 2021-22, due to unusually large expendable donations received in those years, which are expected to be used over the next years.
- New external debt is assumed to be issued in the form of debentures to be paid in 40 years. Debt service costs for new external debt consist of debt divided by 40 years plus interest at a rate of 5.5%[4]. Debt service costs for new internal loans consist of principal and interest repayment of amortizing loans over 25 years with an interest rate of 5.5%. Debt service cost for interest only loans to bridge finance donations consist of interest of outstanding debt calculated using a rate of 4.5%.
- Pension Contribution Strategy and Pension Special Payment Budget recommended in the 2022-27 long-range budget. With the elimination of the significant going concern deficit in the University's Registered Pension Plan due to the 2020-21 returns and the transfer to the University Pension Plan in July 2021, there will be no need for additional payment by 2026-27. However, budgets will be set aside internally to build a pension reserve of $366.5 million by April 30, 2027.

Based on the assumptions above, the following graph shows the forecasted total debt policy limit (calculated with a debt burden ratio of 5%) compared to actual and planned debt. The increase in the debt policy limits is mainly attributed to the planned growth in the operating expense budget.

[4] The 5.5% interest rate includes a margin for future interest rate increases. Ottawa, York and Queen's issued debentures of $300 million, $100 million and $125 million for 2.635%, 3.394% and 2.889% in February, March and April 2020. More recently, Ryerson issued a debenture of $250 million for 3.542% in April 2021, and McMaster and Carlton issued debentures of $125 million and $220 million for 3.405% and 3.264% in June 2021.

Actual/Forecasted Debt Policy Limit compared to Actual/Planned Debt



	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
Actual internal debt - pension	116.8	111.5	105.9	100.0	93.8	6.3	-	-	-	-	-
Actual + approved internal debt - other	202.6	213.0	200.8	147.7	146.4	264.7	225.4	452.6	566.6	616.7	620.7
External debt - actual	713.9	712.0	711.0	710.0	710.0	710.0	710.0	710.0	710.0	710.0	710.0
Policy - total debt limit	1,502.9	1,571.0	1,712.4	1,845.9	1,940.1	2,061.4	2,114.4	2,210.9	2,291.4	2,363.9	2,421.9

Excludes accounting adjustments

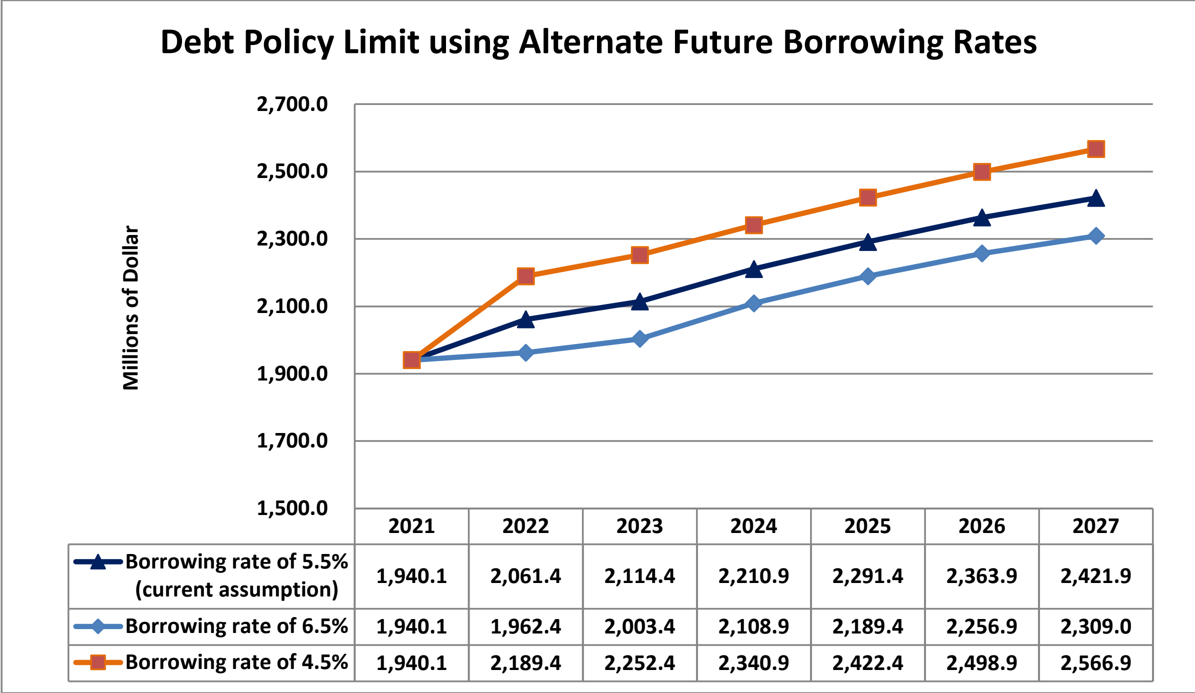
Compared to last year's debt strategy review, the current projection provides slightly higher debt policy limits than last year's projection. Projections of future expenditures that impacts the calculation of the debt burden ratio have been increased slightly based on last year's results and current year's forecast. We anticipate larger capital expenditures in the next few years, which do not impact the debt burden ratio. For fiscal 2022, expenditures for operating fund, restricted funds and ancillary operations are expected to be slightly higher than previously projected.

Expendable resources are expected to grow since revenues are expected to grow modestly at higher rates than expenses. The excess of revenues over expenses are partially used towards capital expenditures. In 2021 and 2022, large expendable donations, which is expected to be spent over the next few years will increase expendable resources over the next few years. Additionally, the lower than expected operating expenses also contributed to larger reserves in 2021. Based on the forecasted expendable resources, viability ratios are expected to be above the desired minimum of 0.8, so we do not expect the need to adjust the debt limit by this secondary parameter.

Based on the above projections, the debt policy limits for future years will provide sufficient financing needed for the projects under active consideration.

Sensitivity Analysis

Material increases in interest rates would negatively impact this projection as they would increase the cost of new debt, increasing the debt burden ratio, and thus reducing the debt policy limit. As stated above, we have used a future borrowing rate of 5.5% (with a margin of almost 2% for future rate increases) to project the debt policy limits. A sensitivity analysis of the debt policy limit was calculated using interest rates of 4.5% and 6.5% as shown in the graph below.



	2021	2022	2023	2024	2025	2026	2027
Borrowing rate of 5.5% (current assumption)	1,940.1	2,061.4	2,114.4	2,210.9	2,291.4	2,363.9	2,421.9
Borrowing rate of 6.5%	1,940.1	1,962.4	2,003.4	2,108.9	2,189.4	2,256.9	2,309.0
Borrowing rate of 4.5%	1,940.1	2,189.4	2,252.4	2,340.9	2,422.4	2,498.9	2,566.9

The above graph shows that an increase of 1% in the interest rate for borrowing would result in a debt policy limit reduction between $99 million (2022: from $2,061.4 million to $1,962.4 million) and $112.9 million (2027: from $2,421.9 million to $2,309.0 million). A 1% decrease in the interest rate would result in a debt policy limit increase between $128 million (2022: from $2,061.4 million to $2,189.4 million) and $145 million (2027: from $2,421.9 million to $2,566.9 million).

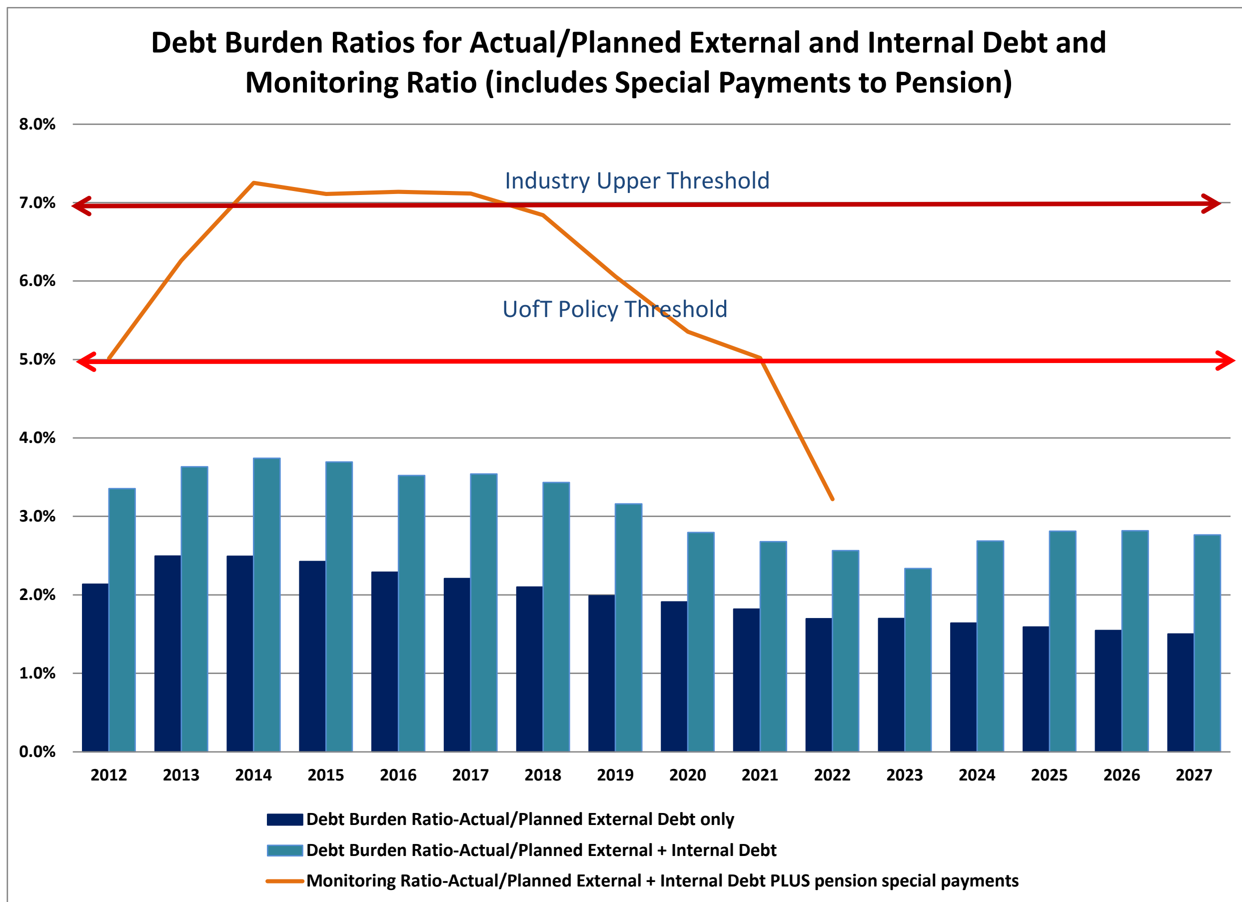
In addition, the projected debt policy limit is also dependent on the projected growth of the University's expenditures and expendable resources. If these were to grow at a lower rate than those projected in this analysis, the debt policy limits would also be lower than projected. At the borrowing rate of 5.5%, for each $10 million reduction of total expenditures, the debt policy limit would decline by $6.2 million.

3. FINANCIAL MONITORING

Debt affordability is the financial parameter that determines the debt policy limit. Debt capacity is the secondary financial parameter that is taken into consideration when setting the debt policy limit each year.

Debt Affordability

Debt affordability is defined as the amount that can be made available to pay interest and repay outstanding debt, both external and internal. It is measured via income statement ratios and is impacted by the interest rate at which the debt is financed and the time period over which principal payments are made on the debt. The debt strategy sets the acceptable debt burden ratio (principal plus interest/total expenditures) at 5%, well within a recommended upper limit of 7% (*Strategic Financial Analysis in Higher Education – Seventh edition*).



At the time this policy was approved in 2012, an additional metric was developed to capture the potential impact of future adverse events, due to the size of the pension deficit and the resulting need for pension related contributions over many years by the University. The monitoring ratio, which adds

the special pension payments[5] (under the pension contribution strategy) to principal plus interest on actual and planned internal and external debt, and continues to be divided by total expenditures, will serve only for additional information purposes.

The graph above shows the actual debt burden ratios for external debt alone and the actual debt burden ratios for both external and internal debt up to 2021. The forecasted debt burden ratios include debt that has already been approved by Business Board. It also shows the actual monitoring ratio (that includes pension special payments) to 2021.

With the elimination of the significant going concern deficit in the University's Registered Pension Plan due to the 2020-21 returns and the transfer to the University Pension Plan in July 2021, there will be no need for additional payment to 2026-27. Therefore, for the fiscal years 2023 to 2027, there will be no additional increase to the debt burden ratio for pension special payments.

Based on the projected expenditures and the projected debt service costs for actual and approved projects, the debt burden ratios for the future years will increase slightly but will remain well below the 5% maximum policy limit. The additional monitoring ratio is not expected to add to the regular debt burden ratio, since no special payments are expected beyond 2022.

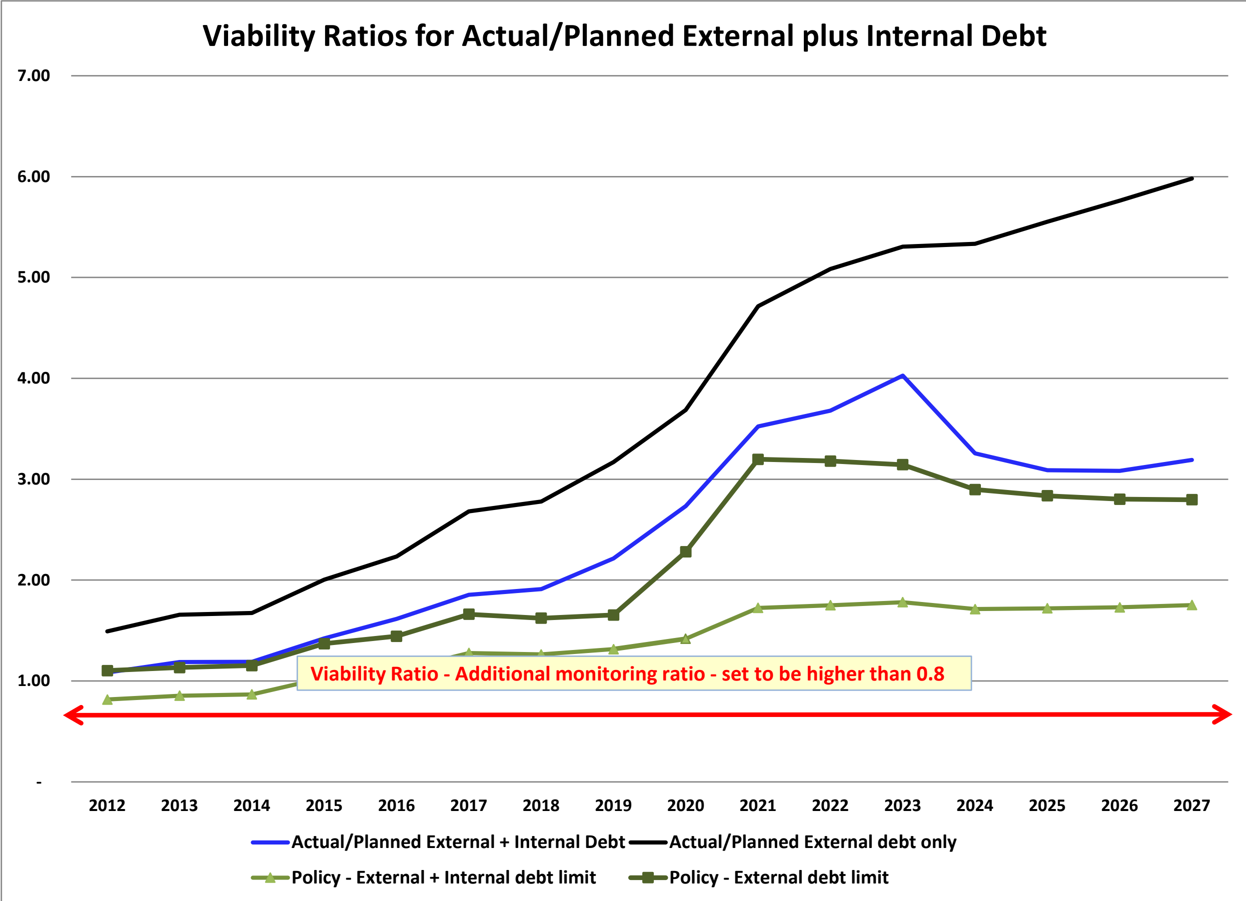
Debt Capacity

Debt capacity, which is considered a moderating factor, is defined as the amount that can be borrowed based on funds on hand that could be used to repay the outstanding debt as of the balance sheet date. It is measured via a balance sheet ratio (expendable resources/debt). The debt strategy identifies a viability ratio of 0.8 as the appropriate lower threshold for our institution that balances our financial, operating and programmatic objectives. This is an additional ratio that is taken into consideration once the debt policy limit is calculated using the debt burden ratio of 5%.

The graph below shows the viability ratios based on actual debt (external only and both internal plus external debt) up to 2021 and the forecasted viability ratios based on actual and approved projects to 2027. It also shows the actual and forecasted viability ratios based on the assumption of issuing debt equal to the debt policy limit, both external plus internal, and then for external debt alone.

The graph shows that the viability ratios for the actual and planned debt are expected to be above the lower threshold of 0.8 for all the years being forecasted. In addition, the viability ratios associated with the forecasted debt policy limits are expected to be also above 0.8 for the years 2022 to 2027. Therefore, we don't expect to adjust the debt limit by this secondary parameter.

[5] Pension Contribution Strategy and Pension Special Payment Budget recommended in the 2022-27 long-range budget. With the elimination of the significant going concern deficit in the University's Registered Pension Plan due to the 2020-21 returns and the transfer to the University Pension Plan in July 2021, there will be no need for additional payment to 2026-27. However, budgets will be set aside internally to build a pension reserve of $366.5 million by April 30, 2027.



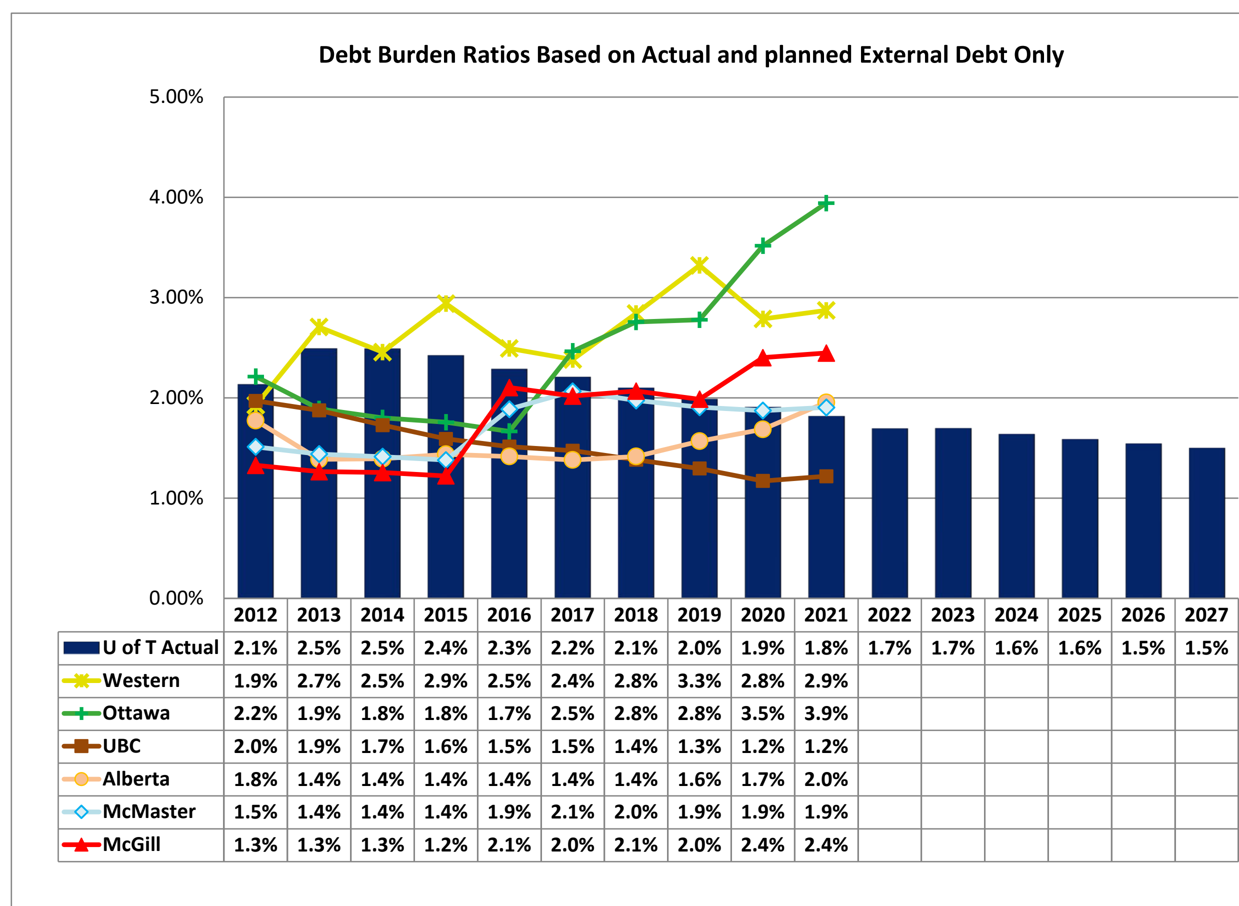
A number of years have passed since the current debt strategy was approved in November 2012. We continue to believe that using the debt burden ratio to assess the University's ability to service debt and using the viability ratio as a secondary ratio to monitor the University's capacity to repay debt are financially prudent. Limiting the cost of servicing debt to quite a small percentage, 5% of total expenditures, helps the University balance what is spent ***on*** the classroom with what is spent ***in*** the classroom. Using an additional parameter to monitor the University's debt adds to the University's caution in setting the debt policy limit.

As noted at the beginning of the report, due to changes in funding environment and to leverage expertise in other industries, the University has explored other innovative financing structures for acquiring capital assets beyond using traditional external or internal debt. With the launch of "Four Corners", many new projects may be bound to require off balance sheet long-term debt which involve other partners. Due to the University's association with these projects, the University may be exposed to political and financial risks. Therefore, the University is currently in the process of developing an amendment to the current debt strategy so that off balance sheet debt generated through partnerships are incorporated in the policy and their impact on the University's financial health is monitored and managed to ensure the University's future financial sustainability. This work is expected to be completed later this year.

Benchmarking

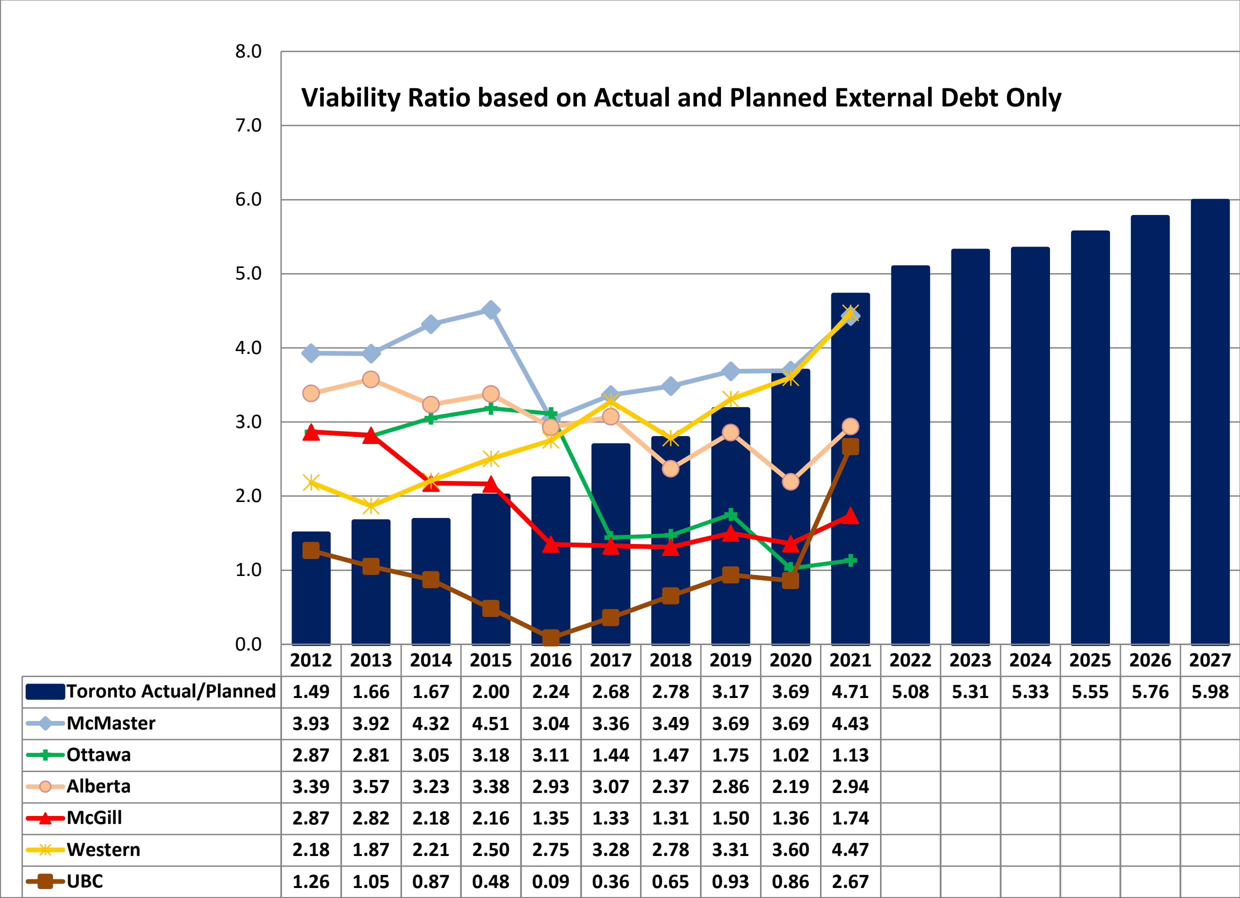
To assess the current debt strategy, we also compare the University's debt ratios to those of selected Canadian and U.S. universities.

For the benchmarking against Canadian universities, we have used the University's actual and forecasted debt burden and viability ratios and compared them to the debt burden and viability ratios that we have calculated for these other Canadian universities. Since these two ratios are not readily available, we have obtained the data from their published financial statements and have made some minor necessary adjustments to their financial data to make them comparable to the data used to calculate the University of Toronto ratios. For example, in calculating the ratios for McGill University, we have excluded the debt, debt service cost and interest expense related to the debt that is secured by the Government of Quebec. For universities that have issued debentures, like U of T, we have used the same approach to calculate the annual debt service cost for the principal component by dividing the debt by the number of years from the issue date to the maturity date. Finally, since information on internal debt is not disclosed in the financial statements and is not readily available, we have calculated the ratios based only on external debt. The two graphs below show the debt burden ratios and viability ratios.



	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
U of T Actual	2.1%	2.5%	2.5%	2.4%	2.3%	2.2%	2.1%	2.0%	1.9%	1.8%	1.7%	1.7%	1.6%	1.6%	1.5%	1.5%
Western	1.9%	2.7%	2.5%	2.9%	2.5%	2.4%	2.8%	3.3%	2.8%	2.9%						
Ottawa	2.2%	1.9%	1.8%	1.8%	1.7%	2.5%	2.8%	2.8%	3.5%	3.9%						
UBC	2.0%	1.9%	1.7%	1.6%	1.5%	1.5%	1.4%	1.3%	1.2%	1.2%						
Alberta	1.8%	1.4%	1.4%	1.4%	1.4%	1.4%	1.4%	1.6%	1.7%	2.0%						
McMaster	1.5%	1.4%	1.4%	1.4%	1.9%	2.1%	2.0%	1.9%	1.9%	1.9%						
McGill	1.3%	1.3%	1.3%	1.2%	2.1%	2.0%	2.1%	2.0%	2.4%	2.4%						

At April 2021, U of T's debt burden ratio on actual external debt was below all the selected peer universities, except for UBC. In recent years, other Canadian universities have increased their reliance on debt-financing, while the University has not issued any external debt since 2011, which is reflected in these ratios.



	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
Toronto Actual/Planned	1.49	1.66	1.67	2.00	2.24	2.68	2.78	3.17	3.69	4.71	5.08	5.31	5.33	5.55	5.76	5.98
McMaster	3.93	3.92	4.32	4.51	3.04	3.36	3.49	3.69	3.69	4.43						
Ottawa	2.87	2.81	3.05	3.18	3.11	1.44	1.47	1.75	1.02	1.13						
Alberta	3.39	3.57	3.23	3.38	2.93	3.07	2.37	2.86	2.19	2.94						
McGill	2.87	2.82	2.18	2.16	1.35	1.33	1.31	1.50	1.36	1.74						
Western	2.18	1.87	2.21	2.50	2.75	3.28	2.78	3.31	3.60	4.47						
UBC	1.26	1.05	0.87	0.48	0.09	0.36	0.65	0.93	0.86	2.67						

In terms of the viability ratio, U of T had higher expendable resources to external debt than all the Canadian universities used for benchmarking.

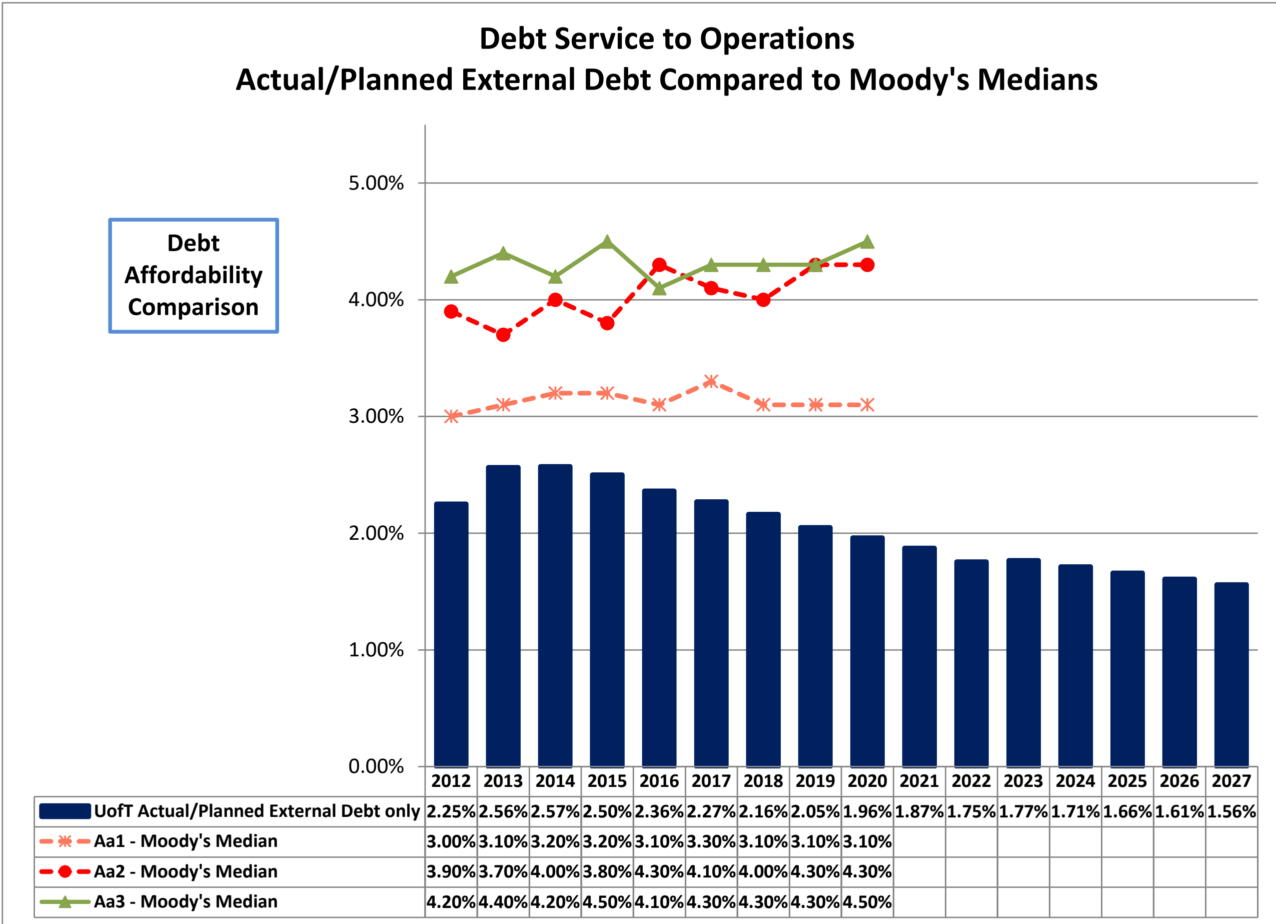
When comparing U of T to U.S. universities, we see that U of T's debt burden ratio is lower than universities with similar investment grade rating categories.

For benchmarking against U.S. universities, we used the Moody's U.S. Public College and University Medians (fiscal 2020) which provided comparison data for selected U.S. universities. The University of Toronto is not included in this report. There are 14 universities at the Aa1 rating level, 27 universities at the Aa2 level, and 45 universities at the Aa3 level. At each rating level, the median university ratio is displayed. Only external debt is considered.

Moody's implemented changes a few years ago in their rating methodology for colleges and universities globally. This change resulted in "adjustments to certain ratios calculations to ensure global comparability, including moving to cash-based wealth metrics from net-asset based metrics". For debt affordability, Moody's has continued to use Debt Service to Operation (which we had used in the past)

as the appropriate metric. Therefore, no change is required for debt affordability benchmarking. However, for debt capacity, Moody's has replaced the viability ratio (Expendable Resources to External Debt) with the Spendable Cash and Investment (defined as cash, short-term investments and investments less externally restricted endowments) to External Debt ratio.

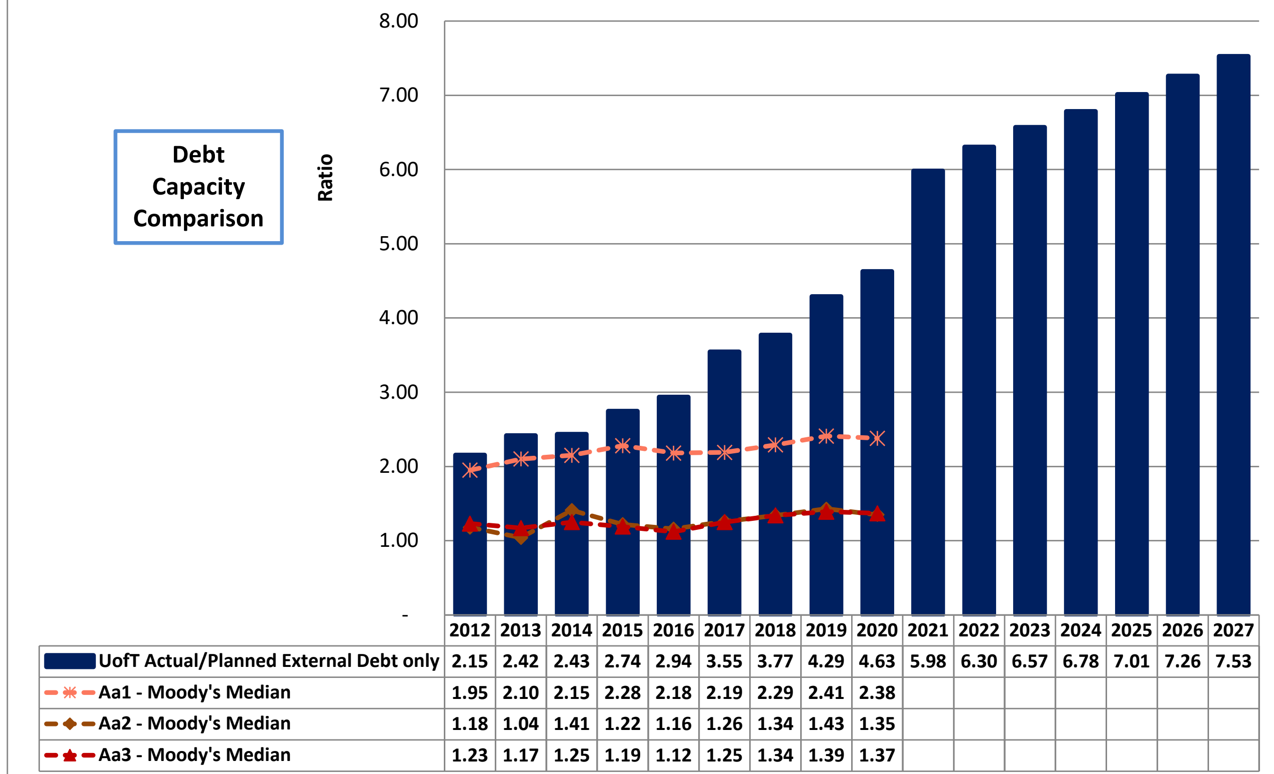
As a debt affordability comparison, we selected the ratio of debt service to operations. This ratio is very similar to the debt burden ratio, but has one difference. Scholarships, fellowships and bursaries are deducted from total expenditures since Moody's considers this category to represent tuition discounting. The U of T ratio reflected below has been adjusted for that difference and is slightly better than the debt burden ratio displayed in the other charts.



	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
UofT Actual/Planned External Debt only	2.25%	2.56%	2.57%	2.50%	2.36%	2.27%	2.16%	2.05%	1.96%	1.87%	1.75%	1.77%	1.71%	1.66%	1.61%	1.56%
Aa1 - Moody's Median	3.00%	3.10%	3.20%	3.20%	3.10%	3.30%	3.10%	3.10%	3.10%							
Aa2 - Moody's Median	3.90%	3.70%	4.00%	3.80%	4.30%	4.10%	4.00%	4.30%	4.30%							
Aa3 - Moody's Median	4.20%	4.40%	4.20%	4.50%	4.10%	4.30%	4.30%	4.30%	4.50%							

The 2020 ratios for the three rating levels range from 3.1% to 4.5%. The 2020 U of T ratio was 1.96%, which is below median US universities with the same rating of Aa1.

The next chart provides the debt capacity comparison, using Moody's new Spendable Cash and Investments to External Debt that effectively incorporates U of T's self-imposed sinking fund in the calculation. This ratio measures the university's ability to repay bondholders from wealth that can be accessed over time or for a specific purpose.



	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
UofT Actual/Planned External Debt only	2.15	2.42	2.43	2.74	2.94	3.55	3.77	4.29	4.63	5.98	6.30	6.57	6.78	7.01	7.26	7.53
Aa1 - Moody's Median	1.95	2.10	2.15	2.28	2.18	2.19	2.29	2.41	2.38							
Aa2 - Moody's Median	1.18	1.04	1.41	1.22	1.16	1.26	1.34	1.43	1.35							
Aa3 - Moody's Median	1.23	1.17	1.25	1.19	1.12	1.25	1.34	1.39	1.37							

The 2020 ratios for the three rating levels range from 1.35 to 2.38. The 2020 U of T ratio was 4.63, higher than the 2020 ratios for the three rating levels range, and the U of T ratio is projected to increase over the future years.

In summary, compared to selected Canadian universities, at April 2021, U of T had lower debt service costs to total expenditures than almost all the other universities. In terms of expendable resources to pay outstanding debt, U of T had higher expendable resources to debt ratios than all the other universities. Compared to U.S. universities, U of T has a lower debt service cost than the median of universities with our same credit rating and higher spendable cash and investments to debt than the median of universities with our same credit rating.

Credit ratings

Credit ratings give lenders an assessment of a borrower's ability to repay debt. The credit rating also influences the interest rate paid by the borrower, reflecting how much the lender wants to be compensated for assuming the risk related to repayment of the debt and the covenants placed on the borrower by the lenders.

The University has three credit ratings – from Moody's Investors Service, from Standard and Poor's Global and from Dominion Bond Rating Service Morningstar. The following table shows the credit rating definitions and the ratings assigned to our U.S. and Canadian peers.

Credit Rating Comparison
University of Toronto with US and Canadian Peers at June 2021

Rating Definitions	**Moody's Investors Service**	**Standard & Poor's Global**	**Dominion Bond Rating Service Morningstar**
Best quality	Aaa	AAA	AAA
Next highest quality	Aa1	AA+	AA(high)
and so on, declining	Aa2	AA	AA
	Aa3	AA-	AA(low)
	A1	A+	A(high)
	A2	A	A
	and so on	and so on	and so on

University	**Moody's Investors Service**	**Standard & Poor's Global**	**Dominion Bond Rating Service Morningstar**
PROVINCE OF ONTARIO	**Aa3**	**A+**	**AA(low)**
University of Michigan	Aaa	AAA	
University of Texas system	Aaa	AAA	
University of Washington	Aaa	AA+	
University of Toronto	**Aa1**	**AA+**	**AA**
University of British Columbia	Aa1	AA+	
University of Pittsburgh	Aa1	AA+	
Queen's University		AA+	AA
University of Minnesota	Aa1	AA	
Ohio State University	Aa1	AA	
University of Western Ontario		AA	
McMaster University		AA	AA
University of California	Aa2	AA	
University of Ottawa	Aa2		AA(low)
McGill University	Aa2	AA-	
University of Arizona	Aa2	AA-	
University of Illinois	A1	A+	

Source: Credit rating agencies' websites and reports.

As the above chart illustrates, the University of Toronto continues to maintain excellent credit ratings, absolutely and in comparison to our peers and is rated above the Province of Ontario.

4. SOURCES OF DEBT

Internal debt

The current debt strategy sets a single limit to include both internal and external debt, with the split between internal and external debt to be determined by expendable cash flows deemed to be available for long-term investment.

Although internal and external debt are considered to be fungible within the overall debt strategy, the maximum internal debt component has been set at 40% of expendable cash to recognize the need for liquidity and to provide for possible future changes to cash flow patterns. Based on a review of EFIP historical and projected cashflows, the University decided last year to increase the allocation of EFIP to internal loans to 25% of the EFIP balance at April 30 each year. For fiscal 2021-22 (based on the EFIP balance of April 30, 2021) the amount set for internal loans was $890.1 million (including $150 million debt for Pension funding). This allocation is still well below the 40% upper limit for EFIP. The annual amount to be allocated to internal loans will be reset each year based on the April 30 balance of EFIP.

External debt and debenture repayment

At April 30, 2021, the University's external debt programme consists entirely of unsecured debentures. A master trust indenture sets out the terms and conditions under which the debentures have been issued, and how they must be repaid.

A total amount of $710 million fixed rate debentures have been issued for 30-year and 40-year terms, with interest payable on a semi-annual basis, and with the principal repayment at various maturity dates, ranging from 2031 to 2051 as follows:

Series A July 18, 2031	$160 million
Series B December 15, 2043	$200 million
Series C November 16, 2045	$ 75 million
Series D December 13, 2046	$ 75 million
Series E December 7, 2051	$200 million

A self-imposed (that is, not specified by the master trust indenture) sinking fund, entitled the Long-Term Borrowing Pool (LTBP) has been established by the University to accumulate funds for the repayment of the debentures. The source of the funds being accumulated in the LTBP is the principal portion of blended principal and interest payment being made by internal borrowers (faculties, divisions and central departments) on loans that they have taken out under the University's internal borrowing programme that are supported by external debt.

At April 30, 2021, a total of $520.9 million has been accumulated in the LTBP towards repayment of the debentures.

SUMMARY

The current debt strategy has been in place for over nine years. This ninth annual report on the functioning of the strategy demonstrates that, provided interest rates remain relatively stable and provided the University grows as projected; it would deliver debt levels needed to support the University's capital needs that are currently under active consideration.

Projections for new external and internal long-term debt are calculated using a borrowing rate of 5.5%[6]. Sensitivity analysis shows that increases in interest rates and slower growth in expenditures would negatively affect this projection and would lower the debt limit. However, reduction of interest rates would positively affect this projection. It should be noted that an increase of 1% in the interest rate used in the calculation (from 5.5% to 6.5%) would lower the debt policy limit at April 30, 2027 to $2,309 million, rather than $2,421.9 million (a reduction of $112.9 million). A 1% reduction in the interest rate used in the calculation (from 5.5% to 4.5%) would increase the debt policy limit at April 30, 2027 to $2,566.9 million rather than $2,421.9 million (an increase of $145 million). In terms of total expenditures, for each $10 million reduction of total expenditures, the debt policy limit would decline by $6.2 million.

The debt policy limit established under this program allows for similar debt that is currently being taken on by selected Canadian comparators; however, it reflects less debt that is taken on by U.S. comparators in the same strong investment credit rating grade that Moody's assigned to U of T. Compared to the median of U.S. Universities with same rating, U of T also has lower debt service cost and higher wealth to pay external debt.

As noted in this report, the debt policy limit encompasses both an internal debt component and an external debt component. The analysis shows that the internal debt component, which represents a long-term investment by the University's expendable funds investment pool, is expected to continue to be available for this purpose throughout the projection period. The report also describes the external debt and shows that progress is being made to accumulate funds needed to repay the debentures, which repayment is required over the period from 2031 to 2051.

Finally, the University is currently in the process of developing an amendment to the current debt policy, so that the impact of off balance sheet debt and the financial and political risks of debt generated through new innovative partnerships, such as some projects through the Four Corner initiative, are incorporated in the policy. This way, their impact on the University's financial health is monitored and managed to ensure the University's future financial sustainability. This work is expected to be completed later this year.

[6] The 5.5% interest rate includes a margin for future interest rate increases. Ottawa, York and Queen's issued debentures of $300 million, $100 million and $125 million for 2.635%, 3.394% and 2.889% in February, March and April 2020. More recently, Ryerson issued a debenture of $250 million for 3.542% in April 2021, and McMaster and Carlton issued debentures of $125 million and $220 million for 3.405% and 3.264% in June 2021.

APPENDIX

Links to related documents

Debt Strategy Policy
The Debt Strategy Policy approved by the Business Board on November 5, 2012 may be found at the following link:
http://www.governingcouncil.utoronto.ca/AssetFactory.aspx?did=9085

Debt Policy Limit, Debt Allocations, Outstanding Debt Issue and Status of the Long Term Borrowing Pool to April 30, 2021
The annual update on debt to April 30, 2021, which includes the calculation of the debt burden ratio and viability ratios and maximum debt policy limit at 5% debt burden ratio may be found at the following link:
https://governingcouncil.utoronto.ca/system/files/agenda-items/20210617_BB_10.pdf

Credit Reports from Rating Agencies
The latest credit report from **Standard and Poor's Global** (November 2020) may be found at the following link:
https://governingcouncil.utoronto.ca/sites/default/files/agenda-items/20201125_08_BB.pdf

The latest credit report from **Moody's Investors Service** (September 2020) may be found at the following link:
https://governingcouncil.utoronto.ca/sites/default/files/agenda-items/20201006_BB_15b.pdf

The latest credit report from **Dominion Bond Rating Service Morningstar** (August 2021) and may be found at the following link: https://governingcouncil.utoronto.ca/system/files/agenda-items/20211005_BB_13.pdf