Attachment 1

UNIVERSITY OF TORONTO

University of Toronto

Debt Strategy

2012

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Executive Summary

Since 2004, the borrowing strategy has defined the maximum amount of external and internal long-term debt that the University of Toronto can take on and provides important discipline around debt and its repayment.

Debt includes all long-term external and internal borrowed funds obtained by any means (e.g. debentures, bank loans, capital leases, etc.), 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.

The internal debt policy limit is currently set at $350 million, composed of $200 million for capital and other requirements and $150 million for pension purposes. Some or all of the $350 million internal debt might need to be refinanced externally at some time, if future cash flow patterns would deteriorate.

The external debt policy limit is set at 40% of net assets averaged over 5 years (set at $746.6 million for 2012-13). In the event that actual outstanding external debt exceeds 40% of net assets averaged over 5 years, no further external borrowing can occur until the external debt has returned to a ratio that is no greater than one third of net assets averaged over 5 years. There is an internal sinking fund requirement to accumulate repayment of the external debt.

The current borrowing strategy and its related processes and procedures have been in place since 2004. This strategy has worked quite well in most respects, and most aspects of it are being retained in the revised debt strategy, but the debt policy limit has presented some challenges which need to be addressed. The internal and external debt policy limits are separately defined and not fungible. There is no mechanism for external re-financing of internal debt. The external debt policy limit is heavily affected by fluctuations in investment returns and by endowed donations but is not influenced to any great degree by the growth in the size of the University and by the University's ability to pay interest and principal on borrowed funds.

Going forward, a single debt policy limit is proposed, including both of the former internal and external debt policy limits. The key characteristic of this single debt policy limit is that, however it is calculated, it would specify the total maximum debt, both internal and external, that the University chooses to take on. In future, the split between internal debt and external debt would be determined by expendable cash flows deemed to be available for long-term investment and could fluctuate between the two over time, but within the overall debt limit. In other words, in future, the availability of more internal cash would not increase the overall

debt policy limit, but it would affect the amount that the University would seek from outside lenders. This is a significant change from current practice.

This change makes it much easier to think about and manage debt, and effectively deals with the issues of fungibility and possible future re-financing of internal debt with external debt. With this change, it is also easier to analyze the consequences of debt.

Debt affordability and debt capacity were selected as the key financial parameters for determining the debt policy limit.

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. A 5% debt burden ratio (principal plus interest divided by total expenditures) was selected as a key determinant of the debt policy limit.

Debt capacity 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 by balance sheet ratios. The viability ratio (expendable resources divided by debt) of 0.8 was selected to be considered when determining the annual debt policy limit.

Although internal and external debt are considered to be fungible within the overall debt policy, there are no current plans to increase the current $350 million internal debt limit, and a maximum of 40% of expendable cash was also established for this component to recognize the need for liquidity and to provide for possible future changes to cash flow patterns.

An additional metric was also developed to monitor the combined impact of the debt and of the pension contribution strategy on the University's ability to pay.

At April 30, 2012, the debt policy limit calculated using the 5% debt burden ratio is $1.33 billion, $233 million higher than the $1.0966 billion calculated under the current strategy (40% of an average of 5 years of net assets). At April 30, 2017, the debt policy limit calculated using the 5% debt burden ratio is projected to be $1.56 billion, $76 million less than the debt policy limit projected under the current strategy. In all years from 2012 to 2017, the viability ratios associated with the projected debt policy limit are projected to be greater than 0.8.

At April 30, 2012, actual debt service, including both internal and external debt, and including notional principal payments on external debentures, was 3.5%. At April 30, 2017 it is projected to be 3.8%, in both cases well below the proposed debt policy limit.

Comparisons to selected Canadian and U.S. universities reinforced our view that the proposed debt policy limit is reasonable.

In summary, taking into account the financial parameters, the need for debt and the University's appetite for debt, **it is recommended that the debt policy limit be calculated annually using the 5% debt burden ratio as a key determinant and that the 0.8 viability ratio be taken into consideration in setting that debt policy limit.**

All other elements of the debt strategy, its associated processes and procedures, and the Business Board approvals that are currently in place are recommended to remain unchanged.

Current Situation

Since 2004, the borrowing strategy[1] has defined the maximum amount of external and internal long-term debt that the University of Toronto can take on and provides important discipline around debt and its repayment.

Debt includes all long-term external and internal borrowed funds obtained by any means (e.g. debentures, bank loans, capital leases, etc.), 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.

The current borrowing programme incorporates the following key provisions:

Internal debt:

- Internal debt includes debt taken on by the University from its internal expendable cash held in the Expendable Funds Investment Pool (EFIP) which includes cash held for various purposes (operating funds, ancillary funds, capital funds, research grants, expendable donations).
- The internal debt policy limit is currently set at $350 million, composed of $200 million for capital and other requirements and $150 million for pension purposes.
- Some or all of the $350 million internal debt might need to be refinanced externally at some time, if future cash flow patterns would deteriorate.

External debt:

- External debt includes all debt taken on by the University which is borrowed from third party lenders.
- The external debt policy limit is set at 40% of net assets averaged over 5 years (set at $746.6 million for 2012-13).
- In the event that actual outstanding external debt exceeds 40% of net assets averaged over 5 years, no further external borrowing can occur until the external debt has returned to a ratio that is no greater than one third of net assets averaged over 5 years.

[1] The borrowing strategy was approved by the Business Board on June 17, 2004. Additional internal borrowing reserved for pensions was approved by the Business Board on January 31, 2011.

Credit ratings:

- Credit ratings are excluded from policy determination because they are subject to many external factors, including changes in rating agency methodologies over time.

Long-term borrowing pool (sinking fund requirement):

- This sinking fund is self-imposed via the borrowing strategy, and is not required by the master trust indenture governing debenture issuance.
- Principal and interest payments are placed in the sinking fund, known as the Long Term Borrowing Pool (LTBP), invested by UTAM, and together with investment income, are used to pay periodic interest payments to lenders and to pay issue and ongoing administrative costs, with the expectation that the net sum from these additions and draw-downs will be sufficient to repay the bullet debentures at maturity.
- The senior officer of the University responsible for financial matters reports periodically to the Business Board on the status of the LTBP.

Borrowing method:

- The borrowing method (e.g. private placement or other method) is determined by the senior officer responsible for financial matters.

Internal loan programme:

- 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.

Accountability to governors:

- Business Board approves the debt strategy.
- Business Board approves each individual capital project to which debt is allocated, including its specific funding and financing components.
- Business Board approves the legal borrowing resolutions required by external lenders to enable the University to issue external debt.
- There is periodic reporting to Business Board to enable the Board to carry out its monitoring and oversight role.

The following table shows the current internal and external debt policy limits, the net amounts allocated for borrowing, and the actual outstanding debt.

	Long-term Debt (millions) October 31, 2012			
	Internal Debt for Capital and Other	Internal Debt for Pensions	External Debt	Total
Policy Limit	200.0	150.0	746.6	1,096.6
Allocations	200.0	150.0	748.2	1,098.2
	-	-	(1.6)	(1.6)
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
Other	161.1	108.3	12.6	282.0
Total outstanding	161.1	108.3	722.6	992.0

As you can see from this table, at October 31, 2012, total permitted debt was $1.0966 billion, ($746.6 million external debt + $350 million internal debt). That amount is fully allocated, with allocations currently standing at $1.6 million more than the total permitted debt.

Actual outstanding debt (that is external debt issued plus internal loans actually issued to borrowers) totals about $1 billion. Actual internal debt includes $161.1 million in internal loans issued for capital projects and other purposes and a $108.3 million internal loan issued to enable a lump-sum payment into the pension master trust. Actual external debt totals $722.6 million, and is in the form of 5 bullet debentures totalling $710 million (with principal repayments due between 2031 and 2051); along with $12.6 million in other small loans, mostly bank loans predating the debenture issuance program which began in 2001.

The current borrowing strategy and its related processes and procedures have been in place since 2004. This strategy has worked quite well in most respects, but has also presented some challenges which need to be addressed in this review.

The internal and external debt policy limits are separately defined and not fungible. Successful issuance of external debt depends on financial markets, interest rates, credit ratings, and demand for University sector debt. Over the past several years, due to strong EFIP balances, we have been able to time the issuance of external debt to the University's

advantage. However, the current strategy does not provide for this bridge-financing, which is available as long as cash flows are sufficient to provide this flexibility. The revised strategy should do so.

The internal debt policy limit is currently set at $350 million. Internal cash flows, which are carefully monitored, have been sufficient to maintain this limit, and are projected to do so for the foreseeable future. The strategy provides for external re-financing of this internal debt if cash flows at some point in the future are not sufficient to maintain it; however a mechanism for doing so is not built into the current debt strategy. This revised strategy should address this.

The external debt policy limit is currently defined as 40% of net assets (assets minus liabilities) averaged over 5 years, which is a balance sheet parameter. Net assets are heavily affected by fluctuations in investment returns and by endowed donations but are not influenced to any great degree by the growth in the size of the University and by the University's ability to pay interest and principal on borrowed funds. Fluctuation in investment returns, particularly in 2008-09, has resulted in a dip in the average net assets, and thus in the external debt policy limit. However, the external debt policy limit is projected to rise when the new accounting rules are implemented beginning April 30, 2013. Neither of these events reflects the University's ability to pay, which is better captured by income statement parameters than by balance sheet parameters. This review will consider income statement parameters as well as balance sheet parameters as a reasonable basis for setting an external debt policy limit.

This paper evaluates the best approach to address the issues that have been identified and proposes a revised debt strategy that is intended to serve the University's needs for many years going forward.

Deciding on a Debt Strategy

This review will attempt to address the issues identified in the previous section and will continue to take into account key questions that were considered when the previous strategy was put in place in 2004, and which continue to be relevant today.

- How much debt can we take on and how much debt are we comfortable with?
- Are we willing to spend more on debt service (principal and interest payments) than we do currently, and how much debt service is too much?
- Are there external uncontrollable factors that could affect our ability to service debt?
- Are we prepared to live with the possibility of lower credit ratings and the possibility of higher interest rates in order to obtain more debt?
- Do we want to be comparable to our peers when it comes to debt, and who are our peers in this regard?

This review must also take account of the external financial environment, including the perspective and needs of external lenders and credit rating agencies as well as the characteristics of the University sector generally and of the University of Toronto specifically.

In conducting this review, we considered a range of current publications to ensure that we were utilizing the most up-to-date thinking in the field. Ultimately we placed most weight on the following references for both a general financial perspective and a specific University sector perspective.

Strategic Financial Analysis for Higher Education, Seventh Edition (2010) provides specific guidance on a wide range of financial analysis, including debt, for more than 5,000 universities in the U.S. university sector. Its authors are KPMG, Prager Sealy LLC and Attain LLC (consultants in this field). This reference has been available since 1980, and is updated regularly. The current edition incorporates thinking arising from the financial difficulties of 2008-09. It provides the most-wide-ranging discussion of university debt available. We relied on it for our theoretical framework and for the benchmarks against which we have evaluated the U of T parameters that we are proposing.

Credit rating reports for the three credit rating agencies which rate the University of Toronto (Moody's Investor's Service, Standard & Poor's and Dominion Bond Rating Service) provided a clear picture of which parameters the rating agencies consider to be most important in assessing the likelihood that universities will repay the debt they have taken on.

Credit rating research reports on universities also provided useful information from a credit rating agency perspective and by extension that of lenders, as well as useful comparator information. We used the *Moody's Public Colleges and University Medians* (issued annually, most recently for 2011) to obtain U.S. university comparators. We also reviewed the *DBRS Industry Study on Universities*, June 2012 for information on the Canadian universities that are rated by DBRS.

We also considered a Council of Ontario Universities (COU) report on Ontario universities that is currently in draft form, and that was recently provided to Ontario Executive Heads for their comments. The *Indicators of Financial Health of Ontario Universities* draws on the *Strategic Financial Analysis in Higher Education Seventh Edition* to propose several key indicators for measuring Ontario university financial health. The Ontario government is aware of this initiative and is encouraging further work in this regard.

Review process:

The review process proceeded on two separate and independent paths. The first path involved a detailed examination of capital project needs, driven by strategic academic imperatives and supported by the Boundless fundraising campaign. It resulted in projected additional borrowing allocations on a year by year basis for the period from 2013 to 2018. Actual and planned additional debt issuance needed was derived from this review.

The second path was a financial review which focused on all aspects of the current debt programme – the current debt strategy, the associated administrative processes and procedures, and the Business Board approvals, and which concentrated on financial ratios, without reference to needs. It concluded that:

- the Business Board's current control of all key aspects of debt policy, debt allocation, and external debt issuance is appropriate and should continue.
- the administrative processes and procedures, including the functioning of the internal sinking fund and the internal loan programme, are working well and should continue.
- the internal sinking fund, which requires that internal loans are set up with principal repayments as well as interest, (even though the external debentures are in bullet form with principal payment at maturity), is an important internal discipline that should be maintained.
- the debt policy limit needs to be changed.

A financial analysis was undertaken to assess the various options for changing the debt policy limit to address the issues that have been identified. Once the financial capabilities were

determined, the need for debt was then brought into the analysis. As you will see from the following sections, the need for debt that has been identified is well within the University's financial capabilities, based on the projection assumptions.

The next step was a review of the financial analysis and the capital project needs by a working group of Business Board members, including the current and former chairs of Business Board and two members with relevant expertise. This proposed strategy reflects their very helpful contributions.

The next section outlines the financial analysis that was undertaken to consider options for a debt policy limit and the evaluation of those options, to arrive at a recommended debt policy limit going forward.

Deciding on a Debt Policy Limit

As noted earlier, the key issues around the current internal and external debt policy limits are that 1) the internal and external debt policy limits are separately established and are not fungible; 2) the possibility that current internal debt may need to be re-financed externally in future has not been incorporated into the external debt policy limit; 3) although internal debt has been used to bridge-finance external debt to the University's advantage, this is not recognized in the current strategy; and 4) the external debt policy limit is derived from a balance sheet parameter that does not reflect the University's growth and ability to pay, but rather fluctuates with investment returns, and which will be increasing due to a change in the accounting rules.

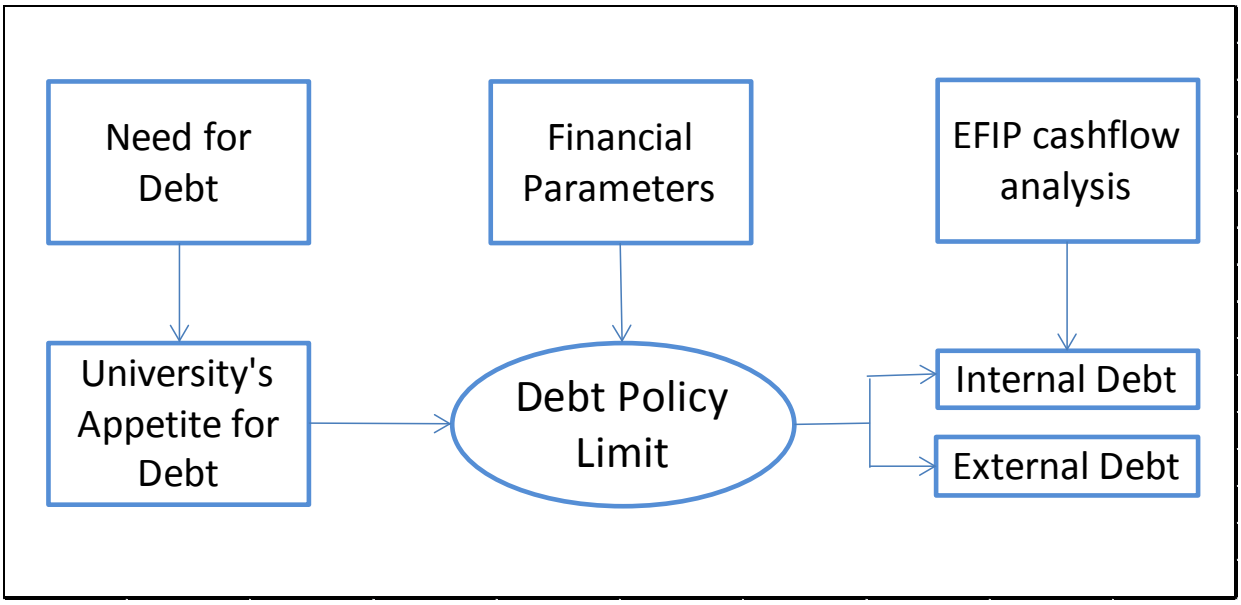
The process for reviewing and revising the debt policy limit was as follows. We identified key concepts and parameters, considered a range of debt policy limit options on a time frame from 2005 to 2017 (using historical data from 2005 to 2012 and projected financial results from 2013-2017) and calculated their impact on certain University financial ratios. We considered the appetite for debt (ON the classroom versus IN the classroom and provision for adverse events). We assessed how much could be met from internal debt and selected a proposed debt policy limit, taking all of the above into account. We compared the proposed debt policy limit to the actual and planned debt needed which was identified through the capital projects review. Finally we compared the proposed debt policy limit and actual and planned debt to selected Canadian and U.S. universities to gauge the impact of the proposed approach on our relative position.

Key Concepts

A single debt policy limit is proposed, including both of the former internal and external debt policy limits. The key characteristic of this single debt policy limit is that, however it is calculated, it would specify the total maximum debt, both internal and external, that the University chooses to take on. In future the split between internal debt and external debt would be determined by expendable cash flows deemed to be available for long-term investment and could fluctuate between the two over time, but within the overall debt limit. In other words, in future, the availability of more internal cash would not increase the overall debt policy limit, but it would affect the amount that the University would seek from outside lenders. This is a significant change from current practice.

This proposed change makes it much easier to think about and manage debt, and effectively deals with the issues of fungibility and possible future re-financing of internal debt with external debt. With this change, it is easier to analyse the consequences of debt. Financial ratios can be calculated using only the external debt component (which is the way that the external lending community views it). Financial ratios can also be calculated on the total debt limit for internal audiences to help deal with issues around the University's appetite for debt, and our ability to service both internal and external debt. It is also easy to assess the potential impact of external re-financing of internal debt. Financial ratios presented later in the paper will illustrate these various views.

Let us now consider the determination of the debt policy limit. The following diagram illustrates the concept of the single debt policy limit and shows its determinants – the need for debt, the University's appetite for debt, and the financial parameters. It also shows that the split between internal and external debt hinges on the availability of cash from EFIP that can be designated for internal loans as long-term investments by EFIP. Each of these factors will be discussed in the following sections.



Need for Debt

Earlier in the paper, we described a detailed projection of potential future capital projects driven by strategic academic imperatives and supported by the Boundless Campaign. Over the next several years, to 2018, it is projected that the University will need new borrowing allocations of up to $200 million and that projected debt issuance to 2017, taking account of borrowed funds already on hand, is likely to be in the range of $124 million, broken down by year, as follows.

	(In Millions of Dollars)		
	Projected New Borrowing Needed	Projected Debt Issuance	Funded From Series E
2013	15	-	15
2014	25	-	21
2015	40	44	-
2016	40	40	-
2017	40	40	-
Total to 2017	160	124	36
2018	40		

Projected borrowing does not match projected debt issuance for several reasons. There is a two to three year lag between new capital project allocations for debt, and the actual need for that debt. It is important to note that, to be conservative, actual allocations of debt policy limit for individual capital projects include donations that are expected to be received after the completion of capital construction, which usually do not translate into a debt requirement since they are usually dealt with on a short- to medium-term basis.

The projected debt issuance noted above has been factored into the analysis that is presented later in the paper.

Appetite for Debt

In assessing the University's appetite for debt, it is important to note that there are a number of conflicting objectives. Firstly there is a desire to take on additional debt to permit greater investment in facilities, which should further the University's academic mission and which should also generate revenues and growth. Its annual cost is reflected in principal and interest payments that must be funded, which can be characterized as spending money ON the classroom.

Balanced against this desire is the need and desire to spend money IN the classroom and on research. In other words, money spent on principal and interest payments is not available for spending on, for example, faculty salaries and benefits, materials and supplies, scholarships, fellowships and bursaries or research support. There needs to be a balance between these two objectives.

The University also needs to be able to respond to new competitive pressures and new academic ventures. This needs to be balanced against the desire for facilities provided by debt.

Finally, the University needs to consider unexpected events, and allow for future possible adverse financial results that could impact financial ratios and ability to pay and needs to preserve a margin of safety for those unforeseen events.

All of these factors need to be taken into account in setting the debt policy limit.

EFIP Cash Flow Analysis and Internal Debt

The Expendable Funds Investment Pool (EFIP) holds the University's expendable cash, which is provided by various outside parties in the form of operating funds, ancillary funds, capital funds, research grants and donations.

While all the cash flowing through EFIP is short-term in nature, the cash flow pattern of inflows and outflows has, for many years, resulted in a substantial amount of cash on hand. While much of that cash is invested in liquid short and medium-term investments, a portion of it is available for longer term investment, which is achieved through the loan of these funds in support of the debt strategy. EFIP is repaid with principal payments and interest from internal loans that require blended principal and interest payments based on market rates.

The availability of internal cash that can be loaned by EFIP in support of the debt strategy is carefully reviewed and monitored on an ongoing basis. Cash is managed and projected on a daily, weekly, monthly, quarterly, annually and longer term basis. At the present time, our cash flow analysis indicates that up to $350 million can be loaned on a long term basis by EFIP without impairing cash flows or impairing EFIP's role in providing short-term construction financing for capital projects, bridging financing to external debt issuance and other short and medium term financing needs. Projections to 2017 currently indicate that, absent future changes to cash flow patterns, this level of internal debt can continue for the foreseeable future.

Having examined our cash flow patterns, to provide for necessary liquidity and to recognize the varying purposes for which funds held in EFIP are intended to be spent, it is financially prudent to limit the amount of internal cash that can be loaned by EFIP as internal debt. A ratio to represent a prudent and reasonable cap on internal debt as a percentage of EFIP funds has been established at 40% (calculated as internal debt outstanding divided by the audited April 30 EFIP balance plus internal debt outstanding).

Due to the considerable uncertainties in the external financial and political environment at this time, we are not proposing any increase to the internal debt component of the debt policy limit as part of this study.

Therefore, all of the analysis that follows assumes that the internal debt policy limit will be held steady at $350 million and that all future additional projected debt would be sourced externally. If that would change, and additional internal cash were available for long-term investment, the proportional split between internal and external would change, but the total debt policy limit would not change.

Financial Parameter(s)

The financial parameter(s) that are used to determine the debt policy limit need to have the following characteristics:

- The parameter(s) need to be linked to the size of the University, and should capture growth, reflecting the University's increased ability to obtain and service debt.
- The parameter(s) should be stable and predictable and should not be adversely affected by variations in investment earnings, investment income, donations or value of endowment.
- The parameter(s) should be supported by and defensible to professionals and external centres of excellence in the field and reflect leading practices for fiscal prudence in the sector.
- The parameter(s) should be aligned with strategic direction.
- The parameter(s) should be independent of the need for debt.

The analysis that was undertaken evaluated the suitability of a range of possible parameters used by the credit rating agencies, by other Canadian universities, recommended in *Strategic Financial Analysis for Higher Education (7th Edition*), and promulgated in *Financial Indicators for Ontario Universities*. Ultimately, we concentrated on debt affordability and debt capacity and selected one ratio in each category to evaluate which was the best approach for University of Toronto.

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 impacted by the interest rate at which the debt is financed and the time period over which principal payments are made on the debt. We considered a number of possible debt affordability ratios and selected the debt burden ratio (principal + interest/total expenditures) as the one most useful to the University. This ratio, using total expenditures as the denominator, is promulgated by *Strategic Financial Analysis in Higher Education (7th Edition) which notes*[2] that it

> "should be considered a key financial indicator for any financial institutions using debt. This ratio examines the institution's dependence on borrowed funds as a source of financing its mission and the relative cost of borrowing to overall expenditures…Alternatively, some institutions prefer to measure debt service as a percentage of total revenues. The

[2] Strategic Financial Analysis in Higher Education, Seventh Edition, page 116, 117.

> rationale for using a revenue measure is that the revenues represent the actual source of funds to pay debt service, and the use of an expenditure measure provides an incentive to grow rather than limit expenditures, since a growing expense basis, even absent growth in revenues, would make the institution look better for this ratio. While we agree with these observations, we find difficulty in managing to a ratio based on revenues, due to the significant volatility in total revenues from year to year caused by operating gifts, investment performance or state appropriations."

We accepted this guidance and selected the debt burden ratio with a "total expenditures" denominator as the income statement parameter for determining the debt policy limit. The detailed calculation of this ratio may be found in Appendix 1. This ratio is very useful in evaluating how much is being spent ON the classroom rather than IN the classroom. It is also very useful to the external lending community in assessing the University's ability to pay. It is used by Moody's Investor's Service in slightly modified form (with an adjustment for scholarships, which are viewed in the U.S. as tuition discounting and therefore not included in expenditures) It is also used in *Financial Indicators for Ontario Universities*. With respect to a debt burden ratio benchmark, this U.S. university guidance states that:

> "the industry often has viewed an upper threshold for this ratio at 7 percent, meaning that current principal payments and interest expense should not represent more than 7 percent of total expenditures; however a number of institutions operate effectively with a higher ratio, while others would find this ratio unacceptable....it is not the case that a low debt service burden is superior to a higher debt service burden. For most financially healthy institutions it is advisable to allocate a certain percentage of the operating budget to debt service. Institutions with very low ratios may be forgoing necessary investment in facilities, which, over time, may have a negative impact on their competitive profiles"[3].

We have accepted this guidance and considered the 7% industry threshold to be the upper limit that we would consider in evaluating options based on the debt burden ratio.

Debt capacity 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 balance sheet ratios and the debt policy limit is a percent of the balance sheet parameter. The current borrowing strategy employs a percentage of net assets as the financial parameter,

[3] Strategic Financial Analysis in Higher Education, Seventh edition, pages 117-118.

which is a form of debt capacity measure. We considered a number of possible debt capacity ratios and selected the viability ratio (expendable resources/debt) promulgated *by Strategic Financial Analysis in Higher Education (Seventh Edition, 2010)* and utilized by Moody's Investor's Service, as the one most useful to the external lending community in assessing how much debt the University's balance sheet can support. The detailed calculation of this ratio may be found in Appendix 1. With respect to a viability ratio benchmark, U.S. university guidance indicates that

> "although a ratio of 1:1 or greater indicates that, as of the balance sheet date, an institution has sufficient expendable net assets to satisfy these obligations, this value should not serve as an objective. Many public institutions can operate effectively at a ratio far less than 1:1 since…the institution enjoys the credit rating of the state for its borrowing purposes…the level that is "right" for the Viability Ratio is institution-specific. The institution should develop a target for this ratio and others that balances its financial, operating and programmatic objectives"[4].

We have accepted this guidance and considered debt policy limit options based on viability ratios less than 1:1.

Analysis of Options:

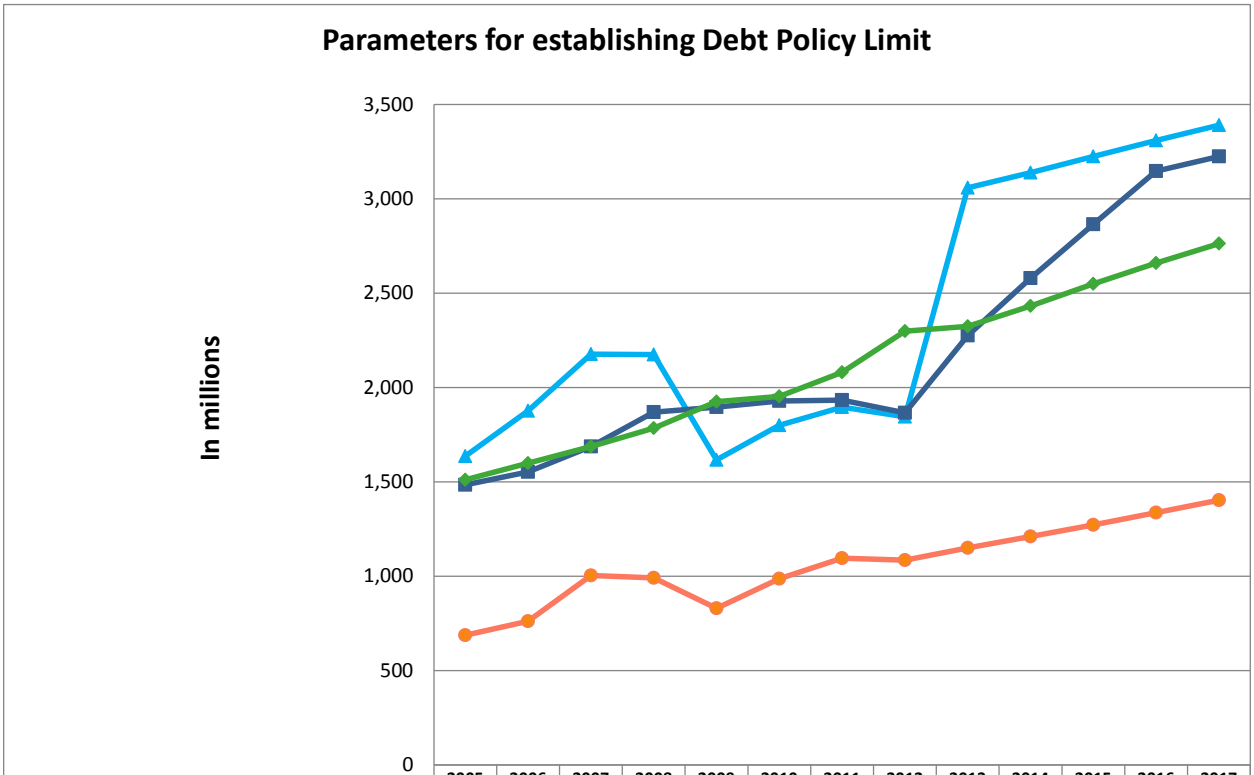
This analysis considers debt burden ratios and viability ratios for the total debt policy limit, for the external debt policy limit and for actual and planned external debt for the period from 2005 to 2017, using historical data from 2005 to 2012, and projections from 2013 to 2017 using the following key assumptions:

- Long-range operating budget and service ancillaries budget to 2017.
- New accounting rules.
- Endowment returns equal to policy target return (6% nominal).
- No provision was made for the positive financial impact expected due to planned investments in additional capital facilities made possible by increased debt, except for the budgeted increase in student enrolment that will not be possible if some of those investments are not made.
- Additional debt is assumed to be issued at a 5% fixed rate for 40 years.

[4] Strategic Financial Analysis in Higher Education, Seventh Edition, page 115.

- Debt service includes principal repayment, including notional principal payments on bullet debentures[5].

The following chart shows net assets, net assets averaged over 5 years, total expenditures and expendable resources for the period from 2005 to 2017.



	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Net assets	1,636.1	1,876.4	2,176.5	2,174.3	1,617.1	1,800.0	1,896.4	1,844.9	3,058.7	3,138.1	3,224.4	3,309.3	3,389.9
Net assets smoothed over 5 years	1,484.7	1,552.8	1,688.0	1,870.1	1,896.1	1,928.9	1,932.9	1,866.5	2,275.4	2,579.6	2,864.4	3,147.0	3,224.1
Total Expenditures	1,510.6	1,599.9	1,687.2	1,784.4	1,925.5	1,953.0	2,081.0	2,298.7	2,324.0	2,432.0	2,548.8	2,659.3	2,762.4
Expendable resources (Moody's, Viability ratio)	688.2	761.6	1,004.0	991.2	830.7	987.2	1,095.7	1,085.9	1,150.9	1,210.9	1,272.2	1,336.7	1,403.0

As you can see from the above chart, net assets and expendable resources are both more variable than total expenditures.

The debt burden ratio and the viability ratio were calculated for the current debt policy limit and for a number of options, in which either the debt burden ratio, or the viability ratio was the policy determinant. We also calculated the viability ratios associated with the debt burden options and vice-versa.

The options that were considered were debt burden ratio options of 4%, 5% and 7%, and viability ratio options of 0.8, 0.9 and 1.0. The 7% debt burden ratio was rejected as being too aggressive and not allowing any room for potential adverse events that could impact the

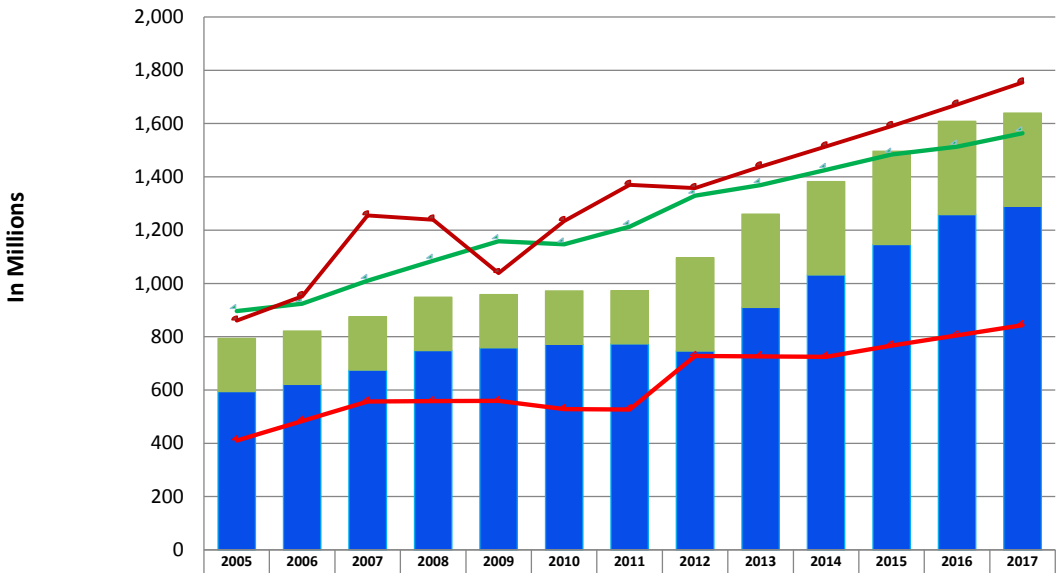
[5] Principal repayments on internal debt reflect amounts paid by internal borrowers on loans amortized over terms up to 25 years. Notional annual principal repayments on external debt reflect the amount of the debenture divided by the term of the debenture.

University's ability to pay. The 4% debt burden option was rejected as being too restrictive for a debt policy limit that combines both internal and external debt. The 1.0 and 0.9 viability ratio options were both rejected because the University is publically assisted, and because ultimately, we believed that the ability to repay 80% of both internal and external debt at the balance sheet date, without taking illiquid assets into account, is a very reasonable level, particularly given the low probability that this necessity would occur.

Based on the financial analysis and taking into account the considerations outlined above, we then focussed on the 5% debt burden option and the 0.8 viability option as reasonable parameters for determining the debt policy limit.

The following chart shows the debt policy limit calculated using the debt burden ratio of 5% and the viability ratio of 0.8. It also shows the actual and planned external debt determined under the separate "need for debt" path that was described earlier and holds the internal debt constant at the $350 million level. The limits that would result under the current (40% of 5 year average net assets) strategy are also shown for comparison purposes.

Debt Policy Limit Options Compared to Current Strategy and Actual/Planned Debt - IN MILLIONS of DOLLARS

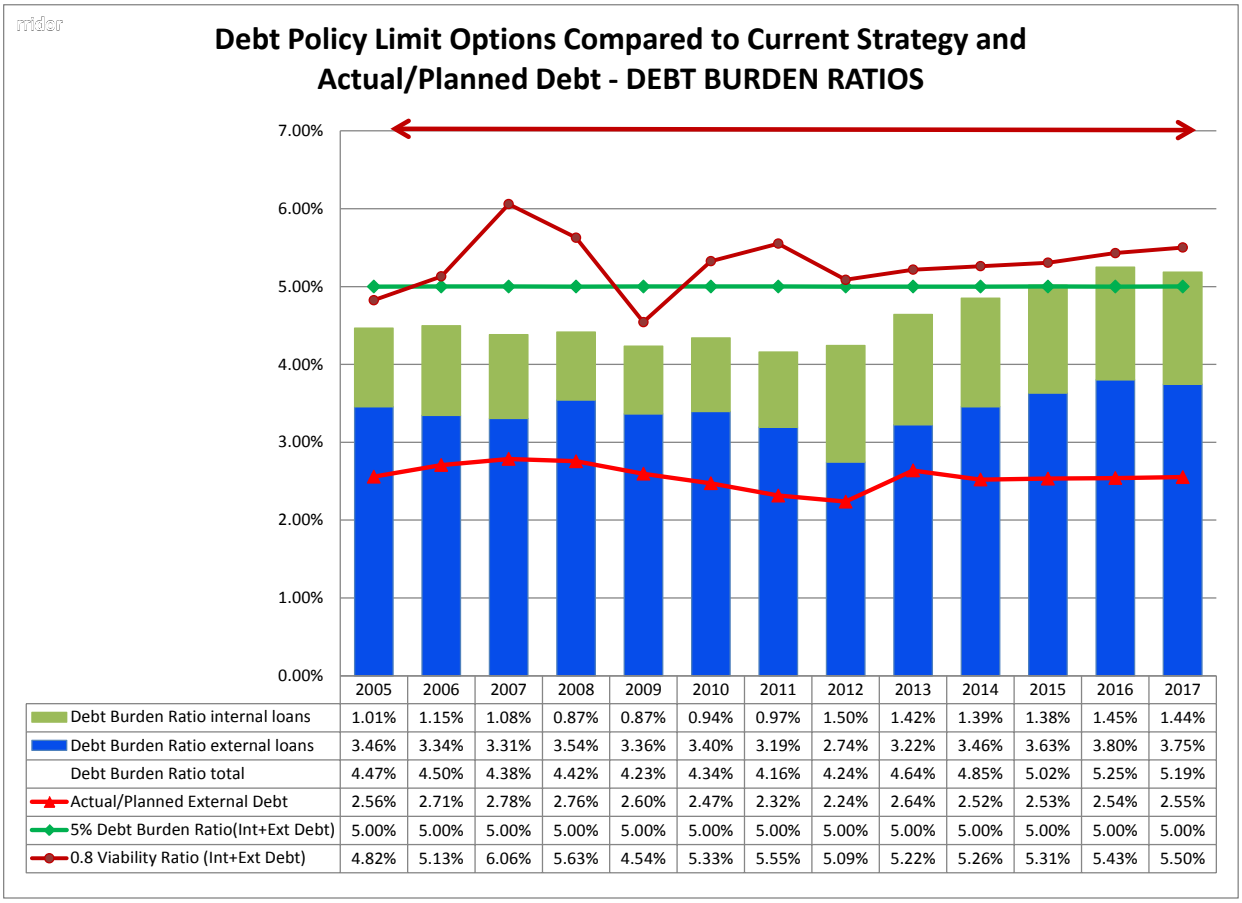


	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Current Maximum internal Debt	200.0	200.0	200.0	200.0	200.0	200.0	200.0	350.0	350.0	350.0	350.0	350.0	350.0
Current Maximum external Debt	593.9	621.1	675.2	748.0	758.4	771.5	773.1	746.6	910.2	1,031.8	1,145.8	1,258.8	1,289.6
Current Maximum External + Internal Debt	793.9	821.1	875.2	948.0	958.4	971.5	973.1	1,096.6	1,260.2	1,381.8	1,495.8	1,608.8	1,639.6
Actual/Planned External Debt	410.6	483.7	556.7	558.4	558.9	528.2	526.8	727.7	726.2	724.6	766.9	805.2	843.4
5% Debt Burden Ratio(Int+Ext Debt)	896.4	923.8	1,009.9	1,085.1	1,158.7	1,146.9	1,212.7	1,329.6	1,369.4	1,426.3	1,483.6	1,513.4	1,563.9
0.8 Viability Ratio (Int+Ext Debt)	860.3	952.0	1,255.0	1,239.0	1,038.4	1,234.0	1,369.6	1,357.4	1,438.6	1,513.6	1,590.2	1,670.8	1,753.7

This chart shows that the debt policy limit calculated using the debt burden ratio has a smooth and steady path over the entire period from 2005 to 2017, reflecting a steady and growing ability to pay, that is higher than the debt policy limit under the current strategy, in the

early years, but lower in the later years. In contrast, the debt policy limit calculated using the viability ratio option is quite variable during the historical period, reflecting fluctuations in expendable resources. Actual and planned external debt is well below the external debt policy limit component (total debt policy limit minus $350 million internal debt policy limit) for all scenarios.

The next chart shows the debt burden ratios for both the 5% debt burden option and for the 0.8 viability ratio option. It also shows the debt burden ratio for the actual and planned external debt and the projections under the current strategy.

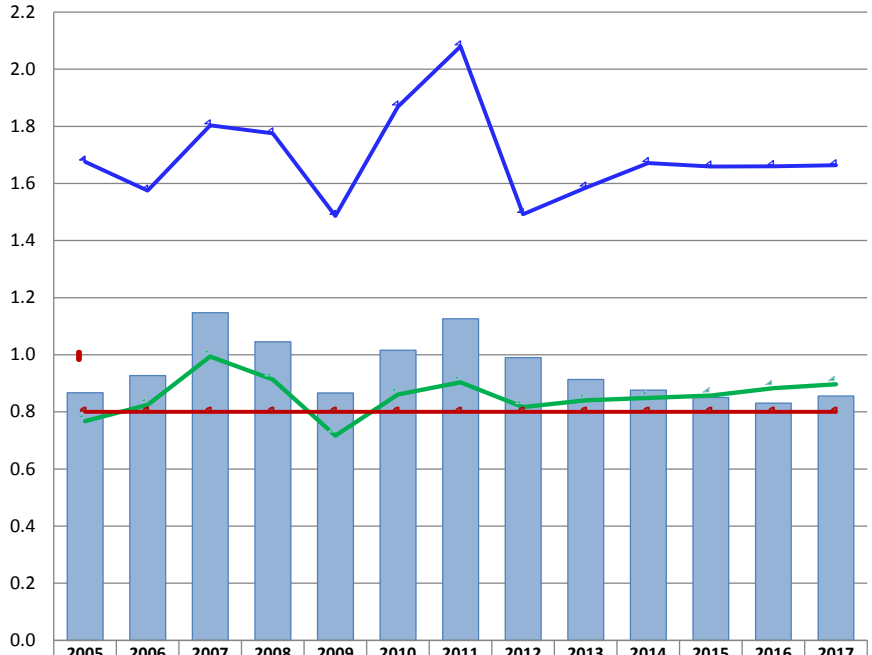


	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Debt Burden Ratio internal loans	1.01%	1.15%	1.08%	0.87%	0.87%	0.94%	0.97%	1.50%	1.42%	1.39%	1.38%	1.45%	1.44%
Debt Burden Ratio external loans	3.46%	3.34%	3.31%	3.54%	3.36%	3.40%	3.19%	2.74%	3.22%	3.46%	3.63%	3.80%	3.75%
Debt Burden Ratio total	4.47%	4.50%	4.38%	4.42%	4.23%	4.34%	4.16%	4.24%	4.64%	4.85%	5.02%	5.25%	5.19%
Actual/Planned External Debt	2.56%	2.71%	2.78%	2.76%	2.60%	2.47%	2.32%	2.24%	2.64%	2.52%	2.53%	2.54%	2.55%
5% Debt Burden Ratio(Int+Ext Debt)	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%
0.8 Viability Ratio (Int+Ext Debt)	4.82%	5.13%	6.06%	5.63%	4.54%	5.33%	5.55%	5.09%	5.22%	5.26%	5.31%	5.43%	5.50%

The chart shows the 5% debt burden and the debt burden ratio resulting from the 0.8 viability ratio option (5.09% for 2012, rising to 5.5% by 2017). The debt burden ratio for the actual and planned external debt is 2.2% in 2012, rising to 2.6% by 2017. The debt burden ratio for the internal debt policy limit is 1.5% in 2012, falling to 1.44% by 2017. For 2012, the ratio for the actual internal debt is 1.3% (see appendix 1). If we add together the debt burden ratio for actual and planned external debt of 2.2% and actual internal debt of 1.3%, the total debt burden ratio at April 30, 2012 is 3.5%.

The next chart calculates the viability ratios for the 5% debt burden option and the 0.8 viability option. It also shows the viability ratio for the actual and planned external debt and the projections under the current strategy.

Debt Policy Limit Options Compared to Current Strategy and Actual/Planned Debt - VIABILITY RATIOS



	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Current Maximum External + Internal Debt	0.87	0.93	1.15	1.05	0.87	1.02	1.13	0.99	0.91	0.88	0.85	0.83	0.86
Actual/Planned External Debt	1.68	1.57	1.80	1.78	1.49	1.87	2.08	1.49	1.58	1.67	1.66	1.66	1.66
5% Debt Burden Ratio (Int + Ext Debt)	0.77	0.82	0.99	0.91	0.72	0.86	0.90	0.82	0.84	0.85	0.86	0.88	0.90
0.8 Viability Ratio	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80

The chart shows the 0.8 viability ratio and the viability ratio resulting from the 5% debt burden option (0.82 for 2012, rising to 0.90 by 2017). The viability ratio for the actual and planned external debt is 1.49 in 2012, rising to 1.66 by 2017. For 2012, factoring in the actual internal debt (see appendix 1) reduces the ratio to 1.08.

In summary, the 5% debt burden option generates viability ratios ranging from 0.82 to 0.90 over the period from 2012 to 2017 while the 0.8 viability ratio option generates debt burden ratios of 5.09% to 5.50% over the period from 2012 to 2017.

The debt policy limits generated during the historical data period from 2005 to 2012 better reflect the growth of the University during the period, and fit better the other criteria listed earlier, than do the ones generated under the viability ratio option. During the projection period, the 5% debt burden option results each year in a debt policy limit that is slightly lower than the one generated by the viability option, with associated viability ratios somewhat better than 0.8.

A review of the historical period in particular illustrated that total expenditures were more predictable than expendable resources on hand. If total expenditures were to show slower growth or to decline, due to a decline in the number of students, or a change in the tuition policy or government grants, the University should change its debt policy limit since its ability to pay would have been affected. It is not at all clear that a change in expendable resources has the same imperative. A review of the U.S. university guidance tells us that

> "All but the financially weakest institutions should focus primarily on debt affordability, rather than debt capacity, when considering additional commitments…for stronger institutions, the balance sheet is not as relevant in the near term, as it may only impact relative ability to pay from a rating analysis perspective…debt affordability highlights the concept that the institution's operating budget is the constraint limiting the incurrence of additional debt"[6].

Based on the above analysis and guidance, it is recommended that the 5% debt burden be selected as a key determinant of the debt policy limit. However, it is important to note that the viability ratio provides useful and different information on the University's financial health and ability to manage the debt programme. That information should be taken into account when the debt policy limit is set on an annual basis.

Ideally, the debt policy limit calculated using the 5% debt burden ratio in any given year should result in a viability ratio that is equal to or greater than 0.8. If it does not, then the Administration will need to exercise judgement to decide whether to moderate the debt policy limit to improve the viability ratio. That judgement would include a consideration of whether the factors resulting in a viability ratio less than 0.8 for that year seem to be short-term in nature or reflective of a longer term trend.

It is recommended that the 5% debt burden ratio be a key determinant of the annual debt policy limit and that the 0.8 viability ratio be taken into consideration in setting that debt policy limit.

As noted above, the debt policy limit calculated using the 5% debt burden ratio is projected to be greater than 0.8 in each of the years in the projection period to 2017. That projection was used for the next step, which was to compare that projected debt policy limit, and the actual and planned debt, to selected Canadian and U.S. universities to gauge its impact on the University's relative position.

[6]Strategic Financial Analysis, Seventh Edition (2010) page 34.

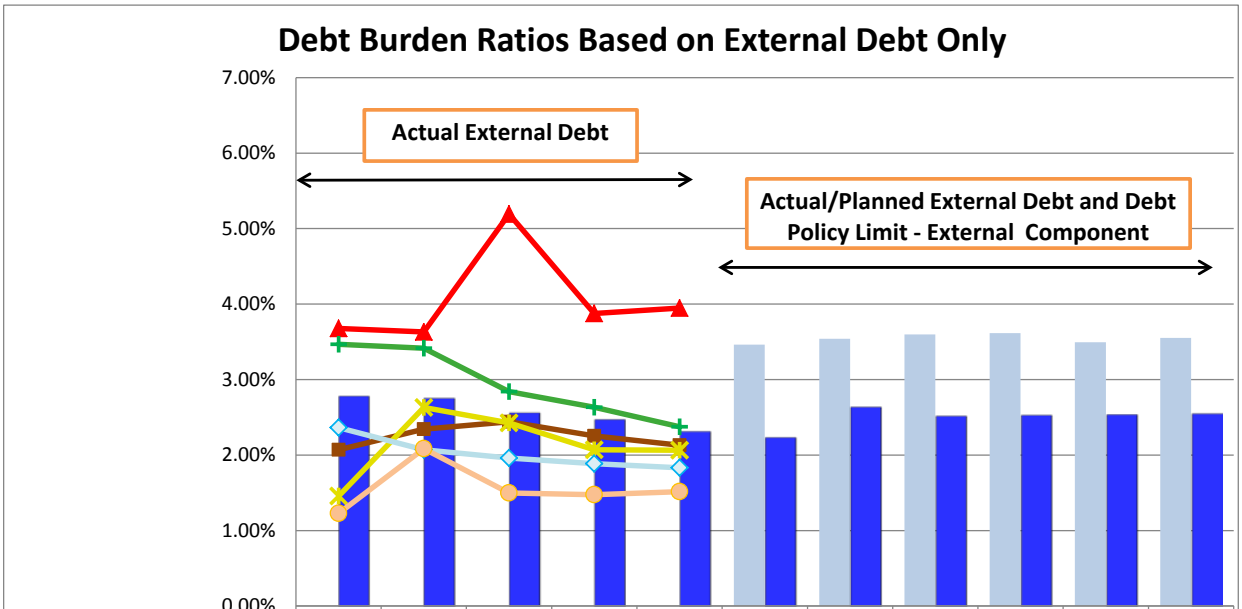
Comparisons to Others

The projected external debt policy limit and actual and planned external debt were compared to certain financial ratios for selected Canadian and U.S. universities.

Canadian universities:

We calculated the debt burden ratios and viability ratios for McGill University (Aa2 Moody's, AA- S&P), McMaster University (AA- S&P, AA low DBRS), University of Alberta, University of British Columbia (Aa1 Moody's, AA+ S&P), University of Ottawa (Aa1 Moody's, AA DBRS) and Western University (AA S&P). The current credit ratings for the University of Toronto are Aa2 Moody's, AA S&P and AA DBRS.

The following chart shows the debt burden ratios for external debt for the universities listed above for the historical period from 2007 to 2011, and for the University of Toronto for the period 2007 to 2017. The actual and projected ratios for the U of T are based on actual and planned external debt to match the data available on the other universities.

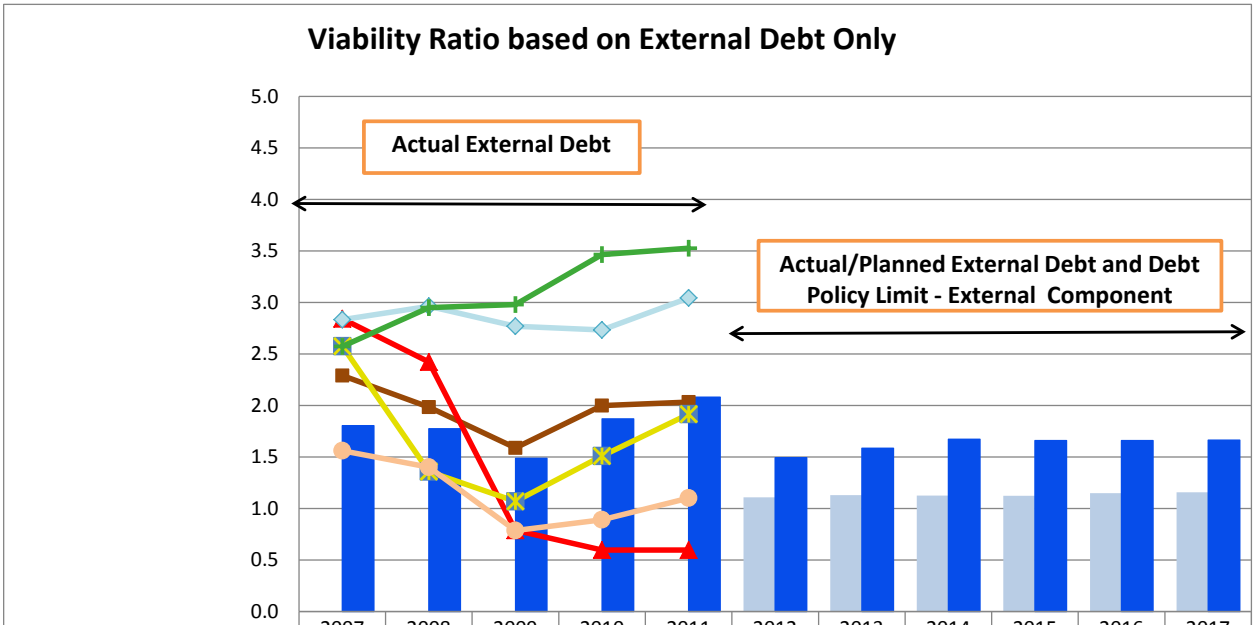


	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Toronto-5% Debt Burden						3.5%	3.5%	3.6%	3.6%	3.5%	3.6%
Toronto Actual/Planned	2.8%	2.8%	2.6%	2.5%	2.3%	2.2%	2.6%	2.5%	2.5%	2.5%	2.6%
UBC	2.1%	2.3%	2.4%	2.3%	2.1%						
McGill	3.7%	3.6%	5.2%	3.9%	3.9%						
Western	1.5%	2.6%	2.4%	2.1%	2.1%						
McMaster	2.4%	2.1%	2.0%	1.9%	1.8%						
Alberta	1.2%	2.1%	1.5%	1.5%	1.5%						
Ottawa	3.5%	3.4%	2.8%	2.6%	2.4%						

As you can see from the chart, the actual 2011 debt burden ratios for the comparator universities ranged from 1.5% for the University of Alberta to 3.9% for McGill University. The

University of Toronto ratio for 2011 was 2.3%, and is projected to rise to about 2.6% by 2017. While no projection information is available for these comparators, we recently conducted an informal survey of a number of other Canadian universities. Several have indicated intentions of issuing additional debt over the next few years.

The next chart shows viability ratios for the comparator universities to 2011, and University of Toronto ratios based on the external debt policy limit for the 5% debt burden ratio and the actual and planned external debt to 2017.



	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Toronto-5% Debt Burden						1.11	1.13	1.13	1.12	1.15	1.16
Toronto Actual/Planned	1.80	1.78	1.49	1.87	2.08	1.49	1.58	1.67	1.66	1.66	1.66
UBC	2.29	1.98	1.59	2.00	2.03						
McGill	2.84	2.42	0.79	0.60	0.60						
Western	2.58	1.36	1.07	1.51	1.92						
McMaster	2.83	2.96	2.77	2.73	3.04						
Alberta	1.56	1.40	0.78	0.89	1.10						
Ottawa	2.57	2.95	2.98	3.46	3.53						

As you can see from the chart above, the 2011 viability ratios ranged from 0.6 for McGill University to 3.53 for University of Ottawa. The University of Toronto ratio for 2011 was 2.08, and is projected to trend to 1.66 by 2017.

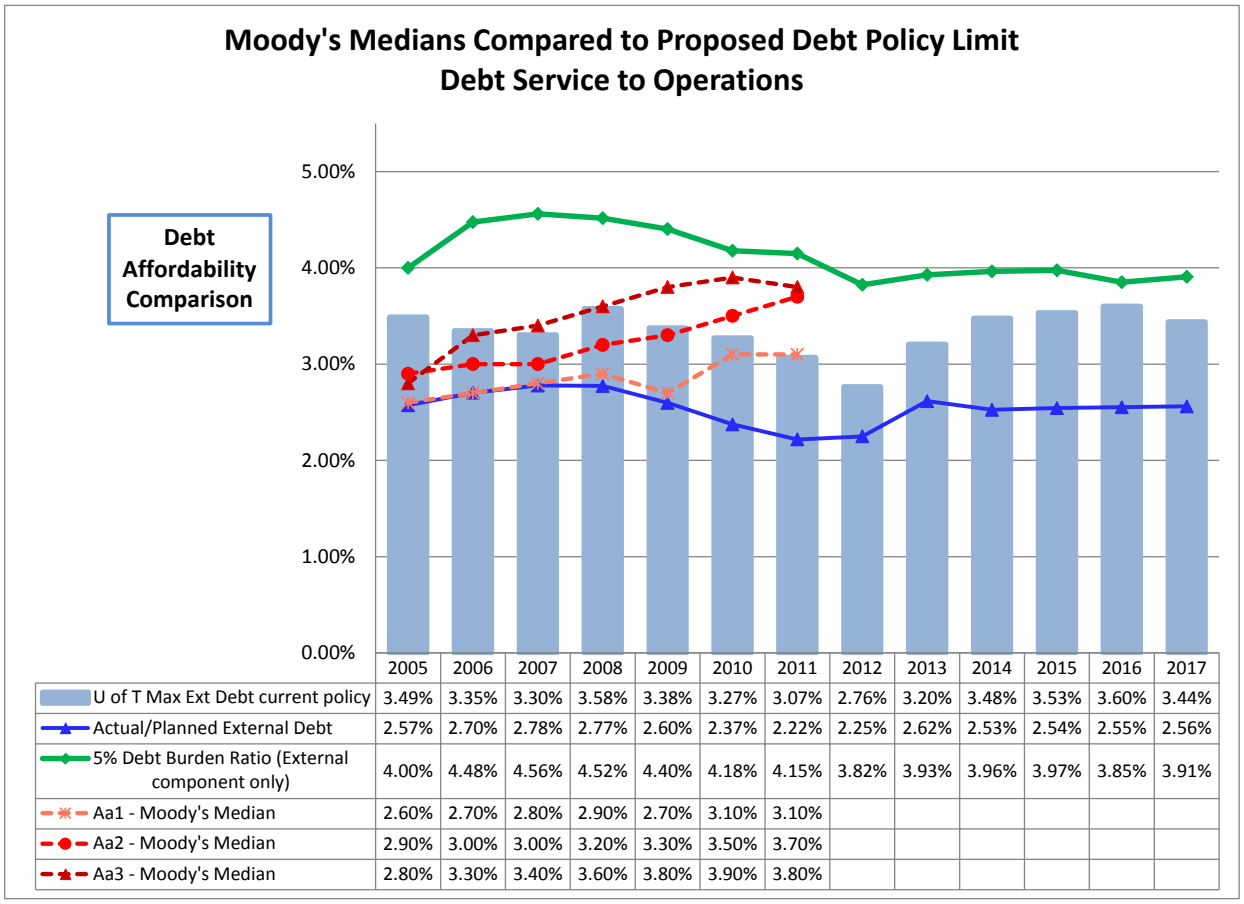
We can conclude that the U of T ratios are within the range of the historical ratios for these comparator Canadian universities.

It is recognized that Canadian lenders often rely on Canadian comparators when analysing individual debt issuance. Therefore, we will also monitor such reporting which is issued from time to time.

U.S. universities:

Moody's Public College and University Medians (Fiscal Year 2011) provided comparison data for selected U.S. universities. The University of Toronto is not included in this report. There are 13 universities at the Aa1 rating level, 44 universities at the Aa2 level, and 41 universities at the Aa3 level. At each rating level, the median university ratio is displayed. Only external debt is considered.

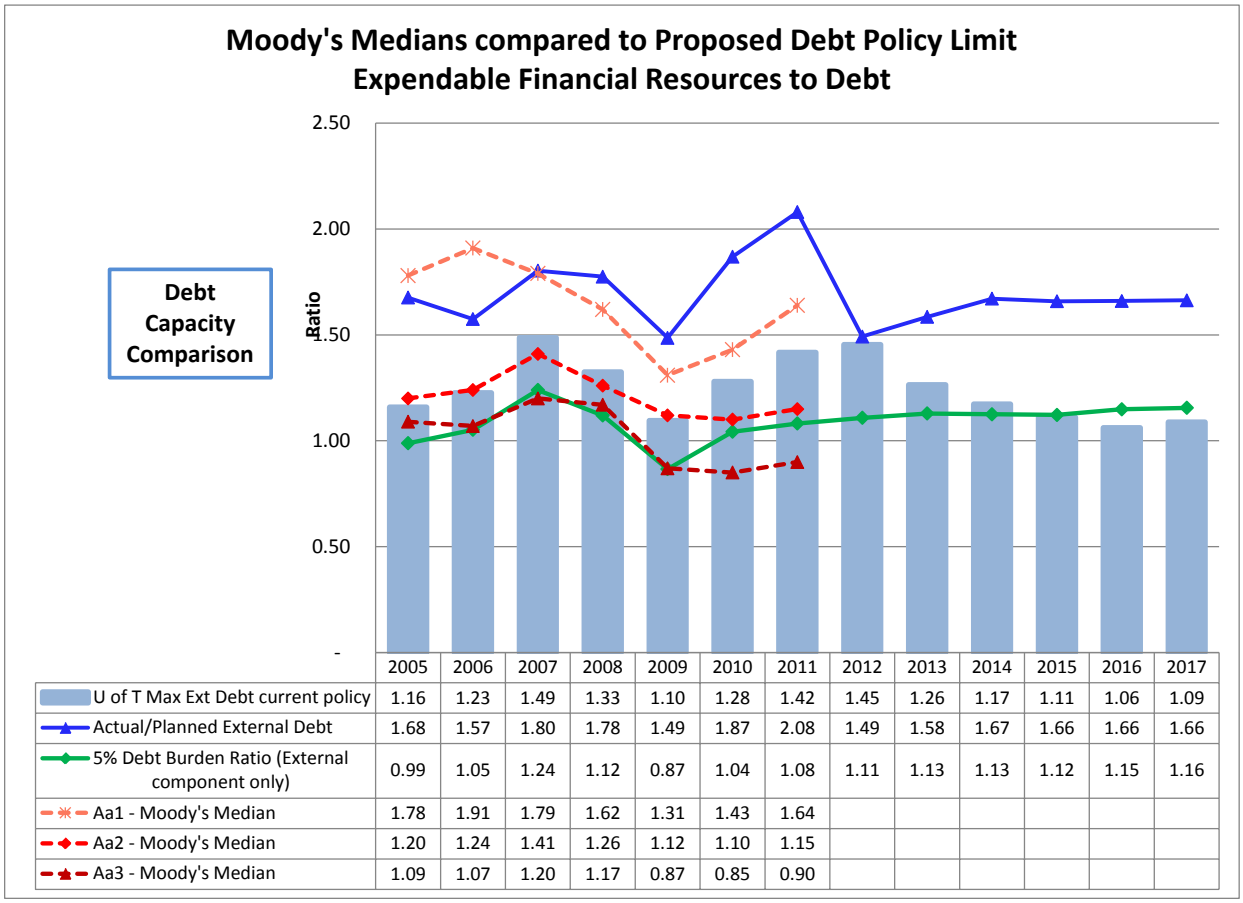
As a debt affordability comparison, we selected the ratio of debt service to operations. This ratio is very similar to the debt burden ratio, but has one difference. Scholarships, fellowships and bursaries are deducted from total expenditures since Moody's considers this category to represent tuition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



	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
U of T Max Ext Debt current policy	3.49%	3.35%	3.30%	3.58%	3.38%	3.27%	3.07%	2.76%	3.20%	3.48%	3.53%	3.60%	3.44%
Actual/Planned External Debt	2.57%	2.70%	2.78%	2.77%	2.60%	2.37%	2.22%	2.25%	2.62%	2.53%	2.54%	2.55%	2.56%
5% Debt Burden Ratio (External component only)	4.00%	4.48%	4.56%	4.52%	4.40%	4.18%	4.15%	3.82%	3.93%	3.96%	3.97%	3.85%	3.91%
Aa1 - Moody's Median	2.60%	2.70%	2.80%	2.90%	2.70%	3.10%	3.10%						
Aa2 - Moody's Median	2.90%	3.00%	3.00%	3.20%	3.30%	3.50%	3.70%						
Aa3 - Moody's Median	2.80%	3.30%	3.40%	3.60%	3.80%	3.90%	3.80%						

As you can see from the chart above, the 2011 ratio for the three rating levels ranges from 3.1% to 3.8%. The 2011 U of T ratio was 2.22% for actual external debt. On the basis of actual and planned external debt, this ratio is projected to trend to 2.56% by 2017. For the external debt policy limit it is projected to be 3.91% by 2017.

The next chart provides the debt capacity comparison, in the form of the viability ratio. This Moody's ratio is calculated in exactly the same way as the one used elsewhere in this paper.



	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
U of T Max Ext Debt current policy	1.16	1.23	1.49	1.33	1.10	1.28	1.42	1.45	1.26	1.17	1.11	1.06	1.09
Actual/Planned External Debt	1.68	1.57	1.80	1.78	1.49	1.87	2.08	1.49	1.58	1.67	1.66	1.66	1.66
5% Debt Burden Ratio (External component only)	0.99	1.05	1.24	1.12	0.87	1.04	1.08	1.11	1.13	1.13	1.12	1.15	1.16
Aa1 - Moody's Median	1.78	1.91	1.79	1.62	1.31	1.43	1.64						
Aa2 - Moody's Median	1.20	1.24	1.41	1.26	1.12	1.10	1.15						
Aa3 - Moody's Median	1.09	1.07	1.20	1.17	0.87	0.85	0.90						

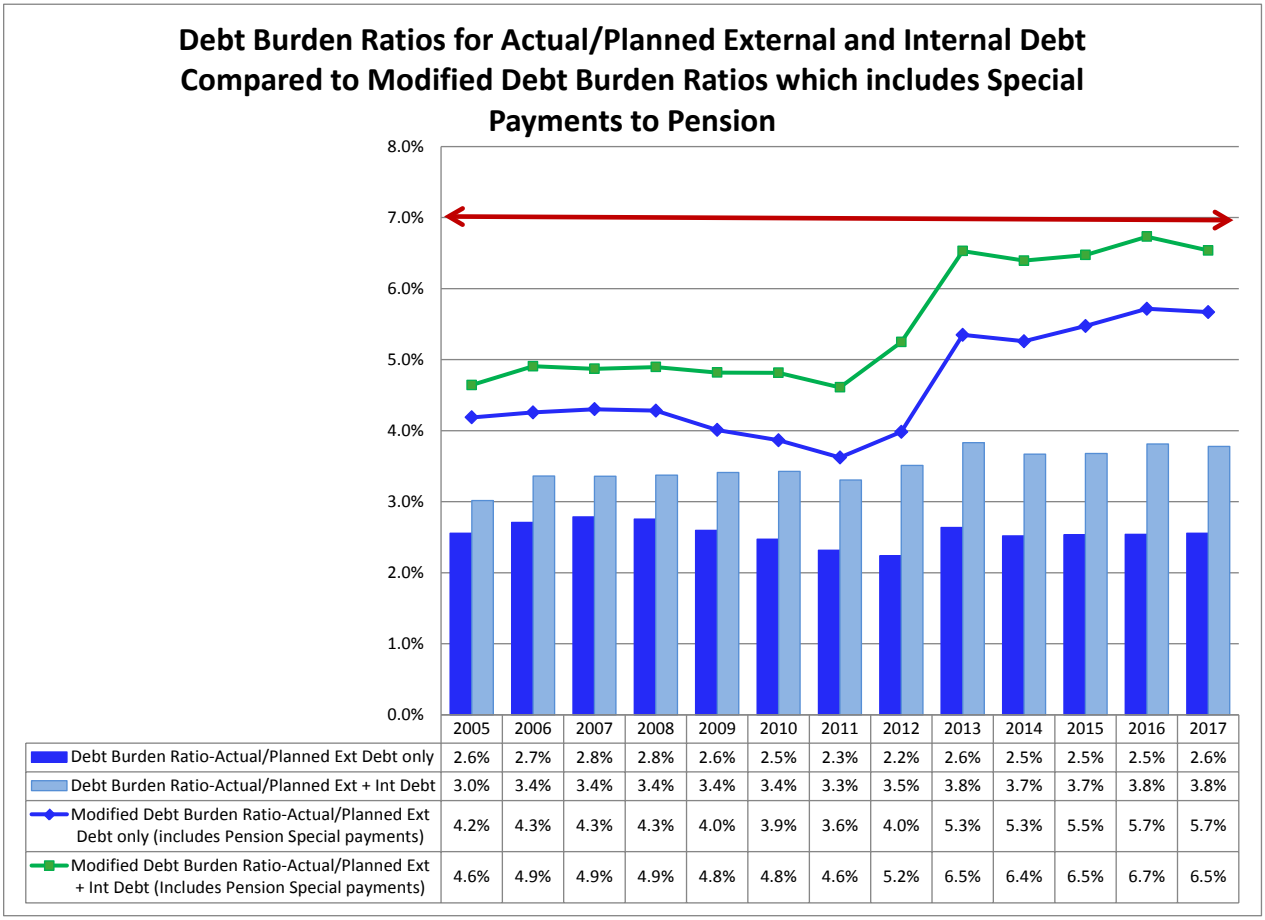
As you can see from the above chart, the 2011 ratio for the three rating levels ranges from 0.90 to 1.64. The 2011 U of T ratio was 2.08 and is projected to trend down to 1.66 by 2017. For the external debt policy limit, it is projected to be 1.16 by 2017.

These Canadian and U.S. university comparisons reinforced our view that the proposed debt policy limit and actual and planned debt are reasonable.

Other Considerations

The foregoing analysis makes a general provision for future adverse events, through its overall approach, and through the levels that have been selected for the debt burden ratio and the viability ratio. However, the size of the pension deficit and the resulting need for pension related contributions over many years by the University represent a large obligation, albeit one that is not defined as debt per se, that deserves individual consideration.

An additional metric has been developed to capture this impact, which will be calculated annually based on audited financial statement data. The metric is a variation of the debt burden ratio utilized in the determination of the debt policy limit (principal plus interest divided by total expenditures). The modified ratio will add pension payments under the pension contribution strategy (which is built into the long-range operating budget) to principal plus interest on actual and planned internal and external debt, and continue to be divided by total expenditures. The following chart shows this modified debt burden ratio for the historical and projection period from 2005 to 2017.



	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Debt Burden Ratio-Actual/Planned Ext Debt only	2.6%	2.7%	2.8%	2.8%	2.6%	2.5%	2.3%	2.2%	2.6%	2.5%	2.5%	2.5%	2.6%
Debt Burden Ratio-Actual/Planned Ext + Int Debt	3.0%	3.4%	3.4%	3.4%	3.4%	3.4%	3.3%	3.5%	3.8%	3.7%	3.7%	3.8%	3.8%
Modified Debt Burden Ratio-Actual/Planned Ext Debt only (includes Pension Special payments)	4.2%	4.3%	4.3%	4.3%	4.0%	3.9%	3.6%	4.0%	5.3%	5.3%	5.5%	5.7%	5.7%
Modified Debt Burden Ratio-Actual/Planned Ext + Int Debt (Includes Pension Special payments)	4.6%	4.9%	4.9%	4.9%	4.8%	4.8%	4.6%	5.2%	6.5%	6.4%	6.5%	6.7%	6.5%

As the chart above shows, this modified ratio is 5.2% at April 30, 2012, and trends up to 6.5% by 2017. It assumes the current pension contribution strategy. While this additional metric

will be provided for monitoring purposes only, and no benchmark is available, it is worth noting that the projected modified ratios are lower than the 7% industry threshold noted by U.S. guidance for the original ratio.

Recommended Debt Strategy

Debt policy limit:

The proposed debt policy limit, based on a 5% debt burden ratio and a 0.8 viability ratio, took into account all of the elements considered in this paper:

- the need for debt,
- the appetite for debt,
- the financial parameters,
- the comparisons,
- the projected split between internal and external debt and
- the projected timing of actual additional debt issuance.

The internal debt component is currently set at $350 million and it is assumed that this level would remain unchanged through the projection period. The current cash flow projections support that recommendation. Cash flows are projected to be sufficient to allow considerable flexibility in bridge-financing future external debt issuance. 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.

Given the large obligation that the University has with respect to the pension contribution strategy to fund the pension deficit, an additional metric will also be calculated to monitor the combined impact of debt service and pension payments on the University's ability to pay.

All other elements of the debt strategy, its associated processes and procedures, and the Business Board approvals that are currently in place are recommended to remain unchanged. The proposed debt strategy may be summarized as follows:

Debt:

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 fund deficits. External debt includes all funds borrowed from third party lenders while internal debt includes funds borrowed by the University from its expendable cash flows.

Debt policy limit:

The debt policy limit includes both internal and external debt with fungibility between them. It is determined on the basis of debt affordability, moderated when necessary and appropriate by considerations of debt capacity. Debt affordability is measured by the debt burden ratio (principal plus interest divided by total expenditures) and the maximum debt policy limit is calculated using a debt burden ratio of 5%. Debt capacity is measured by the viability ratio (expendable resources divided by debt). Annually the debt policy limit will be calculated on the basis of the 5% debt burden ratio. If the viability ratio associated with that debt policy limit is less than 0.8, then consideration will need to be given to decide whether to moderate the debt policy limit. The debt policy limit includes both internal and external debt, and the internal debt component is limited to 40% of the Expendable Funds Investment Pool (internal debt outstanding divided by audited April 30 EFIP balance plus internal debt outstanding).

Credit ratings:

Credit ratings will continue to be excluded from policy determination because they are subject to many external factors, including changes in rating agency methodologies over time.

Long-term borrowing pool (LTBP):

The long-term borrowing pool is the sinking fund that accumulates funds for repayment of external debt. Principal and interest payments related to bullet debenture borrowing will continue to be placed in the LTBP, and, together with investment income, will be used to pay periodic interest payments to lenders, and to pay issue and ongoing administrative costs, with the expectation that the net sum from these additions and drawdowns will be sufficient to repay the bullet debentures at maturity.

Borrowing method:

The borrowing method (e.g. private placement or other method) continues to be determined by the senior officer responsible for financial matters.

Internal borrowing programme:

Processes and procedures continue to be determined by the University 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.

Comparisons to others:

- *Moody's U.S. Public College and University Medians* continues to be the key comparator because the data is readily available and published annually for a large comparison pool that is relevant for U of T.
- Comparisons to other Canadian universities will periodically also be provided to governors.

Accountability to governors:

- the current Business Board approvals continue (approval of this debt strategy; approval of all capital projects with a borrowing component; approval of the legal borrowing resolutions required from time to time for issuance of external debt).
- Regular reporting to Business Board continues.

Appendix 1 Ratios at April 30, 2012

Debt Burden Ratio (at April 2012)

Debt Burden = Principal + Interest / Total Exp - Depreciation + Principal - Non cash Pension

	(in Millions)		
	External Debt	Internal Debt	Ext + Int Debt
Principal Payment:	17.1	11.7	28.8
Interest Payment:	34.3	18.0	52.3
Total Principal & Interest:	51.4	29.7	81.1
Total Expenditures:	2,437.9	2,437.9	2,437.9
Less Depreciation:	(137.0)	(137.0)	(137.0)
Plus Principal payments:	17.1	11.7	28.8
Pension expense in excess of funding	(19.3)	(19.3)	(19.3)
	2,298.7	2,293.3	2,310.4
Debt Burden Ratios:	**2.2%**	**1.3%**	**3.5%**

Viability Ratio (at April 2012)

Viability Ratio = Expendable resources (see list below) / Debt

	(in Millions)		
Expendable resources:			
Unrestricted deficit	(135.2)	(135.2)	(135.2)
Internally restriced endowments	230.8	230.8	230.8
Deferred Contributions	371.2	371.2	371.2
Internally restricted cash reserves:			
Operating fund reserves	437.2	437.2	437.2
SRA fund	121.3	121.3	121.3
Departmental trust funds	71.5	71.5	71.5
Alterations and renovation funds	75.3	75.3	75.3
Other funds	23.6	23.6	23.6
Internal loan for Pension Funding	(109.8)	(109.8)	(109.8)
Total expendable resources	1,085.9	1,085.9	1,085.9
	External Debt	Internal Debt	Ext + Int Debt
Total Debt	727.7	273.6	1,001.3
Viability Ratios	**1.49**	**3.97**	**1.08**

Modified Debt Burden Ratio - Including Special Payments for Pension (April 30, 2012)

$$\text{Debt Burden} = \frac{\text{Principal + Interest + Special Payments for Pension}}{\text{Total Exp - Depreciation + Principal - Non cash Pension}}$$

	(in Millions)		
	External Debt	Internal Debt	Ext + Int Debt
Principal Payment:	17.1	11.7	28.8
Interest Payment:	34.3	18.0	52.3
Total Principal & Interest:	51.4	29.7	81.1
Special Payments for Pension	40.1	40.1	40.1
Total Principal + Interest + Special	91.5	69.8	121.2
Total Expenditures:	2,437.9	2,437.9	2,437.9
Less Depreciation:	(137.0)	(137.0)	(137.0)
Plus Principal payments:	17.1	11.7	28.8
Pension expense in excess of funding	(19.3)	(19.3)	(19.3)
	2,298.7	2,293.3	2,310.4
Debt Burden Ratios:	**4.0%**	**3.0%**	**5.2%**