Understanding the Sustainability of the Ontario Postsecondary System and its Institutions:

A Framework

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Executive Summary

It is a fundamental responsibility and obligation of government and of institutional leaders to assure that postsecondary institutions are sustainable and capable of providing a high quality academic experience.

This paper offers a conceptual framework for examining the sustainability of Ontario's public postsecondary institutions. It discusses the definition of the term "sustainability," how it can be measured and the various tools and strategies available to both institutions and government to meet sustainability risks when they are identified.

Key messages of this analysis:

1. Sustainability is about more than just money. At present, it is easier to talk about financial issues and indicators, but equally important are issues relating to the quality of education and the academic experience institutions can offer.
2. The best sustainability regimes are those that look forward and are designed to predict future challenges. Sustainability analyses based on the current state only, or that look backward in time, are limited beyond serving as indicators of trends over time.
3. Overcoming sustainability challenges is a responsibility of, and requires collaboration between, the government and institutions. The tools available to solve sustainability challenges are inextricably linked to, and influenced by, other policies and practices in the Ontario postsecondary education sector, such as enrollment planning, tuition policies, funding formulas, differentiation and institutional autonomy.

The next steps are to better document the current sustainability risk faced by Ontario postsecondary institutions and to develop in greater detail a suite of strategies, tools and options to eliminate or mitigate sustainability challenges facing the Ontario system and its institutions.

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Introduction

The Deputy Minister of Advanced Education and Skills Development (MAESD) asked the Higher Education Quality Council of Ontario (HEQCO) to initiate an analysis of the sustainability of the Ontario postsecondary system and of the institutions that comprise it. This charge is motivated by the sentiment that a fundamental responsibility of government is to ensure that public institutions are left in at least as good shape at the end of a mandate as at its beginning. The leaders of Ontario's postsecondary institutions, we would argue, carry the same obligation.

This paper begins the sustainability analysis by offering a conceptual framework that will shape future, more data-based analyses. This paper examines a number of questions:

1. Why is sustainability important?
2. What does sustainability mean?
3. How can sustainability be measured?
4. What are best practices for optimizing sustainability?
5. What strategies are available to increase sustainability when an institution is at risk?

The paper concludes by offering a set of recommendations for the continued analysis of sustainability in the Ontario postsecondary system.

Why is sustainability important?

Ontario understands that its higher education institutions – through the students they educate, the discoveries and innovations they produce, the economic return they offer and the communities they support – are the foundation of a modern, knowledge-based economy. In contrast with many other jurisdictions around the world, the higher education system in Ontario is public; there is no private higher education system of a size or scope to provide the higher education needed by Ontario and its citizens. Given the economic and social requirements of a jurisdiction that wants and needs to stay globally competitive, if the Ontario public higher education system does well, the province does well. If the postsecondary system does not perform well, the social and economic consequences to Ontario are drastic. One obvious requirement of a well-functioning postsecondary system is that it, and the institutions within it, are sustainable and therefore have the financial and academic capacities to deliver on the expectations society and students impose on them.

The Board of every Ontario postsecondary institution also expects that as a first order of business, the administration will attend to and maintain the sustainability of the institution.

Government has a particularly significant obligation to assure the sustainability of its public higher education system. Quintessential roles of government are to be responsible stewards of public funds and to ensure the quality of institutions in the public sector. When the sustainability of a public sector is questioned, as is the case now for the Ontario postsecondary system, the government is obliged to act.

An analysis of sustainability has the added feature of tying together the various moving parts of a public higher education system. The higher education sector in Ontario is large and makes a huge contribution to postsecondary education in Canada. Ontario's 44 public postsecondary institutions – 24 colleges and 20 universities – constitute approximately 40% of all higher education enrolments in Canada. The Ontario public postsecondary system is a complex ecosystem and it is sometimes difficult to appreciate the relationship among its various moving parts. A proper sustainability analysis, as will be demonstrated below, forces an examination of some of the most important elements of a postsecondary system – including finances, academic quality, workforce deployment, productivity, labour relations – and how they relate to one another.

What does "sustainability" mean?

System versus institutional sustainability:

One can speak about sustainability of a postsecondary system and/or of the institutions within it. The concepts of "system sustainability" and "institutional sustainability" are inextricably linked. It is impossible to think of a system as being sustainable if the institutions within it are failing or are unsustainable. Equally, just because institutions in a system might be sustainable, it does not mean that the overall system is performing effectively or optimally.[1] One can imagine practices of individual institutions that might improve their individual sustainability, such as opening satellite campuses or predatory recruiting practices that would diminish the overall sustainability of the provincial system. Similarly, a government might adopt policies to improve sustainability that are at a system level, such as changes in system design or consolidation of institutions.

This paper adopts the view that sustainability is a shared responsibility and obligation of both government, that regulates and shapes the system, and the individual institutions that comprise the system. The relevant question, in our view, is what are the respective roles, functions and responsibilities of government and the institutions in ensuring that higher education in Ontario is sustainable.

In previous presentations (Weingarten & Deller, 2010; Weingarten, 2014), we have forwarded the view that the role of government is to articulate the goals or desired outcomes for its public postsecondary system and to fashion a suite of system policies, processes and regulations that assist institutions to best advance towards these desired goals. Government has powerful levers to establish the framework and to provide incentives to maximize system sustainability, such as tuition and enrolment policies, differentiation, funding formulas and to set meaningful reporting regimes. In the event that an institution is identified as being at a sustainability risk, given that these are public institutions, the government also has a role to ensure the Boards develop and implement credible plans for risk mitigation and, in the event that a government does provide emergency funding, it also has a say in the

[1] That said, having every institution in the system resting on a sound and sustainable foundation is not a bad first order goal.

terms and conditions around the use of that funding. The role of the institutions is to work within the system framework and to pursue, within their distinctive academic missions and institutional capacities, practices and operations that allow them to deliver on their academic goals and to maximize their contribution to their specific constituencies and the overall system.

The critical point here is that sustainability requires cooperation, collaboration and alignment between government and the institutions. There should be clarity between the two parties as to their respective roles and responsibilities. It means that governments must have the expertise and capacity to appreciate the implications of their actions and policies on institutions. Similarly, institutions need to appreciate and respect the legitimate role of government in stewardship of the public higher education system. This means finding the right balance in Ontario between institutional autonomy and public accountability. In our view, Ontario would benefit from more clarity on these foundational questions.

Consistent with the argument above, various parts of this paper speak to government's role and issues regarding sustainability, institutional roles and issues regarding sustainability, and how the two may intersect.

Sustainability as a strict financial concept:

In its starkest and simplest form, sustainability means that an institution's revenues and expenditures are in balance. An obvious sign of unsustainability is when an institution runs out of cash to support an upcoming expense, e.g., to meet an impending loan payment or to fund a payroll run. In the private sector, this is when one declares bankruptcy or insolvency.

In broad terms, the main sources of revenues and expenses in the Ontario postsecondary system are well understood.

The two dominant sources of revenue are provincial grant and tuition. These two sources collectively represent approximately 85% of university and 72% of college operating funds.[2] Institutions do not have direct or sole control over these predominant revenue sources. The provincial government determines the grant and also the parameters for acceptable tuition or tuition changes.

Institutions have sources of revenue beyond grant and tuition. There is the revenue from ancillary operations – such as residences, food services, parking, bookstore sales, etc. – but this revenue usually covers or supports the particular function or area from which the revenue is derived. Typically, there is no "profit" from ancillary operations that is available for general revenue. (In fact, institutions are often pleased when they do not need to draw operating funds to supplement or support ancillary operations.) There is revenue from research grants but these are trust funds that can only be used for the particular research program or project for which they were obtained; they cannot be directed to other operating purposes. There is revenue to support the indirect costs of research, which is more fungible than research grants but these are inadequate to fund the true indirect costs of research (in Canada, doing

[2] University and college financial data are from 2014-15 and are from the Council of Ontario Universities, Council of Finance Officers (COFO) for universities and the MAEDS for colleges. Provincial grants and tuition as a share of revenues are based on operating revenues for universities and total revenues for colleges.

research is a losing financial proposition) and there are constraints and restrictions on how these funds can be used. There is revenue from fundraising and return on endowments: these sources represent a small percentage of operating revenue, no more than 5% for universities and less for colleges. In most cases, these funds are also restricted and can only be used for the purposes for which they were secured originally. Postsecondary institutions have other significant assets, especially capital holdings, but these are not easily convertible into cash.

The dominant expenses of Ontario's postsecondary institutions, as they are for other public sectors, are salaries plus benefits. These represent approximately 76% of university and 63% of college operating expenses.[3] Salaries and benefits are typically negotiated and subject to collective agreements. In universities, some of this salary commitment (approximately 41% of operating[4]) represents immutable long-term commitments to the tenured faculty complement. Although college faculty are not tenured, they are also protected to a degree from dismissal or redeployment by their collective agreements. Other salary lines, to staff, sessional instructors, etc. can be adjusted by the institution to respond to economic constraints. The other dominant operating expense is utilities, materials and supplies.

In extreme cases, an institution finds itself with insufficient revenue to meet expenses within the current fiscal year, prompting a request to government for emergency funding. In most cases, however, this sustainability failure is predictable in advance because many of the annual expenses and revenues can be reasonably foreseen since they are embedded in multi-year agreements (e.g., multi-year salary settlements) or because key revenue drivers like enrolments do not change dramatically from one year to the next.

Sustainability as both a financial and quality concept:

No Ontario institution has failed to meet a payroll run and none has declared bankruptcy. Yet, there is a strong belief, and many assertions, that the Ontario system and some of its institutions are unsustainable, either currently or will be sometime in the not so distant future. These views, therefore, must be capturing something about sustainability that goes beyond simply the ability to pay the bills. And it does. Our definition of sustainability embeds the view that to keep revenues and expenses in balance, institutions may be using a set of strategies that diminishes academic quality and the educational experience they offer their students. In other words, to maintain financial sustainability, academic sustainability is put at risk. It is possible erosion of academic quality resulting from manoeuvers and strategies institutions are using to meet fiscal pressures that makes the institution unsustainable. These strategies can be anything from hiring freezes (which increase class sizes and student-to-faculty ratios, thereby diminishing student engagement), to a more than desirable amount of teaching being done by non-full-time instructors, to deferred infrastructure renewal or expansion, to reduced services.

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[3] University financial data are from 2014-15 and are based on data from Council of Ontario Universities, Council of Finance Officers (COFO). College financial data are from 2012-13 and are from Colleges Ontario. Salaries and benefits as a share of expenses are based on operating expenses for universities and total expenses for college.

[4] Salaries of tenured faculty include full-time faculty members with an academic rank. Benefits for tenured faculty members have been prorated based on their share of salaries and wages for all university staff.

Therefore, sustainability in postsecondary education incorporates both financial and academic issues. In Ontario, the suspected erosion of academic sustainability is contributing as much to sustainability concerns and discussion as are strictly financial issues. For years, many Ontario institutions have had a gap between their revenue and expenses. Ontario institutions have demonstrated remarkable elasticity in adapting to this financial gap. There is a sense, however, that the strategies left to institutions to close the revenue-expense gap is diminishing the quality of the Ontario postsecondary system. This idea was captured most succinctly by a 2013 HEQCO Expert Panel that reviewed the Strategic Mandate Agreements (SMAs) proposed by the institutions and concluded that "the Ontario was not sustainable if the quality of the system is to be maintained."[5]

How can sustainability be measured?

As noted above, sustainability is both a financial and a quality construct. It is easiest to think about measures of financial instability (as discussed below) and these are a good starting point for a sustainability analysis of any particular institution. The province has already adopted some indicators, drawn from financial statements released by the institutions (see below) that provide some clue as to the financial sustainability of the institution.

But a sustainability analysis is incomplete without consideration of the quality of an institution; in particular, is an institution using tools and strategies to meet financial obligations that are diminishing, or will diminish, the quality of the academic experience to an unacceptable level? It is on this assessment of sustainability of academic mission where things get murky. There is less clarity and consensus about what these quality indicators might be. What is an unacceptable student-to-faculty ratio? How low can National Survey of Student Engagement (NSSE) scores be before they are deemed to be unacceptable? What is an unacceptable graduation rate? At present, there are no answers to these questions. At HEQCO, we have forwarded the argument that quality reflects adequate achievement of defined learning outcomes, but even this approach begs the question of what is "adequate." One sensible view is that while a threshold for unacceptable quality cannot be identified, academic sustainability can be addressed by looking at the trends of relevant variables or proxy indicators over time to see if they are stable, improving or getting worse.

The most appropriate and meaningful sustainability analysis incorporates both financial and academic measures. The financial ones are easier to conceptualize and obtain. There is less consensus on measures and indicators of academic sustainability and quality. It is also easier to imagine that all postsecondary institutions could use the same indicators for financial sustainability. But measures of academic sustainability must be linked to the distinctive mandate, mission and strategic plans of higher

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[5] We direct the reader to a 2004 paper published by the OECD, *On the Edge: Securing a Sustainable Future for Higher Education*, that examined the sustainability of the higher education systems in eight OECD countries. It provides a useful description of the various factors that are driving concerns about sustainability for both government and higher education institutions. Many of the analyses and observations in that paper are directly relevant and applicable to the Ontario situation.

education institutions, and in a differentiated world, these need not be the same for all institutions. This is where sustainability analyses necessarily link to institutional academic planning, policies like differentiation, processes like the SMAs and to differentiated funding formulas.

As noted earlier, the most obvious indicator that an institution is unsustainable is when it runs out of cash to pay for a current or known anticipated expenses. The proximal signal for this is the institution approaching government to seek emergency funding.

Ideally, however, one wants a measure of sustainability prior to an institution reaching this dire situation so that one can initiate a set of corrective or mitigating strategies that eliminate or reduce the probability of financial failure.

Sustainability indicators from financial statements: Financial statements published by institutions provide some clue as to the degree of financial risk faced by a university or college.

In 2014, the Ontario government negotiated a set of SMAs with each of its postsecondary institutions. The SMA with each college states that:

The Ministry and the College agree to use the following metrics to assess the financial health and sustainability of the institution:

1. *Annual Surplus/Deficit*
2. *Accumulated Surplus/Deficit*
3. *Net Assets to Expense Ratio*
4. *Debt Servicing Ratio*
5. *Quick Ratio*
6. *Debt to Asset Ratio*
7. *Net Income to Revenue Ratio*

These measures signal the financial health of a postsecondary institution. It stands to reason that a college that has accumulated a degree of debt that cannot be serviced by its expected income, or that runs a series of annual deficits, is at risk for more severe financial difficulties.

The province is working with the Council of Ontario Universities on a similar set of indicators from financial statements for universities but the reporting requirement appears not to have reached the same level of clarity or maturity with government as it has with the college sector.

Indicators from institutional financial statements, however, are not the optimal way of flagging sustainability challenges. First, given when financial statements are released, by the time an indicator on a financial statement elicits a red flag, the problem may have become sufficiently acute or severe to limit possible corrective actions. Second, given the accounting rules that determine how financial statements are constructed (that include such things as depreciation of assets, etc.), it is sometimes difficult to figure out from the statements themselves whether an institution faces the probability of running out of revenue to meet expenses. This is especially true for larger institutions that have diverse and multiple revenue sources and flows (think about the significant trust and research funds held by these institutions or the complicated funding arrangements that support medical schools – such as the flow through of clinical earnings that support medical schools). Finally, sustainability indicators that are solely financial may miss the quality implications of actions institutions are using to maintain financial stability.

Indicators from financial statements look backward or, at best, identify the current state. If these are the only ones available, they are most useful and valuable when the trend of the indicators over time is examined.

Forward-looking sustainability indicators: The good news is that it is possible to predict sustainability risks before they become evident in financial statements. On the financial side, as noted before, institutions can reasonably predict their revenues and expenses in future years. These forecasts include institutional decisions about critical budgeting parameters such as expected enrolment, domestic and international, or future wage settlements, which have a major influence on future revenues and expenses. A proper sustainability framework allows for an assessment of whether the parameters being used by institutions are reasonable. It serves no one's purpose to simply plug in numbers for these critical revenue and expense drivers to make the books look good. A proper and comprehensive sustainability framework also asks institutions that anticipate future financial difficulties to identify the strategies they intend to use to meet these financial challenges, thereby allowing for a determination of the impact of these proposed manoeuvers on academic quality.

What are best practices for optimizing sustainability?

The sustainability problem is owned by both institutions and government and can only be solved by them working in a collaborative, trusting, supportive partnership. Jurisdictions will differ in terms of the relative roles of the two partners. Understanding the respective roles of government and institutions in sustainability analyses and in the redressing of sustainability challenges is important – which necessarily gets into issues of institutional autonomy and government accountability.

For institutions:

First, as noted above, expense and revenue changes in future years can often be reasonably predicted and the sooner a financial challenge is identified the more opportunity there is to minimize or fix it. Therefore, the most intelligent and sensible approach to sustainability requires multi-year budgeting. Looking one year in advance seems too short. Estimating five years in advance is seen by some to be too long. Three to five years seems about right. The institution and the board should expect reasonable and prudent budgeting. It serves no purpose to mask a future financial challenge by making unrealistic expectations of enrolment increases or by shorting future expenditures.

Second, the institution's budget model should incorporate a reasonable contingency line or carry a reasonable amount of unrestricted net assets. Postsecondary institutions live in a financially volatile environment. It seems only sensible to reserve some proportion of operating funding to cover unanticipated expenses or revenue drops within a year.

Overall, institutions are well advised to adopt a risk management approach to budgeting and expenditures. We acknowledge that there are institutions that have already moved in this direction.

But, for an institution, a sustainability analysis must be about more than just money. As the OECD (2004) notes:

"An institution is …sustainable…if it is investing in its infrastructure (physical, human, intellectual) at a rate adequate to maintain the future productive capacity needed to deliver its strategic plan and to serve its students and other customers." (p.35)

So whether an institution is financially sustainable must be evaluated within the context of its academic and strategic plans.

For government:

The provincial government has a legitimate and vested interest in the sustainability of the institutions in the public postsecondary system. Governments do not want institutions to fail, nor is it clear that they ever would allow any to fail. Ideally, the government's concern about sustainability should be proactive and anticipate future problems, not reactive and simply responsive to requests for emergency funding when a financial crisis appears. This requires agreement between the government and its institutions about measures institutions will report to assess their sustainability risk, actions proposed by the institution to address sustainability challenges and a sensible, evidence-influenced review of budget assumptions and plans. In these times, sustainability reporting should be as central to an intelligent institutional reporting regime to government as should enrolment.

Sustainability issues are not independent of the overall role of government in a public postsecondary system. Governments have a role in setting the desired outcomes or objectives for their postsecondary systems, designing a framework that provides institutions with the flexibility and levers to address their challenges and make their individual contribution to overall system goals, and implementing a set of financial and other incentives that provide clarity and predictability to institutions. Best practices for government to assist institutional planning include clarity around desired system objectives and goals, sensible enrolment planning and predictable multi-year grant and tuition announcements.

Nova Scotia – Universities Accountability and Sustainability Act:

Nova Scotia appears to have one of Canada's most comprehensive and coherent processes for addressing the sustainability of its postsecondary institutions, stemming from the 2015 Universities Accountability and Sustainability Act.

The element of the Act that has received greatest attention is section 8, which allows the university's Board to advise the Minister that it is suspending labour action such as strikes and lockouts during a revitalization period. Collective bargaining could and should continue during this period. For the purposes of the sustainability discussion, however, the most critical parts of the Act are the annual financial reporting requirements for all Nova Scotia postsecondary institutions. Compiled by each institution in a uniform manner, the financial reports look three years in the future and probe for the degree of sustainability risk faced by the institution. When an institution is deemed to be at risk it initiates a process and discussion with government to explore actions that can be taken to eliminate or mitigate the risk. Each university meets with government every year to discuss their financial position.

This process does not eliminate financial or sustainability challenges nor does it necessarily make it any easier to fix problems. But it does identify the problem well in advance and it appears to engage both the institution and the government in a purposeful and focused planning exercise. It also provides clarity as to the respective roles of government and the institution in addressing the sustainability challenge.

Equally important, the Nova Scotia government understood that part of its role was to establish a postsecondary policy framework that provided the means and flexibility for institutions to meet sustainability challenges. Aside from the new legislation, the government opened a window allowing institutions to reset their tuitions and the government announced four years of predictable provincial funding.

This discussion of best practice cannot ignore the logical sequel of what happens when a sustainability risk is identified. What happens next? What are the respective roles of government, the institution or third parties? The Nova Scotia framework speaks clearly to these issues. It is insufficient for a sustainability analysis to end with identification of risk. Rather, it must include articulation of the process to be used to help fix or ameliorate the problem.

Data disclosure:

On other matters, HEQCO has argued for the importance, influence and motivating power of public data disclosure in higher education.

We will recommend below that institutions report annually and in a standardized way, on their sustainability risk and efforts to address them. Data about enrolments, revenues, surpluses and deficits, debt loads, and especially their trends over time, should be well understood by the institution, its board and government. The keen observer would be able to glean some of this information from publicly available records. But not all of it can be easily extracted or interpreted as currently reported. There is value in the community having a common understanding of the degree of sustainability risk faced by its institutions and this means presenting the most relevant data in a digestible form. Like all problems, addressing the challenge starts with a shared understanding of the nature, magnitude and scope of the problem.

However, we also understand that issues of the risk, especially financial risk, faced by institutions are sensitive and not necessarily matters that in the first instance are appropriate for public disclosure. There is a time and place for public disclosure of this information and identifying the right time should be a matter of discussion between government and the institutions.

What tools are available to increase sustainability when an institution is at risk or to buffer institutions against sustainability challenges?

Tools that may be useful, available or appropriate to address a sustainability challenge depend somewhat on when the risk is identified. As we noted earlier, the best situation is with pre-emptive action when a risk is identified in advance based on sound and realistic planning. Less preferred is remedial action when an institution finds itself in an emergency situation that was not flagged in advance. Regrettably, this less preferred option is too often the modus operandi in the Ontario system.

More money: The solution often promoted to fix sustainability challenges is simply to give the institution more money, either by an increased grant or higher tuition.

Emergency funding obviously helps when there are insufficient funds to meet expenses, but it does not solve the problem. Rather, all it does is kick the sustainability problem down the road (how far down the road depends on how much additional funding is provided). Furthermore, if institutions perceive that they will always be bailed out, there is little motivation for them to make the hard decisions necessary to mitigate or prevent those emergencies from happening.

On the financial side, institutions are at a sustainability risk typically because there is some structural or systemic imbalance between revenue and expenses. Unless the incremental or emergency funding is accompanied by some systemic change, the sustainability challenge will simply re-emerge. This is the essential feature of the Nova Scotia model. When an institution is in financial trouble, either before the emergency happens or even if emergency funds are granted, the focus is to return the institution's finances to a stable, sustainable point, and the government has created a process to allow the time and opportunities for that to happen.

Increasing enrolment: In Ontario's current funding formula, over 90% of incremental annual operating revenue is enrolment sensitive. In fact, the substantial growth funding available to institutions over the last 10 years or so, approximately 7% per year, may well have masked sustainability challenges. The current concern over the inability of some Ontario institutions to increase enrolment – whether for demographic, geographic or reputational reasons – motivates much of the current disquiet in Ontario over institutional sustainability.

Under current financial arrangements, the ability of an institution to increase enrolment is a major buffer against financial instability. Ontario institutions differ considerably in terms of domestic enrolment demand. Figure 1 shows the application and acceptance data for each Ontario university. Some institutions demonstrate high demand and therefore the ability to accept more students if they wish. Others show a far more limited, or decreasing, capacity.

In the face of financial shortfalls, many institutions also seek to increase enrolment of international students (we recognize that there are other academic reasons for seeking international students but we would be naïve to ignore the prominence of financial considerations in an institution's international recruitment plans). The enrolment of international students in Ontario colleges and universities is shown in Figure 2. Because international students pay higher fees than domestic students, they provide a cash infusion to institutions. However, there are costs associated with an increased international cohort. In addition, the international market is volatile. International fees are probably best treated as short-term cash infusions that may redress a financial challenge in one or a couple of years rather than a long-term fix for a systemic sustainability challenge. Furthermore, if institutions become too reliant on international fees it may raise legitimate issues around access of domestic students. The experience in Australia, which became very dependent on international fees to meet operating expenses, underscores these two dangers.

Reducing the wage bill: The strategies above seek to redress the imbalance between revenue and expenses by increasing revenue. Since salaries and benefits represent approximately 76% of operating expenses of postsecondary institutions in Ontario, the other way to redress a fiscal imbalance is to reduce the wage line, or at least to mitigate its increase over years. The fact that salaries in Ontario institutions are rising faster than inflation, in some cases substantially so, is a major driver of concerns over the ability of Ontario postsecondary institutions to remain sustainable.

The college sector has better matched salary increases to inflation than has the university sector. Part of this results from the different bargaining regimes of the two sectors. Colleges engage in province-wide bargaining. Universities bargain individually and the bargaining environment and arbitration rules universities face make it very difficult for individual universities to reduce salary settlements to inflation or lower.

The salary issue has been exacerbated by the elimination of mandatory retirement at age 65; mandatory retirement was eliminated in the Ontario postsecondary system in December 2006. Prior to that, the availability of mandatory retirement at age 65 assured a greater opportunity for faculty renewal and provided an effective lever for institutions that wished to reduce the faculty complement by offering early retirement incentives. In 2005, approximately 1.5% of Ontario's university faculty complement was age 65 or older. With the elimination of mandatory retirement, by 2013, about 10% of Ontario university faculty are over age 65.[6] It is timely to conduct a deeper analysis of the impact of the elimination of mandatory retirement on the sustainability risk faced by postsecondary institutions.

Another way some institutions are reported to reduce their wage bill is to preferentially hire sessional or non-full-time instructors in lieu of full-time. There are many legitimate academic reasons institutions seek to employ part-time instructors. That said, it is equally timely to conduct a deeper analysis of the extent and role of teaching by non-full-time instructors in Ontario colleges and universities and how this influences finances and the academic experience of students. HEQCO is completing a preliminary analysis of these issues in the Ontario postsecondary system and will release its report soon.

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[6] Data are from the Ontario Council of Academic Vice-Presidents (OCAV) and include faculty in tenured academic ranks. Clinical faculty, visiting and research-only faculty members are excluded.

Pension plan obligations: A continuing discussion in Ontario has been the degree to which meeting ongoing pension funding requirements represents a sustainability risk. The pension plan issue affects institutions differentially. It seems timely to clarify the degree to which meeting ongoing pension obligations represents a serious sustainability problem and for which institutions. It is also appropriate to develop and offer a set of options to these institutions to meet this challenge.

Productivity: Another strategy to improve sustainability is to increase productivity. In 2012, at the request of the government, HEQCO conducted a preliminary analysis of the productivity of the Ontario postsecondary system. That analysis suggested two promising strategies to increase sustainability. For government, at the system level, it was to redesign the postsecondary system using the differentiation policy and an amended funding formula to drive efficiencies, reduce duplication and improve quality. At the institutional level, it was to optimize the deployment of faculty teaching resources. Two subsequent workload analyses of the Ontario university system, one conducted by HEQCO (2014) and the other by COU (2014) further illuminated the significant productivity increase that could be obtained by considering faculty workloads. Specifically, the great majority of tenured faculty are on contracts that suggest a workload distribution of 40% teaching, 40% research and 20% service. Yet, the analyses above suggest that approximately 13% of the Ontario professoriate demonstrate little to no evidence of scholarly output yet are doing very little additional teaching to compensate for their lack of research output.

The government has already moved to adopt differentiation as a major policy lever for transforming the Ontario postsecondary system. It has also initiated analyses of how the university and college funding formulas could be amended to, among other goals, increase institutional sustainability. There has been little activity within the college or university sector to implement changes that would optimize faculty resources at a scale suggested by the two workload investigations.

Summary

The analysis of sustainability in this paper reveals many of the moving parts of postsecondary systems and leads to consideration of many of the tools and strategies – such as funding formulas, differentiation, workloads – that are available to increase the stability and sustainability of postsecondary systems and institutions. We make three important points:

First, the best way of approaching the issue of sustainability is to look forward. The most useful indicators and measures are those that predict sustainability challenges in the future. Indicators and measures that document the current state or look backwards are more limited. If they must be used, the trend line of these indicators over time is instructive.

Second, sustainability is more than just about money and finances. A comprehensive sustainability analysis incorporates academic considerations of the changes in the quality of the student experience and the quality of our institutions. It is easier now to talk just about money and financial indicators. But we must get to the point where quality indicators are as prominent and treated as rigorously as are measures of revenues, expenses and the balance between them.

Third, overcoming sustainability challenges is a responsibility of, and requires collaboration between, the government and institutions. The tools available to solve sustainability challenges are inextricably linked to and influenced by other policies and practices in the Ontario postsecondary education sector such as enrolment planning, tuition policies, funding formulas, differentiation and institutional autonomy.

Next steps

We make the following recommendations for advancing the sustainability discussion and analysis.

1. Better data are urgently needed. It is impossible to accurately diagnose the sustainability problem in the Ontario postsecondary system or to identify the most promising options for redress unless we have a more comprehensive data-informed discussion. This paper identifies some of the data and evidence we need: more focused financial reporting of the most important indicators; a more complete understanding and rigorous analysis of the strategies institutions are using to meet financial challenges such as enrolment planning and use of non-full-time instructors, workloads, etc. Some, we suspect much, of these data exist. It is time to reveal and use these numbers purposefully and intelligently. We recognize that there needs to be a shared sense of trust among partners – government, institutions and HEQCO – for this to happen. It is time to trust. We all have a stake, as does the entire province of Ontario, in getting the job done well and we cannot do so without knowing in an informed way where we are, what we are doing and what we plan to do. It starts with this evidence-based conversation.
2. In light of the conversation recommended above, the government and institutions should develop a standardized sustainability reporting framework that would provide institutions, government and the public with a short list of meaningful indicators about the sustainability risk faced by each institution. To the extent possible, this framework should be forward looking, report on strategies the institutions are using to mitigate or eliminate the anticipated financial risk (including the major parameters they are using, such as enrolment and revenue numbers, in future years) and quality-related variables. Again, we believe much of this information is available. We also believe that in some cases (like, as discussed earlier, the financial indicators colleges report), we are reporting too many variables. We should restrict this standardized report to a limited number of only the most essential data needed to drive and inform the sustainability discussion.
3. The government, either internally or by the use of a third party, should use the data collected and these sustainability reports to identify those institutions at greatest current or future risk and initiate discussions with those institutions to explore options for mitigating or eliminating that risk. This discussion should be grounded and shaped by evidence and data. Similarly, the government should develop policies and practices for those institutions not at sustainability risk

to offer them the greatest flexibility and autonomy to pursue and optimize their differentiated mandates and missions.

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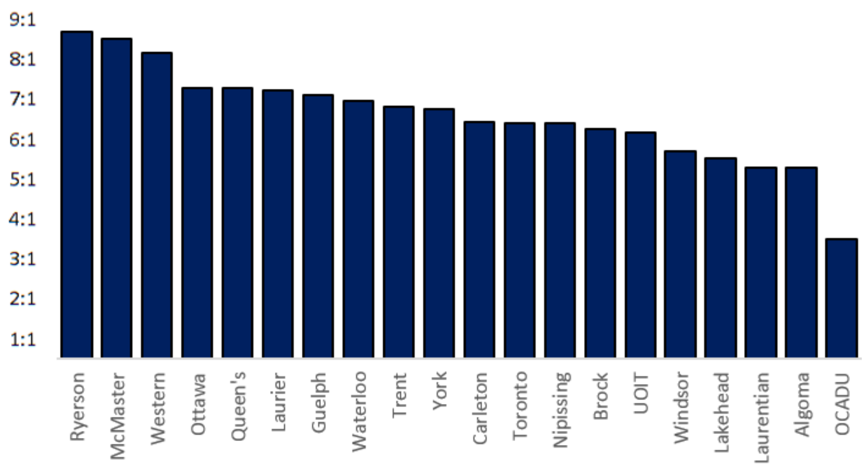
Appendix A

Figure 1: Application to Registrant Ratio, 2014

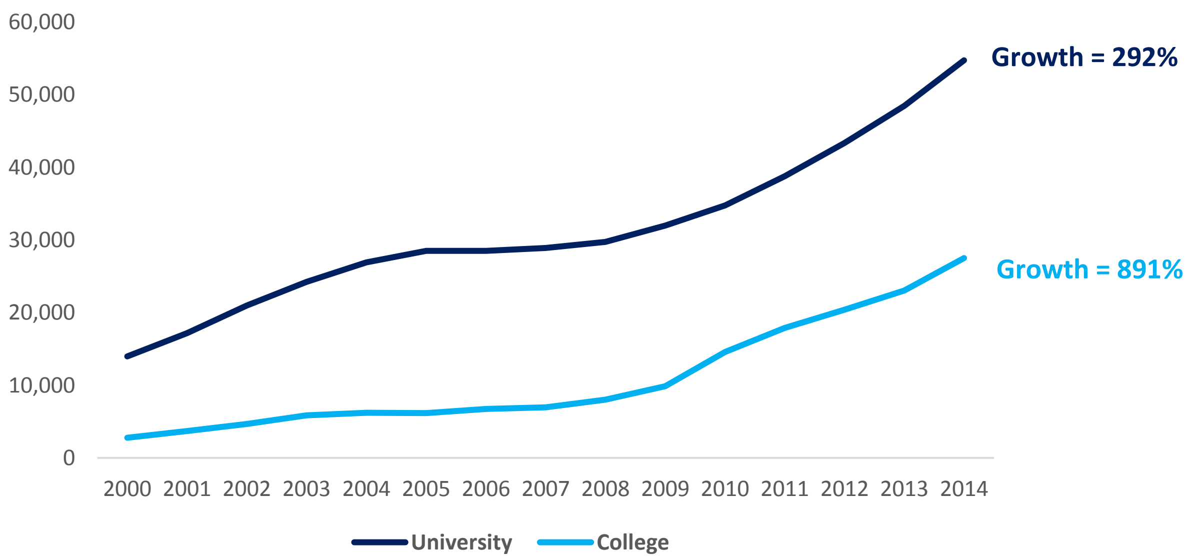


Source: Council of Ontario Universitites, Commonum University Data of Ontario (CUDO)

Expanatory notes about the data:

- The above graph shows the number of applications to registrants. As such, applicants may be double counted as individuals can submit up to three applications at one institutuion.
- Data are based on the number of full-time, first-year applications and registrants in first-entry programs for fall 2014, with the exception of Algoma, which are for fall 2012.

Figure 2: Ontario International Student Enrolment



Source: Ministry of Training, Colleges and Universities (MTCU)