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Tuition Fee Policy Options for Ontario

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Executive Summary

Ontario is in the process of designing a plan for postsecondary education (PSE) to follow *Reaching Higher*. The new plan will contain an array of policy goals and strategies, and some consideration must be given to a tuition fee policy. The current tuition fee policy was slated to end in 2009-10, but was extended by two years. A new framework must be in place for the 2012-13 academic year.

This paper presents options for a new tuition framework. We do not rank the options or make a recommendation, believing that this decision is appropriately a political one to be made by government.

Much has been written about tuition fees and tuition fee policy. Our contribution is to provide some context for the choices ahead. One perspective comes from recent research on higher education. There is an emerging consensus in the Canadian higher education literature that can help evaluate current policies and point to possible new directions. This body of knowledge is frequently missing from tuition policy discussions, either because it is not widely understood or, occasionally, because the implications run counter to long-held positions.

The other perspective is historical. Ontario's choices will be shaped in good measure by the policies already in place and the priorities underlying them. Specifically, postsecondary education will continue to be viewed as a key contributor to the province's economic and social goals, and expectations for the sector are likely to continue to focus on accessibility, quality, and accountability.

We begin by describing briefly the current tuition framework and pressures for change. This discussion makes clear that tuition fee policy is not just about tuition fees; it is equally about student financial assistance policies and about the revenue needs of colleges and universities. Setting a new fee policy requires full appreciation of the complex interplay among these three factors.

We note that, contrary to often-expressed views, Canadian researchers find no consistent correlation between tuition fees and PSE participation and persistence rates. Part of the explanation for this result is that average private rates of return to postsecondary education compare very favourably to those available from purely financial investments. Increases in tuition rates of the magnitude witnessed in Canada in recent decades apparently have not been large enough to alter this situation. Another part of the explanation is that non-financial barriers loom large for some individuals.

Private rates of return are relatively high in part because governments have chosen to subsidize PSE in various ways. The public debate frequently focuses on average tuition fees as reported by Statistics Canada. Yet this focus is misleading. For many students, particularly those with demonstrated financial need, the actual costs of PSE

are substantially lower once grants, subsidized loans, tax credits and debt relief are taken into account.

These government policies notwithstanding, there are still groups that are under-represented in PSE in Ontario and it is apparent that financial barriers remain part of the explanation. Other factors include lack of understanding of the relative benefits and costs of postsecondary education and decisions made early in the schooling process that preclude a successful transition to PSE.

There is an emerging consensus in the literature on how to design support policies to offset financial barriers. Ontario has many of these features in place, but there are options for improvement. These changes should be considered no matter what new tuition policy emerges, but it is especially important to do so if the new policy contains ongoing fee increases.

The process for deciding on a tuition policy requires simultaneous and interdependent decisions on three key PSE policy variables: the revenue needs of the colleges and universities in each year of the planning period, a tuition fee framework that balances contributions to these revenue needs with effects on accessibility, and the public funds available each year for operating grants plus contributions to student financial assistance.

Four types of tuition frameworks are presented and evaluated for strengths and weaknesses within the Ontario context: capped tuition fees, a shares approach, constrained deregulation, and full deregulation. We look briefly at several variants of fee caps: a rollback, a freeze, tying increases to the CPI, and retaining the status quo policy of a maximum allowable increase of 5%. We argue that there is no obvious cap figure. Any choice involves a balancing of revenue needs, accessibility, and fiscal capacity.

The same point applies to proposals to adopt a shares approach wherein tuition revenue is set at some portion of institutional operating revenue. There is no obvious share to aim at. Governments over many years, for a variety of reasons, chose to increase the relative share of PSE operating costs borne by students. These decisions were made in conjunction with a host of other economic and social policy adjustments; for example, tuition credits. Any decision to alter this trend must take this broader historical perspective into account.

The choice of a new fee policy must also involve consideration of the pros and cons of relaxing or even removing the current distinctions of allowable fee increases among programs. A constrained deregulation approach would remove these distinctions among programs but retain an overall fee cap. Complete deregulation would remove the distinction and the arbitrary cap, although it is perfectly compatible with a scheme to tax back a portion of fee increases for need-based financial assistance.

1. Introduction

Ontario is in the process of designing a plan for postsecondary education (PSE) to follow Reaching Higher. The new plan will contain an array of policy goals and strategies, and a tuition fee policy will be a key part of the mix. The current tuition fee policy was slated to end in 2009-10, but was extended by two years. A new framework must be in place for the 2012-13 academic year.

This paper presents options for a new tuition framework. We proceed by describing briefly the current framework and pressures for change. This discussion makes clear that tuition fee policy is not just about tuition fees; it is equally about student financial assistance policies and about the revenue needs of colleges and universities. We examine the complex interplay among these three factors, and we present options for a new fee policy. We do not rank the options, however, believing that this decision is appropriately a political one.

Much has been written about tuition fees and tuition fee policy. Our contribution is to provide some context for the choices ahead. One perspective comes from recent research on higher education. There is an emerging consensus in the Canadian literature that can help evaluate current policies and point to possible new directions. This body of knowledge is frequently missing from tuition policy discussions, either because it is not widely understood or, occasionally, because the implications run counter to long-held positions.

The other perspective is historical. Ontario's choices will be shaped in good measure by the policies already in place and the priorities behind them. Specifically, postsecondary education will continue to be viewed as a key contributor to the province's economic and social goals, and expectations for the sector are likely to continue to focus on accessibility, quality, and accountability.

An appendix provides background information on Ontario's tuition fee and student financial assistance history. A companion @Issue note will survey experiences in other jurisdictions of relevance for Ontario.

2. The Current Tuition Fee Policy and Arguments for Change

The main features of Ontario's current tuition fee policy are as follows (see Appendix 1 for details):

- Tuition fees for students entering the first year of graduate, professional and a few undergraduate programs (often referred to as "formerly deregulated programs") can rise by no more than 8% over what they were for students who entered these programs the previous year, and by no more than 4% for each subsequent year of the program.

- The comparable figures for students in all other programs are 4.5% for the entering year and 4% for each subsequent year.
- The maximum allowable increase for high-demand college programs is 8% in the first year and 4% in continuing years. For regular college programs, the figures are 4.5% for the first year and 4% for continuing years.
- The maximum allowable average (weighted by program enrolment) annual increase an institution can levy is 5%.
- Tuition fees for international students are not regulated and are not included in these allowable maximums.

One obvious option is to continue this policy for another, say, five years. This prospect elicits two very different reactions.

One reaction is that projected tuition fee levels under this option are too high; the new policy should cap the rate of increase of tuition fees at a much lower rate or, ideally, should freeze or even reverse it.

This view stems from concern about the presumed effects of tuition fees on PSE participation¹ and persistence² decisions. Allowing average tuition fees to rise at 5% per annum³, it is argued, will lower participation rates and increase drop-out rates. To make matters worse, these effects will be more pronounced for students from under-represented groups, the very individuals that are the focus of accessibility efforts. Student financial assistance programs may cushion some of the impact of higher fees, the argument continues, but they cannot fully or reliably offset these negative effects for particularly vulnerable students. Colleges and universities need adequate resources to operate effectively, so the government will have to consider increased operating grants to compensate them for the loss of tuition fee revenue.

The other reaction to the possibility of extending the status quo tuition fee policy is precisely the opposite one, namely that projected fee levels under this option are too low: the new policy should raise the annual cap on tuition fee increases significantly or even abolish it entirely.

This position stems from the perceived revenue needs of colleges and universities. Tuition fees in Ontario accounted for 37% of university operating revenue and 27% of college operating revenue in 2008 (Snowdon and Associates, 2009) so a 5% cap on average annual tuition fee increases will generate about a 2% per annum increase in annual operating revenue for universities and about a 1.5% per annum increase for colleges. At best, this incremental revenue just covers projected inflationary rates

¹ The PSE participation rate is the percentage of the population of a specified age cohort (e.g. 18-24) registered in a postsecondary education program on a given date.

² The PSE persistence rate is the percentage of students registering in a PSE program in a given academic year who register again the subsequent year. It is the inverse of the drop-out rate.

³ Compounding annually at a 5% rate, fees would be 28% above their current level in 5 years and 63% above in 10 years.

measured by the CPI⁴, and falls short of cost increases measured by the higher education price index (AUCC, 2008, Appendix E). It provides no funds for expansion or quality enhancement.

Proponents of this view anticipate (reluctantly) that the Province's fiscal position will not permit significantly larger operating grants in the next few years. Thus the only realistic option is to rely on tuition fee increases. Higher fees will increase the cost of PSE to students admittedly, but financial assistance programs are in place to cushion the effects of fee increases, particularly for students from low-income families.

It is clear from even this brief summary that tuition fee policy is not just about tuition fees. It is equally about the design and operation of student financial assistance programs and about the revenue needs of colleges and universities. We take up these issues below, but first we address a key empirical question: what is the relationship between tuition fees and accessibility and persistence decisions?

3. Do Tuition Fees Adversely Affect Accessibility and Persistence?

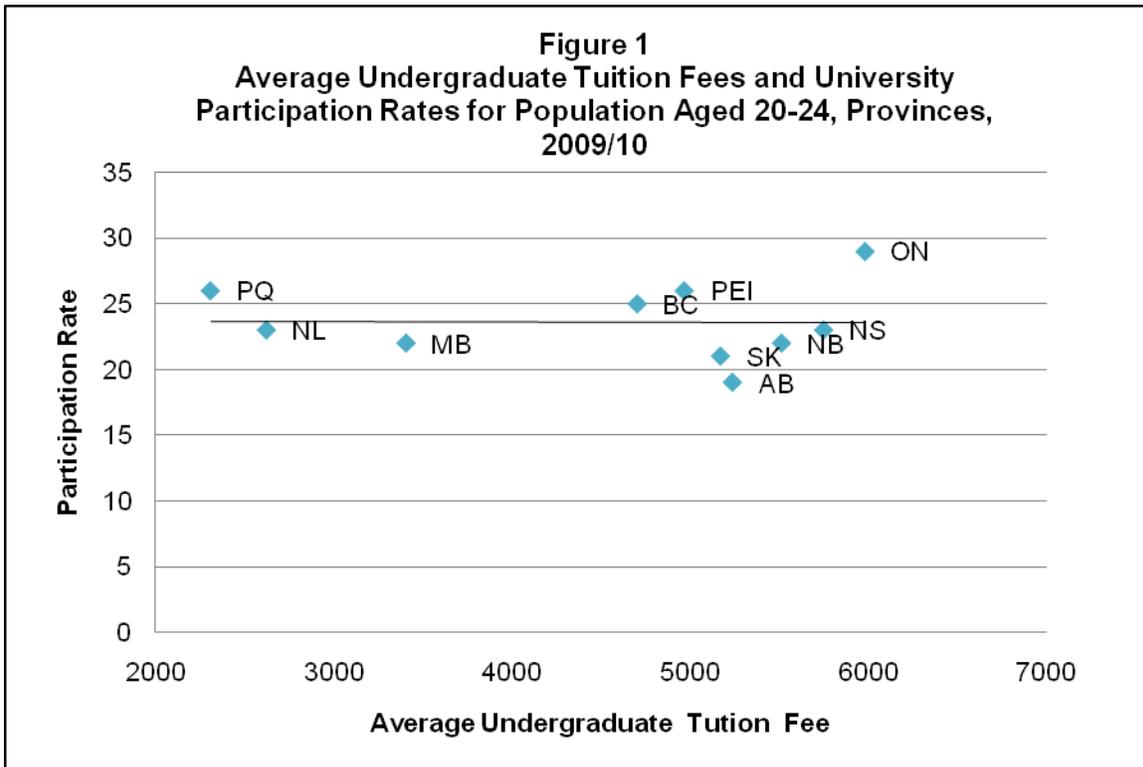
The answer to this question is clear: Canadian research finds no consistent relationship between tuition fees and PSE participation and persistence rates.

Two kinds of evidence support this conclusion. The first is simple correlations between tuition fees and PSE participation rates. Ontario, with the highest average undergraduate tuition fee among provinces in Canada in 2009/10⁵, had the highest university participation rate (Figure 1). The trend line in Figure 1 is flat, indicating no apparent connection between tuition fees and participation rates. This lack of correlation also holds for Ontario over time. Average real (i.e. after inflation) university tuition fees in Ontario increased significantly from the early 1990s until 2009-10 yet the participation rate continued to rise (Figure 2). The same relationship holds for Ontario colleges although the changes over time are smaller (Figure 3).

These simple associations do not prove that tuition fees do not matter, however. Many other factors also influence PSE participation and persistence decisions, and these influences may be offsetting the tuition effect. That is, participation rates in Ontario might be even higher, and drop-out rates even lower, with lower fees. For this reason, analysts have turned to more sophisticated statistical models that attempt to allow for these other influences in order to isolate the effects of tuition fees.

⁴ The Bank of Canada's Consumer Price Index (CPI) inflation target range is 1-3% per annum, with monetary policy aimed at keeping the rate at the mid-point of 2%.

⁵ Ontario's average fees are pulled up by a few high-cost, formerly-deregulated programs. For other programs, Ontario's average fees in 2009-10 were slightly lower than those in Nova Scotia and New Brunswick and about equal to those in Alberta.



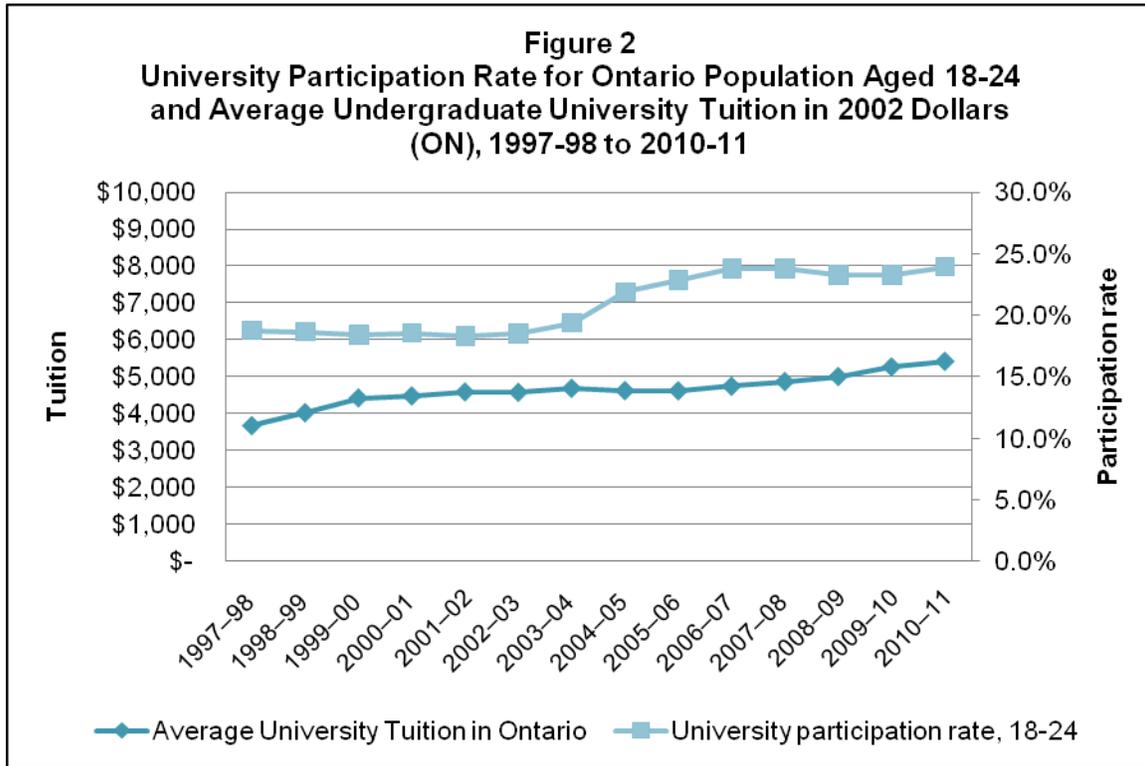
Source: Participation rate: Statistics Canada, Centre for Education Statistics. Tuition and Living Accommodation Costs for Full-time Students at Canadian Degree-granting Institutions Survey (TLAC)⁶ <http://www.statcan.gc.ca/daily-quotidien/100916/t100916a1-eng.htm>. Tuition fees noted in 2009 dollars⁷ <http://www.statcan.gc.ca/pub/81-582-x/2010004/tbl/tble1.2.1-eng.htm>.

⁶ The participation rate is based on a monthly average from September to April and includes full-time and part-time attendance. 'Other' types of education from the LFS are not included in the three types of schools: primary or secondary school; community college, junior college or CEGEP; and university, and are excluded from the numerators for the totals.

The elimination of Grade 13 (Ontario Academic Credits (OAC)) in Ontario after 2002/2003 may have affected participation rates at certain ages.

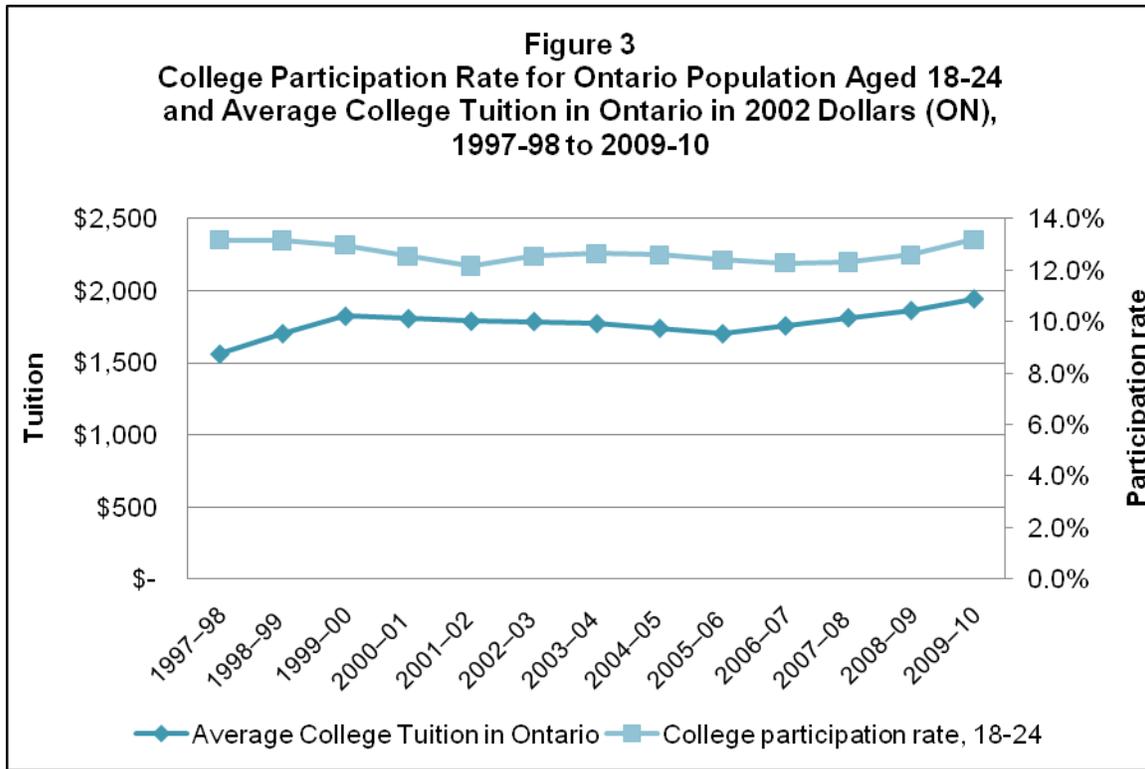
Figures may not add up to totals because of rounding. Some cells may show small revisions compared with past PCEIP tables due to minor differences in table production.

⁷ These are average tuition fees for all undergraduate programs. As noted previously (footnote 5), Ontario's average is pulled up by a few high-cost, formerly-deregulated programs.



Source: Tuition data source: Statistics Canada, Centre for Education Statistics. Tuition and Living Accommodation Costs for Full-time Students at Canadian Degree-granting Institutions Survey (TLAC)⁸ University participation data source: MTCU Fall full-time headcount (funding eligible)/ Ontario population aged 18-24. Population Data source: Ministry of Finance based on Census data.

⁸ Using the most current enrolment data available, average tuition fees have been weighted by the number of students enrolled by institution and field of study. Since the distribution of enrolment across the various programs varies from period to period, caution must be exercised in making long-term historical comparisons. Revised data for 2006/2007 and for 2007/2008 resulting from the modifications to the questionnaire (implementation of the Classification of Instructional Programs (CIP) for both undergraduate and graduate programs) and the expansion of the survey universe.



Source: Tuition data source: Colleges Ontario, Tuition fee revenue per FTE; Tuition fee figures were obtained from MTCU and are based on tuition fee reports submitted by colleges. College participation data source: MTCU Fall full-time headcount (funding eligible)/ Ontario population aged 18-24. Population Data source: Ministry of Finance based on Census data.

To date at least, these studies have not turned up a significant relationship between tuition fees and either PSE participation or persistence rates. Johnson (2008) reviews the Canadian literature on the topic. He reports that studies using aggregate provincial-level data find no evidence that participation rates are lower in jurisdictions with higher fees. Studies that make use of student-level data find some evidence that higher tuition reduces overall participation, although the effects are very small: 1-3 percentage points for a \$1,000 increase in fees. He presents some new results using Youth in Transition Survey (YITS) data and finds little evidence that tuition levels play an important role in decisions to attend university out of high school and no evidence that they affect persistence decisions.

One problem may be that there is relatively little variation in tuition fees among provinces or within a province over time, making it difficult (statistically) to capture the effects. Tuition fees for dentistry, medicine and law increased significantly in Ontario between 1995/6 and 2001/2 after deregulation, and thus provide an interesting case study. Frenette (2005) finds that these abrupt changes in fees appear to have affected the composition of the student body in these programs, but in an interesting way. Enrolment rose among students whose parents held a graduate or professional degree, but also among those whose parents held no PSE credentials. If it is assumed

that there is a correlation between parental education and income, one interpretation is that the middle group could not afford fees yet did not qualify for assistance.

How do we explain this apparent lack of a consistent relationship between tuition fees and participation rates? One possibility is that the economic and non-economic benefits of PSE to individuals are sufficiently high that variations in tuition fees of the size witnessed in Canada in recent decades have not been large enough to cause individuals to rethink enrolment decisions. That is, tuition fee increases may have increased the costs of PSE, and increased costs may have reduced the net return from the investment, but not by enough to alter behaviour. This is the topic of the next section.

A second possibility is that some barriers to PSE are non-financial in nature, meaning that one would not expect to see a close connection between a financial variable such as tuition fees and decisions to enroll in college or university. We look at this possibility in section 5.

4. How Significant are Private Benefits of PSE?

The evidence is clear: education provides graduates with higher average annual earnings and lower unemployment rates, and this relationship varies consistently with levels of education. High school graduates earn more on average than those without a high school diploma; college diploma holders earn more on average than high school graduates; those with a Bachelor's degree earn more on average than college diploma holders; and those with professional and postgraduate degrees have the highest average earnings.

The differences are significant (Boudarbat et al., March 2010). The gap in average weekly earnings in Canada in 2005 (data from the 2006 census) for those with a post graduate degree relative to those with only a high school diploma is over 50% for men and over 60% for women. The gap for Bachelor's degree holders relative to high school diplomas only is 40% for men and 45% for women. For diploma holders relative to high school graduates, the gaps are 20% for men and slightly over 20% for women.

Further, these gaps in average weekly earnings have grown over time. The most marked change has been in the returns to men with a Bachelor's degree where the gap relative to a high school diploma rose from 30% in 1980 to 40% in 2005. Other changes, for both men and women, were also positive but less dramatic.

The differences in average earnings among the various education levels reflect the value labour markets attach to the knowledge and skills obtained in postsecondary

education⁹. The fact that relative earnings are constant or even increasing over time indicates that the demand for PSE graduates continues to outstrip the supply of them despite the very significant gains in overall PSE attainment in the last few decades.

There are costs associated with obtaining this education though so we cannot just look at relative earnings. Students pay tuition fees and other direct costs and are out of the labour force while in school. The appropriate measure of the benefits of PSE therefore is the private rate of return¹⁰. The returns in this calculation are the projected life-time after-tax earnings of individuals with a PSE credential relative to those with only a high school diploma. The costs are those the student incurs to obtain the credential: foregone earnings and direct costs such as tuition, books, and supplies. For PSE to be a wise investment, the private rate of return must be at least as high as rates available from other investment opportunities.

A clear picture emerges from Canadian research on private rates of return to higher education despite the fact that investigators use different data sources and time periods.

Moussaly-Sergieh and Vaillancourt (2009) estimate the private rate of return in 2000 for an undergraduate university degree at 11.5% for men and 14.1% for women. Their direct costs include average tuition fees as reported by Statistics Canada and expenses for books and furniture. By their calculations, rates of return for both men and women were higher in 1990 and 1995 than they were in 2000. They speculate that the decline to 2000 is due to the fact that tuition fees increased faster than wages and salaries over the period and that there were increases in personal income tax rates.

A more recent estimate (Boothby and Drewes, 2010), taking only the cost of foregone earnings into account, puts the rates of return to a Bachelor's degree in 2005 at 17% for women and 13% for men and at 11% for both men and women for a community college diploma. The estimates for a Bachelor's degree fall to 14% for women and 11.4% for men if an arbitrary tuition fee of \$5,000 is included as an additional cost. They do not report equivalent figures for earlier census years.

Neither study includes the effects of recent government policies aimed at making PSE more affordable, which would have the effect of making rates of return even higher. For example, the tuition costs that students actually incur are generally less than the fees reported annually by Statistics Canada. Since 1999-2000 the federal and provincial governments have provided education tax credits for tuition and ancillary fees and for living costs while in school. These credits can be used by the student in the current

⁹ An alternative explanation of the value of postsecondary credential is that it is a signal of traits and characteristics the graduate possesses that are valued by employers but that are not directly observable. See Weiss (1995).

¹⁰ The private return refers to the benefits the graduate himself or herself derives from postsecondary education. These benefits are financial in the form of higher lifetime earnings, but also non-financial. This concept is distinct from the social return to postsecondary education which refers to the benefits to society more generally from an educated population.

year, carried forward to be used against future income, or transferred to another individual such as a parent or spouse.

Tax credits had a significant effect on the costs students actually incurred while in school (Usher and Duncan, 2008). Average tuition fees in Ontario rose by 63.3% between 1997-98 and 2007-08 (Berger et al., 2009, p.64). Adjusted for inflation, this figure is 30.2% (Usher and Duncan, 2008). Taking tax credits for tuition and ancillary fees into account, the increase is only 22%. Using 1999-00 as a base year, the increase in real net fees to 2007-08 in Ontario was just 2%. In effect, nominal tuition fee increases since 2000 have been almost completely offset by the combined effects of inflation and education tax credits.

Collins and Davies (2005) take tax credits for tuition and living costs into account, but use a different data source than the previously-cited authors. They estimate the private rate of return for the median bachelor's degree recipient to be 9.1% for men and 12.7% for women in 1998 and at 9.3% for men and 12.7% for women in 2003. Higher tuition fees in the latter year were offset by increased subsidies to higher education (e.g. tax credits) and lower marginal income tax rates.

None of the estimates takes scholarships and grants into account, mainly for lack of appropriate data. For individuals receiving such support, the effect would be to lower PSE costs further and make the private returns to PSE even higher.

These uniform findings of relatively high private rates of return to PSE may help explain why researchers consistently find no correlation between tuition fees and enrolment. If education is funded out of personal resources, the private return is greater than the returns available from other investments¹¹. If personal resources are unavailable, it pays to borrow as long as interest costs are no higher than projected private returns.

If this evidence is to be believed though, why aren't PSE participation rates even higher? That is, why do some individuals not enroll in college or university despite its apparent economic benefit? Why in particular do participation rates vary among demographic and socioeconomic groups? And why do these differences persist despite recent concerted efforts by governments to increase participation?

One response to these questions is that the economic benefit of PSE is not always widely understood. This situation may be particularly true for students in groups traditionally under-represented in PSE. There is evidence, for example, that students from low-income families tend to overestimate the cost of PSE and underestimate the benefits (Usher, 2006). If these beliefs are sincerely held, it is understandable that these individuals choose not to enroll. Changing this perception would likely require a reduction in tuition fees of a magnitude that is not realistic in the current fiscal context. A more appropriate policy response in this case is greater public awareness of the benefits of PSE.

¹¹ For example, the average return on 5-year guaranteed investment certificates for the period January 1, 2001 to December 31, 2010 was 3.01% (http://www.bankofcanada.ca/cgi-bin/famecgi_fdps).

A second possibility is that financial barriers remain despite best efforts by governments to offset them and that these barriers are particularly onerous for students from low-income families. Recent research has greatly enhanced our understanding of the connections between income and PSE participation and how to design assistance programs to deal with these financial barriers. We look at Ontario's policies from this perspective in the next section.

Another explanation, already noted above, is that some barriers are non-financial in nature, meaning that even generous and well-designed assistance policies are not sufficient. We look at this possibility as well in the following section.

5. Income, Participation Rates, and Student Financial Assistance Programs

We address three questions in this section. Is income a factor in PSE participation decisions? If so, can student financial assistance programs offset this effect? What student financial support is available in Ontario?

Is Income a Factor in PSE Participation Decisions?

The short answer to this question is “yes, but much less so than is widely believed once other factors correlated with family income are considered”.

PSE participation is positively correlated with family income for Canada as a whole. Finnie et al (2008) drawing on YITS data report that 31% of young Canadians from the bottom income quintile had attended university by age 19 compared to 50% from the top quintile. Another investigation using the same data source (Berger et al., 2009) finds that 46% of the youth in the highest family income quartile were university students, 31% were college students and 22% were not in PSE. The corresponding figures for youth from the lowest family income quartile are 25%, 36% and 39%.

Similar results hold for Ontario, and are consistent among data sources. Finnie et al (2010a, 2010b) use YITS data to show that access to university is strongly associated with family income. Participation by students from families with family income over \$100,000 is 1.6 times that for students with family income between \$5,000 and \$25,000 (61.9% versus 38.7%). The same pattern does not hold for colleges though. Participation increases with income until the range \$25,000 to \$50,000 (from 33.7% to 40.9%), declines to just over 36% for the range \$50,000 to \$100,000 and declines further to 31% for families with incomes greater than \$100,000.

HEQCO (2010, chapter 2) uses customized data from the Survey of Labour and Income Dynamics (SLID) to examine PSE participation rates by family income. University participation by students in the top income quartile is higher in all years between 1999 and 2007, and increased notably after 2002. Rates for the highest

quartile in 2007 were over 45% compared to around 20% for the other three quartiles. There is little difference among income quartiles in students attending college full time, however, and no apparent changes in any of the series over time. This finding is consistent with that found more generally; namely that income is less of a determinant in decisions to attend college.

Dooley, Payne and Robb (2009) use a mix of high school, university application centre, and census data to explore links between family income and participation in Ontario universities over the period 1995 to 2005. The application rate for the highest quartile in 1995 was nearly 50%, compared to 30% for the bottom quartile, and the gap appears to have widened slightly over the ensuing decade. The application rate for the top quartile in 2005 was 55%, compared to just over 30% for the bottom one.

Dooley et al also calculate registration rates, defined as the percentages of applicants who end up enrolling at an Ontario university for the year in question. Interestingly, there are virtually no discernable differences among income groups in this case. The implication of this result is that the effects of family income on university participation come at the application stage. Once the decision to apply is made, income apparently ceases to be a constraining factor.

The correlation of participation rates with income may be more complex, however. We know that income is highly correlated with other factors such as parental education, Aboriginal status, and distance from a college or university that also influence participation decisions. The question then is whether income effects become less important once these other variables are considered. This is an important issue as financial support policies can offset financial barriers while social and cultural impediments require other approaches.

The Canadian literature consistently finds that the effect of income on PSE participation is significantly reduced when other factors correlated with income are considered together. That is, what might on first glance be thought of as an income effect is in reality a complex mix of financial and non-financial barriers.

Dooley et al (2009) employ multivariate statistical analysis to address this issue for Ontario. Income remains a significant determinant of university application rates when other explanatory variables are included, but its effect is diminished. The gap in the application rate between the highest and lowest income quartiles is 21.4 percentage points when other explanatory variables are not included; including these other variables narrows the gap to 13.6 percentage points.

Finnie et al (2010a, 2010b) arrive at a similar conclusion. Using statistical techniques to control for other variables correlated with income, they find that the effect of income on university participation in Ontario is much reduced though still significant. Interestingly, income effects are notably smaller in Ontario than in other provinces. Family income does not appear as a significant determinant in college participation in any of the statistical models.

Thus, income must be considered as a determinant of PSE participation in Ontario, albeit with a reduced role once other factors are introduced. This result holds despite the fact that there is an extensive student financial assistance framework in place.

There are two possible explanations for this apparent anomaly. The first is that Ontario's financial support measures are not providing the support that is generally supposed. The other is that there are some low-income students who, for a number of complex social and cultural reasons, are not taking advantage of the financial support that is available.

This is a crucial distinction as the policy implications are very different. Financial assistance policies can be adjusted where they can be shown to be lacking, but dealing with non-financial barriers requires a different policy tool kit. It is obviously important therefore to understand what an effective financial support framework looks like and how closely Ontario's meets the criteria.

Can Student Financial Assistance Programs Offset the Income Effect?

The short answer to this question is “yes for most students but probably not for some groups in society unless financial support is coupled with other types of intervention programs”.

Student assistance programs must deal with two main financial barriers to PSE: the need for upfront funds and the riskiness of personal investment in higher education.

The Need for Upfront funds

The first financial barrier is need for upfront funds, known in the literature as a liquidity constraint. Education costs are immediate while benefits are in the future. Students must pay tuition and other fees, books and supplies, and living costs if away from home. Some can draw on personal and family savings to cover at least a portion of these upfront costs and some will have merit- or activity-based scholarships. But some, particularly those from disadvantaged groups, may have neither. These students will be shut out of PSE unless they can somehow finance the upfront costs.

Private loans are generally not available to cover PSE costs because of the lack of collateral. Governments long ago recognized this “market failure” and either provided loans themselves or provided guarantees to private loan providers. Loans deal with the liquidity constraint by giving students the funds required to pay upfront tuition and other fees plus living expenses while at school.

Terms of loan programs vary over time and among jurisdictions, but several features are common. Loans are generally directed at needy students as determined by a means test, and there is usually a maximum amount available. The student and his or her family are typically expected to contribute towards PSE costs. Loans are interest free while the student is in school and sometimes for a short period thereafter. The lending agency provides the funds to the students who use them to cover tuition and

other fees plus living expenses. Repayment begins upon graduation although a short grace period is common.

There are interesting variations on the conventional model. One approach is for the lending agency to make tuition fee payments for eligible students directly to the PSE institution. The amounts transferred in this manner are recorded as a loan and subject to repayment upon graduation in the usual manner. This practice deals directly with the tuition fee portion of the liquidity constraint as there are no upfront tuition fees for the student; living allowances must be dealt with separately.

Another variation is to remove the need for a means test and make loans available to all students who wish to apply, but to attach an interest rate from the beginning. Interest-free loans provide a significant subsidy to the borrower which is why they generally are means tested. This subsidy must be removed if loans are to be available to all students. In these schemes, subsidies based on ability to pay are shifted to the repayment stage; more on this below.

The Australian system is an example of this approach. Australian students have three choices when entering PSE. They can pay tuition fees to the institution upfront and receive a 20% discount. They can pay no fees at all until graduation, with the government making the payment directly to the institution. They forego the 20% discount in this case, which is equivalent to charging interest on the loan. Or, they can opt for a combination of payment and loan with a modified discount. There is, obviously, no means testing. Needs-based support is provided at the repayment stage.

Another example is the Stafford Loan program in the US, which provides loans to nearly all students who are admitted to a participating accredited postsecondary education institution. Students with demonstrated financial need are eligible for subsidized (but not zero) interest rates (Stafford Loan, 2011).

Higher Education is a Risky Investment

The other financial barrier stems from the fact that PSE is a risky investment. The private rates of return to PSE discussed in the previous section are averages; actual returns to graduates will vary in two notable ways. The first is by field of study. The highest returns typically are in health sciences and the lowest in humanities and fine arts, with others in between. This is a long-standing pattern and much of it can be reasonably anticipated by the student¹². The other variation in labour market outcomes is among individuals with identical PSE credentials. These differences reflect such things as innate ability, work ethic, family and school connections, labour market conditions at graduation time, and plain luck.

Conventional student loan programs do not address this risk factor. Debt is incurred and must be repaid regardless of how the individual fares after graduation. Given this obligation, risk-averse individuals may (rationally) decide not to invest in PSE. If risk

¹² Not always though as witness the fate of the stream of students into computer science and software engineering just as the tech bubble was bursting.

aversion particularly characterizes persons in under-represented groups, as is commonly believed, PSE participation rates will vary systematically among demographic and socioeconomic groups.

Some student loan programs have recognized this feature and have introduced provisions to reduce risk by altering the repayment burden. Examples of such innovations include extended interest-free periods, reduced interest rate charges, and eventual debt forgiveness for students who find themselves unable to meet repayment terms. These special terms are generally not automatic. Students must be aware of them and make direct application for relief, and the negotiations can be quite complex.

An alternative to these ad hoc practices is to make debt repayment obligations explicitly dependent upon income after graduation and to make this feature automatic (Guillemette, 2006). There are many variations of such schemes but a common feature is that debt repayment obligations are tied to income after graduation as reported to tax authorities. There is usually a minimum income level below which there are no repayment obligations. Above this minimum level, repayments increase as income increases, in absolute amounts but also frequently as a percentage of family income. There is usually a maximum income figure beyond which full debt plus carrying charges must be repaid.

Loan repayment schemes with these features are in place in Australia and the UK. The UK has recently introduced a new tuition policy and SFA scheme. Full-time and part-time students not choosing to pay upfront fees are able to defer payment of the entire cost of tuition until securing financial stability. Students will pay the cost of their tuition through contributing 9% of their salary (plus inflation) only when they have a salary over £21,000, until the full cost is repaid or 30 years has lapsed. This arrangement will see some individuals pay the full cost of tuition, while a sliding scale will allow others to pay less and some nothing, depending on salary or time lapsed. Similarly, in Australia, students with loans repay their debt once their salary reached a minimum threshold (i.e., \$38,148 AUD in 2007) through taxation. There are ranges for the amount due, based on salary, ranging from 4% at the lowest income, up to 8% at the highest income.

Loans vs Grants

Yet another alternative approach to providing financial support to students is to replace loans, which are repayable, with grants, which are not repayable. Grants have the dual benefit of overcoming liquidity constraints (provided they are available at the start of term) and reducing risk by lowering the amount of debt the student incurs. They are a pure subsidy of the student by the general taxpayer so are generally awarded on the basis of a means test. This does allow the government to focus on targeted pockets of the populations, yet the main drawback is that they are expensive for governments. Loan programs stretch limited government student financial assistance budgets over many more students. They also subsidize persons who, while being low income at the application stage, ended up faring very well in the labour market upon graduation.

Clarity and Transparency

Student financial assistance policies of any ilk can be very complex and require a fair degree of financial acumen on the part of students and their families. Students must be aware that support programs exist, and often have to work their way through often complex provisions regarding eligibility, level of support, and repayment obligations. The need for financial understanding on the part of students increases as governments tinker with specific provisions of student loan programs in an attempt to deal with the riskiness of the investment.

These information challenges may be particularly steep for students from some demographic and socioeconomic groups, with the result that they may not apply for assistance that is available to them. Special education efforts focused on improving financial literacy are obviously important in these cases, in addition to whatever actual financial support is available.

What Student Financial Support is Available in Ontario?¹³

Ontario has an array of programs designed to support students of limited means who wish to attend PSE.

The Need for Upfront Funds

Students seeking financial support for PSE apply on-line to the Ontario Student Assistance Program (OSAP) and Canada Student Loans simultaneously. Applicants provide information on age, gender, institution and program of study, income (individual or family income if classed as a dependent student), summer earnings, assets, and so forth. OSAP calculates financial need, given by allowable educational expenses minus expected financial contributions. The former includes tuition and other fees plus estimated living costs. The latter includes expected contributions from parents and from summer earnings. Students are eligible for assistance equal to financial need, up to a maximum amount.

Once an applicant's total amount of financial assistance is determined, the composition of the support from provincial and federal sources is calculated. Some students will receive loans only while others will receive a mixture of loans and grants. The funds are transferred to the student and he or she pays tuition fees to the PSE institution. The need for upfront funds is thereby addressed in whole or in part, removing a potential barrier for deserving applicants.

Loans are interest free while the student is in school and re-payment begins 6 months after graduation. Students must re-apply to OSAP each year. If they do not seek financial assistance but are still in school, they must notify OSAP to retain the interest free status. Six months after leaving school or graduation, students receive notification of repayment terms.

¹³ See the Appendix for more detail.

The government recently made the loan program more generous, announcing in March 2010 a larger allowance for books, supplies and equipment; an increased amount of student income exempt from impacting OSAP funding; an extension of interest free loans for an additional 6 months; increased loan maximums; and more support for married students, students with dependents and part-time students (Ontario Newsroom, 2010b).

First and second year applicants are automatically considered for grants when applying for a loan. Students from what are deemed to be low income and low-middle income families are eligible for Ontario Access Grants. The grants cover up to half of the tuition to a maximum of \$3000. Canada Access Grants are also available to low income students in their first year of study. Between the two programs, a low-income first year student could receive up to \$6000 in non-repayable grants.

Ontario students are also eligible for assistance from their institution through the Student Access Guarantee (SAG). A predecessor to this program began in 1997 when institutions were required to set aside 10% of annual new tuition fee revenue for institutional student financial assistance. This percentage was raised to 30% the following year and remained there until replaced by the SAG in 2005. Under this policy, institutions have an obligation to provide a minimum amount of financial support each year based on the estimated need of their OSAP students versus the amount of OSAP given. Colleges and universities can cover this education-related unmet need through bursaries, scholarships, work study, and summer employment programs.

In addition to these government policies, many Ontario students receive support directly from universities and colleges (Education Policy Institute, 2008). Some of this support is related to merit or specific activities such as athletics, but most institutions also offer a range of needs-based bursaries, financed out of gifts and donations but also from operating grants. It is difficult to get an estimate of how extensive these grants are or how they are distributed among family income levels.

Loan Repayment

A key provision in Ontario aimed at reducing the risk of investing in PSE is a ceiling on the amount of debt a student is obligated to repay. The Ontario Student Opportunity Grant (OSOG) has its origins in the 1998-99 academic year (see Appendix 1). The ceiling for a two-term academic year was \$7,000 each year over four years until March 2010 when it was raised to \$7,300 (Ontario Newsroom, 2010a). Students are notified of their repayment obligations six months after leaving PSE. The difference between the amount actually borrowed and the debt ceiling is identified as a grant and the obligation is forgiven.

In its original design, the ceiling cap initially applied to all PSE graduates irrespective of their income status. That is, there was no scaling of debt forgiveness to ability to pay after graduation. For those who did not fare well after graduation, a debt of nearly \$30,000 could be a significant millstone. For those who fared very well, having debt above this amount totally forgiven was a windfall.

In recognition of this feature, the Ontario government introduced provisions for assisting those who were experiencing difficulties in repaying debt. The first step was to apply for interest relief for a period of six months, with the possibility of extension. If considered to have insufficient income, repayment obligations were suspended and interest charges ceased to accumulate. If the student was still unable to afford loan payments after five years he or she could apply for some debt reduction.

These provisions were replaced in March 2010 when the Ontario government made further changes to loan repayment provisions. First, students would not begin to accrue interest until 6 months after leaving school. Second, the government announced that it would join the federal Repayment Assistance Program (RAP) to assist students struggling with repaying Canada Student Loans. Under RAP, and now in place in Ontario, no graduate is asked to pay more than 20% of his or her family income in any year towards loan repayment. Any debt remaining after 15 years is forgiven; the period is 10 years for those with a permanent disability.

Graduates having difficulty meeting even these repayment obligations may apply for further relief. During the first five years out of school, if a payment of 20% of income is deemed not 'affordable' (based on income and size of family) the government may reduce payment amounts to ensure there is no undue financial hardship. In some cases, no payment is required. Whatever payments are made are directed towards the loan principle; the government covers the interest.

If there is continued difficulty in repayment following five years in RAP, or the student has been repaying debt for more than 10 years, the student may apply to 'Stage Two' RAP. In this stage the government will pay the interest on the loan, and may also make payments towards the principle. The goal of this is to ensure that all debt is paid within 15 years after leaving school (or 10 years for those with a permanent disability).

This evolution in loan repayment provisions is instructive. Ontario has gone a significant way towards implementing an income contingent repayment scheme. No graduate is asked to pay more than 20% of his or her family income in any year towards loan repayment. This provision applies equally to all graduates, irrespective of their financial circumstances after finishing school. Students who do not fare well economically after graduation and find even this repayment obligation onerous may apply for further relief. If their financial situations continue to be limited, they may apply for further relief yet and eventually for complete debt forgiveness.

The main difference between the Ontario policy and a pure income contingent repayment scheme is mainly in the administration. Ontario graduates must apply for relief and must negotiate the terms on a regular basis, whereas a pure scheme would operate automatically. Repayment obligations would be tied to family income as declared on income tax returns. The share of family income going to loan repayment would be linked explicitly to how the graduate is faring economically, with the percentage set at zero for very low income families. Payment amounts would automatically adjust, upwards or downwards, in line with a graduate's changing economic circumstances.

Clarity and Transparency

Ontario has paid considerable attention to clarity and transparency issues. The OSAP website (www.ontario.ca/osap) is a rich source of information on PSE in Ontario, and the contents are regularly updated. A student considering postsecondary education in Ontario can quite easily find the information he or she needs to calculate the amount and type of financial support available.

Non-Financial Factors

Interestingly, many Ontarians who might benefit from the province's student financial assistance programs do not apply. Work by HEQCO using Survey of Labour Income Dynamics and OSAP data revealed that in 2007-08 only 50% of full-time university students from the lowest income quartile applied to OSAP. The figure rises to nearly 70% for those in the second quartile. The application rate is 40% for those in the third quartile and just under 10% for the highest quartile.

The situation is even more pronounced for colleges. In 2007-08 only 30% of full-time college students in the lowest income quartile applied to OSAP. The figure is over 40% for the second quartile, just under 20% for the third quartile and under 10% for the highest income group.

These application rates are surprising as virtually all students from the two lower income quartiles who applied to OSAP received support, including in the vast majority of cases Access grants. Even more surprising is the fact that the data are for students enrolled full-time in college or university. If they are unaware of the financial support available, or are reluctant to draw on it, one can only wonder about how significant this phenomenon is for individuals who do not even apply to PSE.

One explanation might be the degree of complexity involved in learning about the amount and types of support available, and then applying this knowledge to individual circumstances. If so, the recent changes to OSAP making it more transparent and user friendly may have a positive effect. The challenges may lie deeper though for individuals who do not progress to the point of even considering PSE as an option. In these cases, the appropriate remedies lie much earlier in the schooling experience.

6. Tuition Policy Options

The government has two types of decisions to make when considering tuition fee options. First, should it continue to cap overall fee increases? The current ceiling is 5% per year as noted earlier. If this practice is to be retained, what is the appropriate number?

Second, should it continue to allow differential changes among programs within an overall cap? There are three fee categories currently as noted earlier: formerly regulated programs, formerly deregulated programs, and international students

regardless of program¹⁴. If this practice is to be retained, are the program groupings appropriate or should they be revised?

It's Not Just About Tuition Fees

Tuition policy is not just about setting tuition fees. As the previous section has shown, tuition fees cannot be considered apart from student financial assistance policies when accessibility is a key government and societal priority.

The policy perspective is more complex yet. Any decision to alter fees must be done with explicit consideration of the operating revenue needs of colleges and universities. Each year, postsecondary institutions require incremental revenue to meet three cost drivers: growth (i.e. taking in additional students), quality enhancements (e.g. program development, more modern equipment), and inflation. There are three major sources of incremental revenue: tuition fees, enterprise income and government operating grants. Institutions understandably seek full funding for the three cost pressures, meaning that they look to government to make up the difference between required revenue and the sums garnered from tuition fees and enterprise revenue.

Operating grants come from the public purse, so this allocation necessarily reflects the priority the government places on postsecondary education. The case for funding some portion of PSE out of government revenues rests on the presumption of social returns to education (Riddell, 2003). The assertion, now supported by considerable empirical evidence, is that higher education provides benefits to society beyond those accruing to the graduate. Examples include higher economic growth rates from innovation and knowledge creation, the positive effects on health and longevity, reduced criminal activity, and increased civic engagement. The more a society values these outcomes, the stronger is the case for allocating scarce public resources to the sector.

There have been two notable trends in funding for the PSE sector in Ontario in recent decades. First, the relative contributions of operating revenue sources have changed markedly over time. For universities, the share provided by grants has fallen steadily, from 76% of operating revenue in 1990 to 53% in 2000, and to 50% in 2008. The share of tuition fees rose over the same period, from 19% in 1990 to 36% in 2000, and to 37% in 2008. Other fees contributed 6% to university operating revenues in 2008 (compared to 1% in 1990 and 5% in 2000), and all other sources contributed 7% (Snowdon and Associates, 2009, Table 2a).

For colleges, the share provided by grants fell from 85% in 1992 to 71% in 2000 before rising slightly to 73% in 2008. Tuition fees make up the remainder of total operating revenue, rising from 15% in 1992 to 29% in 2000 and then falling slightly to 27% in 2008 (Snowdon and Associates, 2009, Table 3).

Second, for many years the sum of the incremental revenue from these sources did not fully cover incremental costs. For universities, operating revenue per FTE student,

¹⁴ International student tuition fees are not addressed in this paper.

deflated by the CPI, was virtually unchanged between 1990 and 2003 but rose thereafter. It regained its 1990 value by 2005 and was 6.2% higher in 2008 (Snowdon and Associates, 2009, Table 6a). Real revenue per FTE student for colleges fell continuously from 1992 to 1997, remained constant to 2003, but rose thereafter. Its value in 2008 was 24% above what it was in 2003 (Snowdon and Associates, 2009, Table 7).

The CPI may not be the most appropriate measure of inflation in the PSE sector, however. The bulk of the inflationary pressures experienced by postsecondary institutions each year are the added annual cost to cover salaries and benefits of employees. The average annual salary increment in Ontario in recent years has “outpaced inflation by a considerable margin” (Snowdon, 2010). Additionally, many of the purchases made by postsecondary institutions such as lab equipment, library books, and scientific journals are set internationally. The result is that the inflation rate given by the higher education inflation index (HEPI) typically exceeds that given by the consumer price index¹⁵.

Financial sustainability in an organization is achieved when the annual incremental revenue equals the annual rise in expenses. The fact this has not been consistently achieved has had important consequences for Ontario’s PSE sector. Since enrolment growth and inflation (especially negotiated salary changes) are the imperatives, quality enhancements are the lowest priority new expenditure.

In sum, the process for deciding on a tuition fee policy is complex as it requires simultaneous and interdependent decisions on three key PSE policy variables: the revenue needs of the colleges and universities in each year of the planning period, a tuition fee framework that balances contributions to these revenue needs with effects on accessibility, and the public funds available each year for operating grants plus contributions to student financial assistance. Only two choices are necessary as the third will follow automatically.

The focus of this paper is tuition fees, so it is useful to think of the decision process as beginning by focusing on a tuition fee framework for the planning period. We assume that government accessibility funding at the current rate will be available for any enrolment growth, allowing us to focus on per student incremental revenues and costs. We also assume that the government will cover any incremental costs in student financial assistance policies stemming from changes in tuition fees.

What are the options, and what does each option imply for the other policy variables?

¹⁵ There is no official series for a Higher Education Price Index for Canada or Ontario. AUCC (2008, Appendix E) provides an estimate for Canada and Snowdon et al (2009) use this methodology to calculate a HEPI for Ontario. Both sources note the limitations of this methodology and the need for a domestic index.

Capping Tuition Fee Increases

Rolling Back Fees

Rolling back tuition fees, while undoubtedly popular with some student groups, is problematic. The obvious concern is the large revenue losses for colleges and universities. There would be considerable pressure on the government to fully offset lost revenues with increased operating grants. The sums involved would be significant, even after some slight savings in financial assistance contributions, and are not likely feasible in today's fiscal climate. The alternative is to have colleges and universities absorb the revenue loss, but in this case accessibility and educational quality would surely suffer.

Freezing Fees

The same points apply to the more common proposal to freeze fees at their current level. The only difference is that the revenue loss is less than under a fee roll back and thus the fiscal burden on either the government or the institutions is less. A rough indication of the magnitude of the fiscal implications of freezing tuition fees can be given as follows. Total tuition fee revenue in 2010-11 was about \$3 billion. Under the current policy, ignoring enrolment changes and assuming institutions bump up fees each year by the maximum amount (5%), total tuition fee revenue in 2011-12 would be \$3.15 billion, and five years out (2015-16) would be \$3.83 billion. The government would have to increase grants by \$150 million in 2011-12 if it wished to leave institutions with the revenue they would have under the current policy. By 2015-16 the annual grant would have to be over \$800 million larger.

The required grant contribution would be larger yet if the government were committed to fully covering inflation and providing for some quality enhancement. They would be lower the more willing government was to back off on these factors. The alternative to increasing grants is to have institutions cope with the lost revenue. This route would cut government costs but would force major adjustments on colleges and universities.

The Status Quo

Extending the current tuition fee policy is an obvious choice. If history is any guide, this choice would almost certainly mean that average fees would increase by the maximum amount of 5% each year. Given compounding, as noted earlier, the effect would be to increase average tuition fees by a maximum of 28% over 5 years and by 63% over 10 years.

Based on revenue shares as they were in 2008, a 5% annual increase in fees would generate about a 2% increase in annual operating revenue per student for universities and about a 1.5% increase for colleges. Operating costs will likely increase at a faster rate than this, so without revenue from other sources institutions will face budgets that are declining in real terms. There will be no funds for quality enhancement.

The government would have to decide whether to increase annual operating grants to make up some or all of the inflationary increase in addition to contributing towards any

desired quality improvement. To illustrate, one possibility is to match the annual tuition fee increase of 5%. At Bank of Canada target inflation rates of 1%-3%, this matching option would provide a real (i.e. after inflation) annual increase per student operating revenue to colleges and universities. The inflation-adjusted increase would be less if a higher education price index were used as a deflator. The government might decide to leave the decision of how much to use to cover cost increases and how much to allocate towards quality enhancement to the sector. Alternatively, it could attach quality enhancement conditions to the grant and leave it to institutions to adjust cost increases accordingly.

Tying to the Consumer Price Index

The 5% figure encounters some resistance because it seems to be purely arbitrary. This leads some observers to suggest tying the cap to the consumer price index (CPI). Assuming a constant 2% inflation rate, tuition fees would increase by 10.4% over five years and by 21.9% over ten years. With a 3% inflation rate, these figures are 15.9% and 34.4%. By definition, the real tuition fee increases as measured by the CPI would be zero. This choice has some intuitive appeal as indexing to the CPI is common for social programs and for some labour contracts. It also automatically adjusts for unforeseen changes in the inflation rate.

The main reservation is the effects on institutional operating revenues. Using 2008 revenue shares, a 2% annual increase in tuition fees will generate a 0.7% annual increase in operating revenue for universities and 0.5% for colleges. These figures are clearly below actual cost increases for the institutions. There would be pressure on the government to increase annual operating grants, and by a larger amount than in the status quo scenario. With a 2% annual increase in tuition fees the revenue shortfall for the institutions compared to the current policy would be about \$90 million in 2011-12 and about \$500 million in 2015-16. These are the approximate amounts the government would have to contribute to fully offset the revenue loss to the institutions from the status quo fee policy.

Other Fee Caps

Similar considerations apply to any other tuition fee cap proposal. Other than tying to the CPI, any other option is purely arbitrary. The larger the cap, the greater is the possible adverse effect on accessibility; the lower the cap the greater is the pressure on the government to compensate with increased operating revenue.

A Shares Approach

Yet another approach is to establish a maximum share that tuition fees can be of total college and university operating revenue. If the current share were below this figure, tuition fee increases would be greater than grant increases for a time, although there could be a ceiling on the rate of increase each year. If the current share were above the target, fees would rise more slowly each year than grants until the target was attained. The actual changes to tuition fees and grants each year would depend on perceived revenue needs.

The appeal of this suggestion is that it explicitly acknowledges that PSE has both a private and a public value. The difficulty is that there is no obvious “correct” allocation between these two revenue sources. One suggestion is 50%-50%, presumably on the ground that there is some intuitive appeal to equal shares. We noted above that tuition fees constituted 37% of operating revenue for universities and 27% for colleges, so the implication of this choice is that they would rise faster than government grants for a period. Actual increases each year would follow once total revenue targets were established.

Another suggestion is to return to the shares as they were at some arbitrary date in the past. Tuition has been steadily increasing as a share of total revenue for a long time, as noted above, so adopting this approach would mean that fees would rise more slowly than grants for a time, and the time would be longer the further back one went for the target figure. The problem is that there is no obvious “best” past date to choose. Governments over many years, for a variety of reasons, chose to increase the relative share of PSE operating costs borne by students. These decisions were made in conjunction with a host of other economic and social policy adjustments; for example, tuition credits. Any decision to reverse the trend to relatively higher tuition fees must take this broader historical perspective into account.

Constrained Deregulation

Thus far we have only discussed average fee increases. The other component of the current policy, as noted above, is a distinction between two types of programs – formerly regulated and formerly de-regulated. This distinction was made in 1998 and was intended to reflect the presumed relative earning potential of different programs. Higher rates for some programs were justified on the grounds these graduates were presumed to have higher average earnings and employment rates over their working lives. The distinction was suspended briefly between 2004 and 2005 when tuition fees were frozen, but retained in the new policy introduced in 2006.

It is worth asking whether this distinction is still valid today. If so, do we have the right programs in each category? To answer “yes” to both is to argue that the correct distinctions were made in 1998 and that nothing in the economy has changed since to alter this judgment. The first proposition may be defensible, but the second runs contrary to nearly every analysis of the role of PSE in the new global, information economy.

More generally, it might be argued, why prejudge? Why not leave the matter to the labour market? Skill sets in excess demand will experience relatively rising wages and salaries and relatively falling unemployment rates. The converse holds for skill sets in excess supply. Relatively rising wage rates and relatively falling unemployment rates will cause at least some students to opt for programs that offer these skill sets. Presumably, if the trends are real and sustained, they will be willing to pay higher tuition fees. This is only the case, however, if the programs can demonstrably and reliably deliver this skill acquisition.

The prospect of higher tuition fees is an incentive for at least some colleges and universities to respond to increased program demand when it occurs. The response can take the form of increased admissions to programs that already deliver these skill sets. Or, it can take the form of incorporating these skills in other existing or new programs. In any case, the competition with other programs and institutions is an incentive to provide quality learning outcomes.

The tuition fee cap could be retained, in which case this approach is only a slight modification of the current one. The main advantage is that it would provide more flexibility for institutions when expanding program offerings or introducing new ones. An alternative approach to controlling tuition fee increases is to dispense with an overall fee cap and instead tax tuition fee increments with the revenue to be put into needs-based assistance. There is a precedent for this approach in Ontario with 30% tuition claw back introduced in the 1990s. The assistance could be provided by the institutions themselves with government monitoring as was the case in the earlier scheme. Alternatively, the government could deduct the amounts from operating grants and provide the assistance through OSAP.

This approach is just another step along the deregulation continuum, giving more discretion to institutions when setting fees but still providing a brake on annual increases. If it were to be adopted, it would be worth considering a sliding-scale taxation rate: the claw back would be lower for small increments and would increase with the size of the adjustment.

Full Deregulation

The extreme approach to a new fee policy is to fully deregulate tuition fees by removing any restrictions on tuition fee increases. This decision would be popular with many college and university administrators, but would generate considerable opposition from student groups and others.

This option is attractive from a revenue standpoint. Unless offset by reduced government grants, it could generate additional revenue for the system which could be used for quality enhancement. If the government did choose to reduce grants (or at least reduce the rate of increase over time) they would realize some savings in a time of fiscal austerity. Assuming tuition fees would rise substantially under this option, as seems likely, these savings would be net of higher government contributions to student assistance programs.

The concern with total deregulation is its presumed effect on accessibility. The sticker price shock effect of sharply rising tuition fee levels could discourage some students, particularly those from disadvantaged groups, from even enrolling in PSE. Greater variation in fees among programs, or among colleges and universities for the same program, could lead to proportionately fewer students from disadvantaged groups in

high-return programs or at prestigious institutions unless fully offset by adjustments to student financial assistance programs¹⁶.

7. Conclusion

This paper provides some perspective for the tuition policy framework policy decision expected for 2012-13. The perspective comes from recent research on postsecondary education and from Ontario's historical experience.

There are some clear lessons for Ontario policy makers. First, Canadian researchers find no consistent correlation between tuition fees and PSE participation and persistence rates. Part of the explanation for this result is that average private rates of return to postsecondary education compare very favourably to those available from purely financial investments. Changes in tuition rates of the magnitude witnessed in Canada in recent decades apparently have not been large enough to alter this result. Another part of the explanation is that non-financial barriers loom large for some individuals.

Second, private rates of return are relatively high in part because governments have chosen to subsidize PSE in various ways. The public debate frequently focuses on average tuition fees as reported by Statistics Canada. Yet this focus is misleading. For many students, particularly those with demonstrated financial need, the actual costs of PSE are substantially lower once grants, subsidized loans, tax credits and debt relief are taken into account.

Third, these government policies notwithstanding, there are still groups that are under-represented in PSE in Ontario. Some financial barriers remain; PSE participation is positively associated with family income even after allowing for correlation of income with cultural factors. Other factors include lack of understanding of the relative benefits and costs of postsecondary education and decisions made early in the schooling process that preclude a successful transition to PSE.

Fourth, there is an emerging consensus in the literature on how to design support policies to offset financial barriers. Ontario has many of these features in place, but there are options for improvement. These changes should be considered no matter what new tuition policy emerges, but it is especially important to do so if the new policy contains ongoing fee increases.

Fifth, the process for deciding on a tuition policy requires simultaneous and interdependent decisions on three key PSE policy variables: the revenue needs of the colleges and universities in each year of the planning period, a tuition fee framework

¹⁶ Recall the paper by Frenette (2005) noted earlier looking at the effects of tuition fee deregulation on enrolment in professional programs in Ontario after fee deregulation. Dooley et al (2009) also find evidence that tuition fees affect program choice by students from low-income families.

that balances contributions to these revenue needs with effects on accessibility, and the public funds available each year for operating grants plus contributions to student financial assistance.

Sixth, and following directly from the previous point, there is no obvious benchmark for setting tuition fees. Any choice involves a balancing of revenue needs, accessibility, and fiscal capacity. This is not just a tuition fee policy decision in other words, but rather a choice consistent with the province's broader economic and social objectives.

Seventh, and finally, the choice must also involve consideration of the pros and cons of relaxing or even removing the current distinctions of allowable fee increases among programs.

Appendix

Tuition and Financial Assistance Policies in Ontario

In 1998 the Ministry of Training Colleges and Universities deregulated tuition fees for many university programs¹⁷ as well as some high demand programs in the Colleges of Applied Art and Technology¹⁸. This policy framework decoupled the institutional tuition fee income from impacting on provincial operating grant transfers, and allowed institutions to set their own fees for these programs which were referred to as 'Additional Cost Recovery Programs' (ACRs). The framework also permitted programs that remained 'regulated' to apply a tuition increase of up to 5 per cent of the 1997-1998 fee rate between the 1998-1999 and 1999-2000 academic years.

Alongside increased tuition fees were increased institutional student financial assistance (SFA) requirements, where institutions were required to 'set aside' 10% of the new tuition revenue for the purposes of internally generated financial aid. This 'set aside' was intended to mitigate the extra costs to students deemed 'in need' and was meant for those students in high tuition fee programs. This percentage was increased to 30% in subsequent years.

During the following six years other small adjustments were made to the policies supporting students. Tax relief was introduced on both federal and provincial loans, available tax credits were doubled, a number of grants were introduced, and some elements of the policies and organization of OSAP were reorganized. With the entrance of a new government in 2003, tuition fees were frozen between 2004 and 2006 pending a provincial system-wide assessment¹⁹.

In 2005, the Ontario Government commissioned a review of the higher education sector (Rae, 2005). Following recommendations of the Rae Review (2005) and *Reaching Higher* (Ministry of Finance, 2005), the 2006 Tuition Fee Framework (Government of Ontario) made changes to the tuition policy and student financial assistance programs.

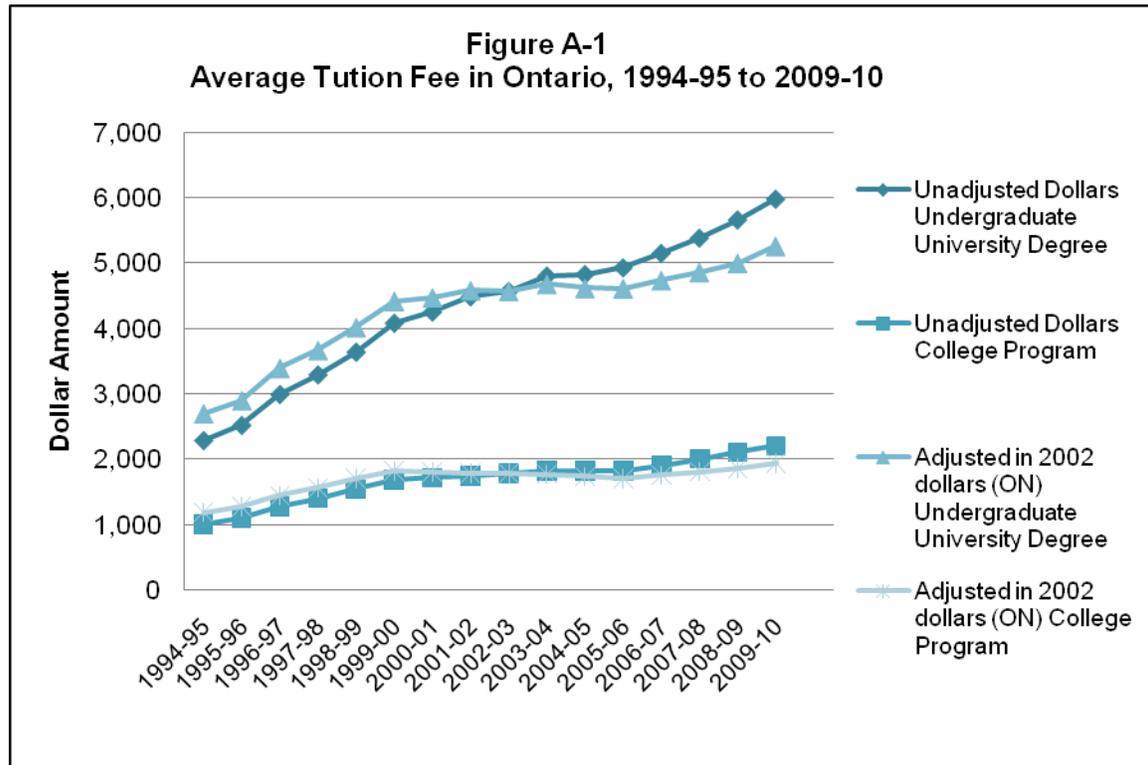
¹⁷ This included some 'first entry' programs that were related to government strategic enrolments (such as computer science, and determined through the Access to Opportunities Program) all graduate programs (including professional programs), and 'second entry' programs (including dentistry, law and medicine) (Boggs, 2009, p 66).

¹⁸ This included programs such as: post-basic programs of instruction, basic postsecondary programs of instruction identified for support under the Access to Opportunities Program (ATOP), and basic postsecondary programs of instruction with high demand for spaces, strong employment prospects, and expectation of high incomes for graduates (MTCU, 2010).

¹⁹ MTCU provided grants to institutions to compensate for foregone increases in both regulated and ACR programs during the freeze.

Tuition Fees

Figure A-1 indicates the tuition fee costs between 1994-95 to 2009-10.



Source: Statistics Canada, Centre for Education Statistics. Tuition and Living Accommodation Costs for Full-time Students at Canadian Degree-granting Institutions Survey (TLAC), and Colleges Ontario²⁰.

Currently, all Ontario public institutions have regulated tuition fees for eligible students (i.e. non-international students) and for programs supported by the MTCU operating grant funding (i.e. non full cost recovery/self-funded programs). Formerly regulated and deregulated programs (ACRs) have different stipulations regarding fee increases. Regulated programs at universities and CAATs, including undergraduate/first entry programs, are allowed to increase first year admission rates by a maximum of 4.5% over the previous year's rate. First year ACRs are able to increase tuition fees to a maximum of 8% (MTCU, 2006).

²⁰ University data: Using the most current enrolment data available, average tuition fees have been weighted by the number of students enrolled by institution and field of study. College data: tuition fee revenue per FTE; Tuition fee figures from College Ontario were obtained from MTCU and are based on tuition fee reports submitted by colleges.

All programs are limited to a 4% increase for existing students. The permitted increases are annual limits and are not ‘bankable’ for future application. Further, no institution is able to increase weighted tuition by more than 5% (calculated on an FTE basis) in any given year (see Table A-1). New programs are permitted to charge what comparable programs at other Ontario public institutions charge (Boggs, 2009: 81-83).

Table A-1 Tuition fee increase matrix

MAXIMUM ALLOWABLE FEE INCREASE		
Program Type	Program Year	
	First Year	Continuing Years
University Arts & Science and Other Programs	4.5%	4%
Professional and Graduate Programs	8%	4%
College Regular Fee Programs	up to the greater of \$100 or 4.5%	up to 4%
College High Demand Programs	up to 8%	up to 4%
TOTAL TUITION INCREASE	5%	

Source: MTCU, 2006.

This policy was initiated in 2006, following a two year tuition fee freeze. The increases were initially based on 2004 tuition fees which were varied due to the previous policy of ACR fee deregulations. Based on the diversity of tuition fees charged during deregulation and the subsequent institutional flexibility of increasing tuition fees, it is not possible to provide a simple overview of the dollar amount of growth. Suffice it to say that institutions have had the ability to increase their overall tuition by a maximum 5% per annum for the past 5 years.

Tuition fee increases are tied to quality improvements and the Student Access Guarantee. Improvements are reported through the Multi-Year Accountability Agreements. At universities the tuition fee set-aside was replaced with the Student Access Guarantee framework to ensure support for students in financial need (see below). For the college sector SAG compliance is regulated, while the existing policy of tuition set aside was also maintained. In 2010 tuition set-aside was extended for another two years with an amendment:

“The amount of tuition fee set-aside funding to be disbursed annually will be set at the previous year’s tuition fee set-aside levels plus 10% of the additional fees resulting from tuition fee increases in the current year, with adjustments to be made for annual enrolment changes, i.e. increased/decreased by the annual percentage increase/decrease in full-time equivalent (FTE enrolment)” (MTCU, 2010).

The set-aside can be drawn upon to meet ministry SAG requirements, and the remaining should be directed to internal student financial assistance offices.

Student Financial Assistance Policies

Ontario students have been supported by both the provincial and federal governments since the late 1950s and early 1960s respectively. While there were a number of changes to the policies over the course of the past 60 years, activities in the past 10 years have the most relevance for the current discussion. Incremental changes have occurred over this period, with the most recent taking place in March 2010.

The Ontario Student Assistance Program is a single agency that determines eligibility and distributes both provincial and federal funding. The purpose of student financial aid (SFA) is to supplement, rather than replace, the financial resources of individuals and their families (where applicable) to meet educational and living costs (see Figure A-2). Assistance is based on financial need as established by the federal and/or provincial governments and as determined by OSAP through an assessment of the OSAP application.

Eligibility and amounts are determined by a number of elements such as the whether the student is ‘dependent’ or ‘independent’ of parental support²¹, income of the student/parent(s), expected accommodated costs, cost of the program, the length of the program, etc. At the application stage students are automatically assessed for both grants and loans.

Figure A-2 MTCU OSAP formula for determining need

Financial Need	=	Allowable Educational Expenses	-	Expected Financial Contributions
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As noted above, in 2005 the Ontario government developed financial and programmatic policies to expand access and participation to postsecondary education. A primary element of the SFA plan was to provide students with financial support to access to postsecondary education through the Student Access Guarantee. The SAG was intended to ensure “no qualified Ontario student...be prevented from attending our publicly-assisted colleges and universities because of a lack of financial support programs” (MTCU, 2009). The stated purpose of SAG was to enhance access to postsecondary education for students in financial need through a number of different means. Changes to OSAP included:

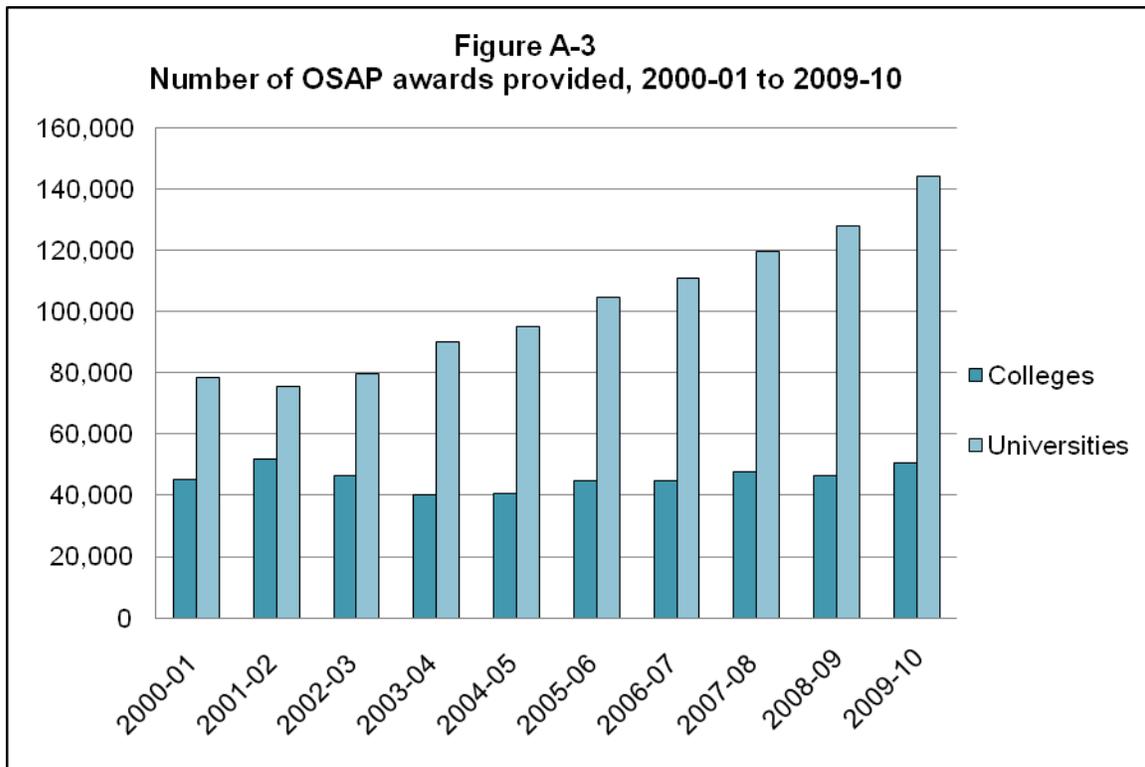
- Improve student financial assistance for 135,000 low and middle income students in 2005-2006

²¹ For OSAP purposes, you are considered an Independent student if the following applies to you:

- You are separated, divorced, or widowed, AND have NO dependent children living with you.
- You have not been a full-time student at a high school or postsecondary institution for at least 12 consecutive months on 2 or more occasions.
- You have been out of high school for at least 4 years before the start of your study period.

- Develop a new tuition framework in 2006
- In collaboration with the federal government and the Canadian Millennium Scholarship Foundation develop low-income tuition grants for first-year dependent students
- Develop a grant for Ontario-only 2nd year dependent students
- Expand eligibility for student loans and increase weekly loan amounts
- Reduce parental contribution expectations, expand interest relief and recognize computer costs in needs assessment
- Match funds raised by institutions to establish endowments for student financial assistance and develop Ontario Trust for Student Support
- Work with the federal government to broaden and expand student assistance.

These changes have increased the number of OSAP awards provided. Since, 2000/2001 there has been increasing numbers of students, particularly from universities, who have applied and received financial aid (see Figure A-3). In 2009/2010 225,262 Ontario students in approved university and colleges programs were awarded OSAP.



Source: OSAP/TCU data.

SAG also required postsecondary institutions to provide additional financial assistance beyond government assistance, based on unmet or unrecognized need, for enrolled students. Under the framework, institutions wanting to increase tuition fees could only

do so if they participated in the SAG and if the fee increase enhanced the quality of the programs.

The governments' institutional SAG initiatives were built upon previous strategies supporting students at the institutional level. By committing to the SAG, institutions agree to financially assist students in need through Bursaries, Scholarships, Work study programs and Summer Employment Programs. The programs are directed towards low and middle low income students who are frequently cited as 'at-risk' for attending and completing PSE.

Unlike the previous 'tuition set aside policy' where institutions were required to take 30% of tuition revenue for the purposes of supporting students, the SAG requires that universities meet the unmet needs of the students rather than distributing a designated amount. The 'unmet needs' of students are calculated during the OSAP application process (see Figure A-2 above), and the overall amount of 'unmet need' of OSAP students at that institution is recorded. Institutions are responsible for providing that amount of aid to students through the various programs²². When the amount of aid given to students matches the government's OSAP assessment of 'unmet need' at the institution, there is SAG compliance. Compliance with SAG is recorded in the Multi-Year Accountability Agreements and is a condition of government funding.

Current Student Financial Assistance Policies

OSAP provides both up-front and back-end aid through five types of assistance.

Loans

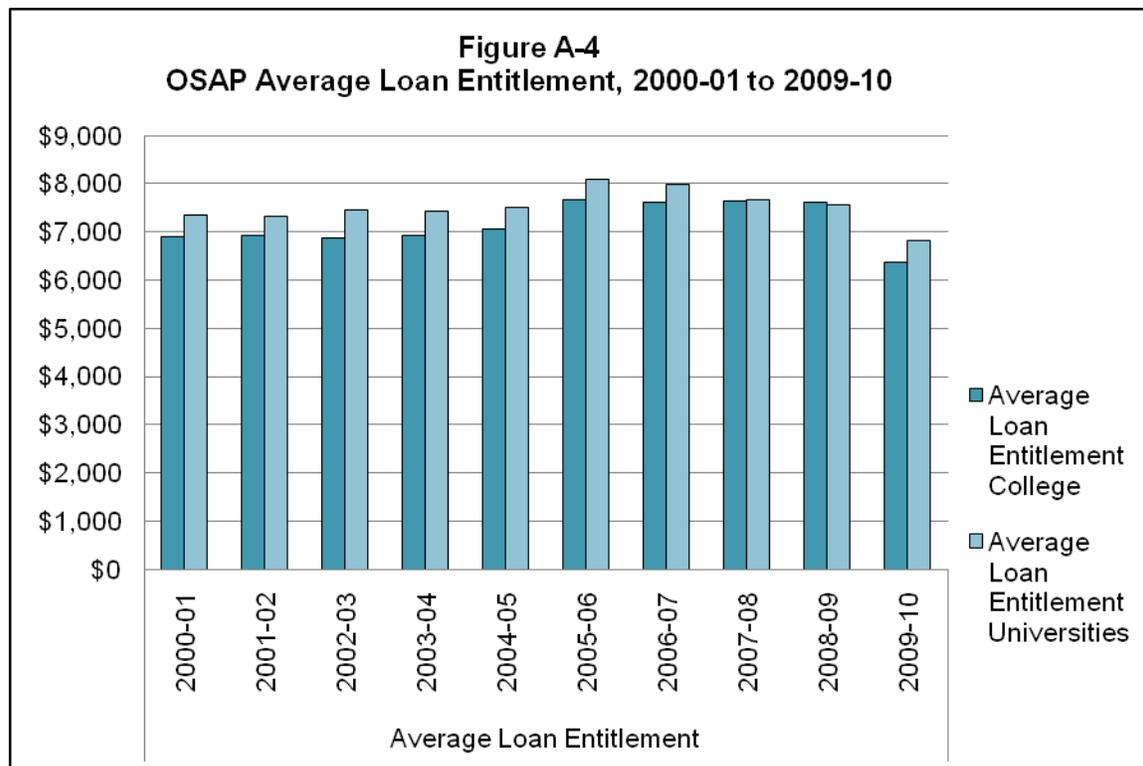
Loans are repayable funds awarded to students based on financial need. Money is provided as a loan, yet the government pays accrued interest during the period of schooling and for 6 months following the end of studies. Students begin to repay their loans 6 months following the end of studies. This is an upfront program for those in need. The amount of loan is shared between the Canada Student Loan program and OSAP. Students are entitled to a maximum amount that must be repaid upon leaving or completing their education.

OSAP funds single students to a maximum of \$360 per week to attend a public university or college, or a private institution that is approved by the government. For a 34 week school year a single student could receive a maximum of \$11,900 in OSAP funding. Sole support parents or married students may receive a maximum of \$560 per week in OSAP funding. A married or sole support parent could receive a maximum of \$19,550 in OSAP funding. Not all students receive the maximum funding amount.

In 2009/2010 the average loan entitlement of combined provincial and federal loans for Ontario university students was \$6604.56. That same year the average college student on OSAP was provided with \$6382.71, and university students were, on

²² It is at the discretion of the institution whether these programs are available to all students or only students on OSAP.

average, provided with \$6826.41 (see Figure A-4). The average loan entitlement for 2009-10 drops for each group when comparing to the entitlements for 2008-09, due to the introduction of the Canada Student Grant program, which provides more non-repayable funding which displaces a portion of the total federal loan provided.



Source: OSAP/TCU Data²³

Grants and Bursaries

Grants are a way to provide pockets of money for specific purposes or for targeted populations. This non-repayable funding is typically awarded based on financial need. There are a variety of grant programs in OSAP targeted at different groups. Students do not typically apply for grants and bursaries as they are automatically assessed at the application stage. Grants and bursaries can be up front (i.e., first year low income, second year low income) or back end aid (i.e., limiting a student's repayable debt).

Provincial and federal grants are provided through OSAP. The amount of grants awarded is calculated in combination with loans, so that the amount of funding determined by OSAP is not exceeded, but the amount of repayable debt is altered. For example, if two students both receive \$7,000, based eligibility for grants one may have a 50/50 split of grants and loans, while the other may be provided the entire amount as a loan. Institutional grants do not impact the allocation of OSAP grants and loans.

²³ Dollars are unadjusted.

Grants have been a significant part of student financial assistance, and there are a number of targeted grant programs in place (see MTCU, 2011 for complete list). Below is a list of some of the larger grant programs:

The Government of Ontario offers the Ontario Access Grant to assist first and second year students from low-income or modest, middle-income families with tuition costs. The Ontario Access Grants covers between 25 and 50 per cent of the tuition, to a maximum of \$3,000. The percentage of the tuition covered depends on individual or parental income.

The Canada Student Grant for Persons from Low-Income Families (CSG-LI) provides eligible Ontario students with financial assistance to help pay for their tuition, books, mandatory fees, living costs and transportation. It is available to full-time postsecondary students attending approved institutions. The grant is available for all years of an undergraduate degree, certificate, or diploma in a program of at least two years (60 weeks) duration. There are similar grants for students of low middle-income families.

In 2010 the government announced a grant for part-time students, which supports low income student who are taking from 20 to 59 percent of a full course load with up to \$1,200.

In 1996, the Government of Ontario introduced the Ontario Student Opportunity Trust Fund (OSOTF). The OSOTF equally matched every dollar raised by colleges and universities for endowed student aid between May 1996 and March 1997. Student aid dollars raised by the OSOTF were intended to support “academically qualified individuals who for financial reasons would not otherwise be able to attend college or university” (Government of Ontario, 1996).

In 2005, as part of Reaching Higher, the OSOTF was reshaped and renamed the Ontario Trust for Student Support (OTSS). According to the Ministry of Training, Colleges and Universities, “the new trust creates more incentive for institutions to fundraise for student aid and fosters a culture of giving” (Government of Ontario, 2004). The OTSS and the OSOTF are two of the funding sources used to meet institutional requirements under SAG.

One back-end grant is the Ontario Student Opportunity Grant (OSOA) which helps to reduce the annual Canada-Ontario Integrated Student Loan debt by limiting their repayable debt. In March 2010 limits were set at \$7,300 for a two-term academic year and \$ 10,950 for a three-term academic year. Any amount of loan over the set amount is automatically forgiven under the OSOG. The grant has been available since the beginning of the 1998–99 academic year, though it was previously capped at \$7000.

Scholarship or Fellowship

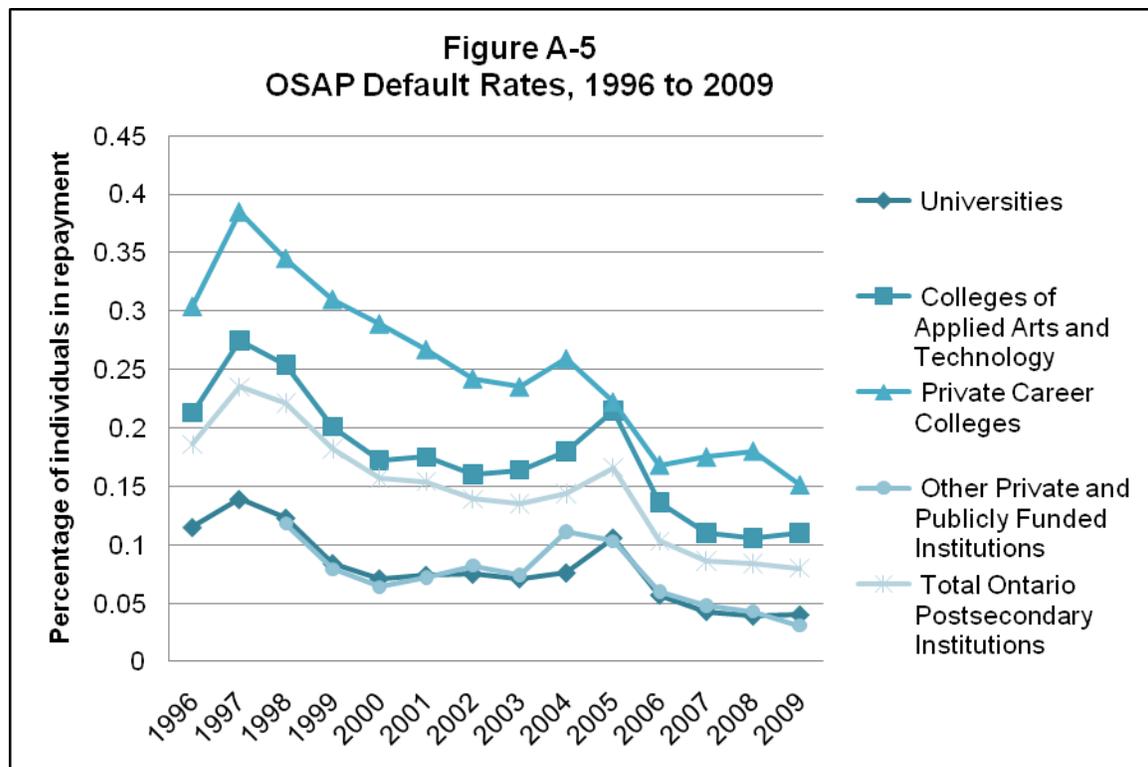
Non-repayable funding typically awarded based on academic merit. Typically students must apply for this up front aid.

Work Study

A work study program helps students meet their educational costs by providing part-time work at their institutions. Students must apply for these programs at their institutions.

Repayment Assistance

Some students have difficulty in repaying their student loans. However, with new supports in place, and a revised loan/grant system as described above, OSAP default rates have been declining since 2004 (see Figure A-5). Yet, there are still students who are unable to keep up with payments. In order to support these students and reduce default rates, OSAP and CSLP and designed programs to support students after their studies.



Source: MTCU/OSAP Data²⁴

Prior to changes of March 2010, there were two streams for repayment assistance, one for the Canada portion of the Canada Ontario Integrated Student Loan, and one for the

²⁴ *The 2009 default rates reflect the repayment status of students who were issued Ontario Student Loans in the 2006-2007 academic year and completed or exited their studies by 2007-2008. For purpose of calculating institutional default rates, student loan recipients/defaulters are assigned to the last institution/program they attended in 2006-2007. The status of these loans was assessed as of July 2009 or about two years after the student was expected to begin repayment.

Ontario portion. Canada repayment assistance is known as the Repayment Assistance Plan (RAP). For OSAP loans, interest began to accrue immediately after leaving school and repayment began after 6 months. Repayments were scheduled to clear the debt over a period of 9.5 years, but any portion of the loan could be paid off before this time without penalty.

Students who believed they were unable to adhere to the repayment schedule due to insufficient income were able to request a review of their student loan or loan remission award by an independent appeals committee. In this situation, students may have been eligible for interest relief where they were not required to make payments on either the principal or interest of the loan. Interest relief is granted for periods of six months, up to a maximum of 30 months with the option to reapply.

If, following 5 years of interest relief, students were still unable to afford loan payments; they were able to qualify for some debt reduction. If annual loan payments exceed 15% of your annual income, the Ontario government would reduce the loan by a maximum of \$10,000 or 50% of the loan, whichever was less.

The Canada Student Loans portion of the loan had different stipulations. In August 2009, the Federal Government announced the Repayment Assistance Plan (RAP) to assist students struggling with repaying Canada Student Loans. Under this plan, no graduates were asked to pay more than 20% of their family income towards their loan. Any debt remaining after 15 years is forgiven.

This dual mode of repayment assistance was replaced in March 2010 when the Ontario government made significant changes to loan repayment. First, students would not begin to accrue interest until 6 months after leaving school. Secondly, the government announced that it would join the federal Repayment Assistance Program.

Under this new policy graduates having difficulty making repayment may apply for relief; they are not automatically considered. During the first five years out of school, if a payment of 20% of income is deemed not 'affordable' (based on income and size of family); the government may reduce payment amounts to ensure there is no undue financial hardship. In some cases, no payment is required. Determined payments amounts are directed towards the loan principle. The government covers the interest. If there is continued difficulty in repayment following 5 years in RAP, or the student has been repaying the debt for more than 10 years the student may apply 'Stage Two' RAP. In Stage two RAP the government will pay the interest on the loan, and may also make payments towards the principle. For example, the government might make up the difference between the required payment and an affordable payment. The goal of this is to ensure that all debt is paid 15 years after leaving school (or 10 years for those with a permanent disability).

Tax Credits

Another back end program is tax benefits. Since 1961 Canadian post-secondary students have been able to claim a reduction in taxes for the tuition fee they pay. Students are also eligible for the education tax credit which is determined by the

number of months spent studying in the tax year, and the intensity of study (full or part-time). These federal tax credits are able to be carried forward to another year or may be transferred to a parent or spouse. In 2006, the average Ontario undergraduate student received a credit of roughly \$2000 (Neill, 2007). Ontario students are also eligible to receive rebates on GST and HST for costs such as tuition, books and basic groceries, and a housing credit up to \$1,000 annually to those with off-campus housing costs (TCU, 2010).

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