Funding Postsecondary Education in Ontario: Beyond the Path of Least Resistance

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Mr. Mackenzie has worked for more than 30 years in a variety of different public policy capacities, at all three levels of government as well as in the non-profit sector. From 1991 to 1994, he was Executive Director of the Ontario Fair Tax Commission. He was one of two principal authors of the Commission report, and took direct responsibility for the Commission's research and writing with respect to local government finance and education finance.

Since 1997, Mr. Mackenzie has been co-chair and principal analyst for the Ontario Alternative Budget project of the Canadian Centre for Policy Alternatives. In that capacity, he has authored each year's Alternative Budget, as well as numerous issue-specific technical papers.

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FUNDING POSTSECONDARY EDUCATION – BEYOND THE PATH OF LEAST RESISTANCE

Executive Summary

For many years, successive governments in Ontario have followed the path of least resistance when funding postsecondary education – cutting back on provincial grants and turning to students to pay higher tuition to make up the shortfall.

As a result, at a time when educational attainment is more important than ever, we are investing less in postsecondary education and charging higher tuition than at any time in the past 30 years.

The Ontario Postsecondary Education Review established in May 2004 is a chance to set out a new path to excellence and greater accessibility. Instead, the review's work to date, as judged by its publications and consultations, has framed a set of narrowly constrained choices leading down that same path of least resistance, to higher tuition and ever-greater barriers to access.

The purpose of this study, commissioned by students, faculty and staff in the university and college sector, is to broaden the debate by challenging assumptions that underlie the current narrow perspective – such as that public funding is inherently regressive and that higher tuition does not impede accessibility – and by pointing to alternative models that might open up the range of options for reform.

Key findings:

- Ontario's investment in both colleges and universities has been in steady decline, as a share of GDP and on an inflation-adjusted per-student basis, for the past 30 years.
- To match the ratio of operating grants to GDP in the rest of Canada, grants for universities would have to increase by $1.15 billion. To match the ratio of grants to GDP for colleges in the rest of Canada, Ontario's grants to colleges would have to increase by $810 million.
- Ontario's investment in college and university infrastructure collapsed from a high of more than 0.5% of GDP at the peak of the building boom in the late 1960s to 0.1% of GDP in the late 1970s. Since then, with the exception of the capacity increases required to prepare for the double cohort in the late 1990s, our postsecondary education system has been running on fumes.
- While B.A. level university graduates can expect to earn, on average, between 30% and 40% more than high school graduates, there is a substantial degree of variability around that average. For one-quarter of university graduates, the "premium" for postsecondary education is actually negative, meaning they earn less than the average high school graduate. For another 25% of university graduates, the premium is greater than 80%.
- Contrary to the claim that subsidized university tuition constitutes a subsidy of higher-income taxpayers by lower-income taxpayers, an analysis based on personal income tax data shows the benefit from subsidized tuition is distributed relatively evenly across individual income groups.
- In a hypothetical calculation of the impact of reducing tuition and paying for it in an across-the-board income tax increase, the net benefit among individuals claiming the tuition tax credit is virtually constant in the middle-income range and is actually eliminated for higher-income taxpayers.
- A review of the studies of the impact of tuition on participation concludes that increases in tuition lead to declines in enrolment, particularly among low-income students.
- Loans with income contingent repayment provisions may have perverse equity implications. They can result in graduates with the same incomes facing substantially different marginal income tax rates, based on the incomes of their parents, with children of poor parents paying higher tax rates than the children of wealthy parents.
- Income contingent loans also replicate labour market inequities faced by graduates, so that to the extent that women, visible minorities and people with disabilities face earnings discrimination in the job market, the lower earnings will also result in longer repayment periods.

Beyond the Path of Least Resistance
Establishing the background

It is hardly a point of debate in Ontario in 2004 that the postsecondary education system is under financial pressure. Resources available to colleges and universities in this province have not kept pace with costs since the late 1980s. The physical infrastructure of the college and university system has deteriorated, as public funds for capital dried up, and as internal capital funding and facilities maintenance budgets were redirected to back-fill shortfalls in operating funding. Tuition and fees have increased substantially in absolute terms, in real terms, and as a share of college and university operating expenditures. Student financial assistance is fragmented, inconsistent, incoherent and inadequate. As a result, student debt on graduation has increased to unprecedented levels.

The financial situation facing the postsecondary education system is not unique. Funding for all public services in Ontario has come under pressure in recent years. After reaching a 25-year peak in 1992, provincial public services spending as a share of GDP declined year-after-year for more than a decade before stabilizing in 2003 at a substantially reduced level. A reduction of this magnitude in the relative size of the provincial public economy cannot help but have visible impacts on public service availability and quality.

Consequently, the future of public postsecondary education is inextricably linked to the future of public services generally. Ten years of cuts at both the federal and provincial levels of government have exposed a political gap between the expectations of Canadians for public services and the reduced fiscal capacity of their governments to deliver on those expectations. It has also exposed a profound fiscal imbalance between a federal government awash in budgetary surpluses on one hand and the cash-strapped elements of the so-called MUSH sector agencies under provincial jurisdiction (municipalities, universities and colleges, school boards and hospitals) which carry out much of the service delivery on the other.

In the decade that ended with the defeat of the Eves Government, conservative policies defined the context within which postsecondary education operates in Ontario. The province's political reaction to that period will continue to affect that context in the future. But it is not the whole story.

Before Mike Harris' Common Sense Revolution turned Ontario's politics upside down, an NDP government faced with extreme fiscal pressures from the 1991 recession identified funding for postsecondary education and the shifting of costs from the provincial treasury to students as a path of less resistance in its struggle to bring the deficit under control. Students' share of the costs of postsecondary education had begun to increase even prior to the 1995 election.

Even before the 1991 recession, Ontario already stood at or near the bottom among Canadian provinces in its funding of postsecondary education. The current financial squeeze is not a recent development. This province has been a chronic under-investor in postsecondary education for a generation. The events of the 1990s made the problem acute, but they did not create it.

Framing the debate

The early weeks of the work of the Ontario Postsecondary Review reveal an effort to narrow the range of options under consideration. The debate over funding is being framed as follows:

- There is some additional public funding available to support postsecondary education, but not enough to provide the system that Ontario needs and that Ontarians want;
- Public higher education funding should be based on student financial need;
- It is both necessary and appropriate that students contribute more towards the cost of their education – necessary, because insufficient public funding is available to cover that cost; appropriate, because students derive a valuable private benefit from investment in public education – a benefit that is not available to taxpayers who do not participate in postsecondary education;
- To the extent that issues of equity and access arise from increased reliance on tuition for the funding of postsecondary education, those issues can best be addressed through student financial assistance delivered in the form of loans, which would be repaid from the additional earnings generated by the student's investment in postsecondary education.

Although the Discussion Paper published by the Postsecondary Review acknowledges the fact that government funding has declined and student tuition

increased as a share of postsecondary funding in Ontario in the past 10 years, the Review goes on to embrace that change by asserting that students will have to pay even more as part of the solution to the province's postsecondary funding problem. Having accepted the premise that Ontario will rely even more heavily on tuition fees than it does in 2004-5, it then looks to jurisdictions that have already decided to rely heavily on tuition fees for postsecondary education finance for its models for how to deal with the issues of access and student debt.

The Review does not back away from the need for more public funding. However, it accepts as given that governments will not provide all of the additional funding needed and asserts that more funding is needed from both governments and students. In doing so, the Review implicitly accepts the status quo – with tuition playing an unprecedented share of operating costs of both colleges and universities – as its starting point. Just as was the case in the early 1990s in the wake of the 1991 recession and in the late 1990s in the Common Sense Revolution, the Review points towards a funding solution in which students and their families are seen as a path of least resistance in postsecondary finance.

In framing the debate in this way, the Review presents participants in the postsecondary education sector with a series of Hobson's choices: between continued inadequate funding and higher tuition; between loans without a contingent repayment component and loans with a contingent repayment component; between a system with high tuition and no targeted student assistance and a system of high tuition supported by income contingent loans. These are the basic funding choices posed by the Review. They are not the only choices.

The purpose of this paper is to provide a factual and analytical basis for a broadening of the debate over options for postsecondary funding reform in Ontario. The paper is in three parts. Part 1 addresses Ontario's investment in postsecondary education as it has evolved over time and in relation to other jurisdictions, both in Canada and in other countries. Part 2 considers the role that students and their families currently play in the funding of postsecondary education and the equity and access issues raised both by the current system and by the income contingent repayment loans systems being advanced by the Postsecondary Review as a solution to both funding and access problems. Part 3 places the international examples selected for consideration by the Review in a broader context, and draws together the conclusions from the analysis in the paper.

PART 1

PUBLIC FUNDING FOR POSTSECONDARY EDUCATION IN ONTARIO

Operating grants

Grants from the provincial government to both colleges and universities have been in decline in the past decade.

In 1990-1991, the total provincial government transfer per funding unit to community colleges was $5,775. By 1999-2000, it had dropped by 40%, to $3,474 per funding unit. If the 1990-1991 funding level had simply kept pace with inflation, it would have reached $6,451 by 1999-2000. Using this latter figure as the base, the 1999-2000 funding level of $3,474 per funding unit represents a decline of $2,977 or 46.1%.[1]

Funding for universities shows a similar pattern. Between 1993-1994 and 2002-2003, provincial operating funding for universities dropped from $7,074 per full-time-equivalent student to $6,427. On an inflation-adjusted basis, funding has declined from an inflation-adjusted 1993-1994 level of $8,440 per FTE student to $6,427, a drop of $2,013 or 24%.[2]

Chart 1 shows the pattern over the decade.

Although reduced funding for colleges and universities became a consistent problem in the 1990s, the data make it clear that this is not a recent phenomenon. Whether measured as a share of GDP or on a real, per-student basis, Ontario's funding for postsecondary education has been in decline for a considerable period of time.

Chart 2 shows college and university operating funding, as a share of GDP, from 1976-7 to 2001-2.[3]

Ontario's investment in college and university operations does not compare favourably with other jurisdictions in Canada. Its investment as a share of GDP ranks 10th in Canada; its investment as a share of provincial expenditures ranks 10th[4]; its per-student expenditure ranks 10th.[5]

Chart 3 compares grants for college operating expenditures in Ontario and the rest of Canada as a share of GDP.[6]

Ontario's grants for colleges have been consistently lower than the average for the rest of Canada, as a share of GDP.

Chart 4 compares grants for university operating expenditures in Ontario and the rest of Canada as a share of GDP.

While there has always been a gap between Ontario's operating grants to universities as a share of GDP and the share in the rest of Canada, that gap has widened substantially over the past 25 years.

Chart 5 measures provincial grants to universities on a real, per-student basis. The gap in grants for universities between Ontario and the rest of Canada widened gradually between 1975 and 1985, remained stable between 1985 and 1995, and then widened again between 1995 and the present.[7]

To match the average grant per student in the rest of Canada, Ontario's operating grants to universities would have to increase by 42%, based on 2001-2 data.[8] Adjusted for inflation since 2001-2, the shortfall would be an estimated $2,940 per student in 2004-5, or a total of approximately $985 million.

To match investment in universities as a share of GDP in the rest of Canada, Ontario's investment would have to increase from 0.41% of GDP to 0.63% of GDP, or an estimated $1.15 billion in 2004-5.

Chart 6 shows average grants per student for colleges in Ontario and in the rest of Canada.[9]

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[1] Source: "Ontario's Colleges: Leaders in Applied Learning – Presentation to: Investing in Students Task Force", Association of Colleges of Applied Arts and Technology (ACAAT), November 2000, p. 35

[2] Source: "Compendium of Statistical and Financial Information, Ontario Universities 2002-03", Council of Finance Officers – Universities of Ontario Council on University Planning and Analysis, Council of Ontario Universities (COU), May 2004, tables A-1, B-1 and E-2

[3] Source: Statistics Canada, CANSIM Tables: 384-0015 and 384-0002 (GDP); 478-0004 (college finances); 478-0007 (university finances)

[4] Denise Doherty-Delorme and Erika Shaker eds., "Missing Pieces: An Alternative Guide to Canadian Postsecondary Education", Canadian Centre for Policy Alternatives, May 2003.

[5,6] Source: Statistics Canada, CANSIM Tables 384-0015, 384-0002, 478-0004, 478-0007.

[7] Source: Statistics Canada, CANSIM Tables 384-0015, 384-0002, 478-0004, 478-0007, 477-0011 (enrolment), Education in Canada, Cat. 81-229 various years (enrolment).

[8] Statistics Canada, op cit.

[9] Source: Statistics Canada, CANSIM Tables: 478-0004 (college finances); 477-0006 (college enrolment)

To match the average grant per student in the rest of Canada, Ontario would have to increase its grants to colleges by more than $2,000 per student, or an estimated total of $350 million.[10] To match investment in colleges as a share of GDP in the rest of Canada would require an increase from 0.16% of GDP to 0.31% of GDP, or an estimated $810 million in 2004-5.

Investment in College and University Infrastructure in Ontario

In recent years, substantial public attention has been drawn to the state of public infrastructure in Ontario. In every area of public service, individual organizations and central bodies speak to a number of common themes: a failure to keep up with growing needs for public service infrastructure; an accumulation of problems resulting from deferred maintenance, itself a consequence of pressures on operating funding; and unmet needs for reinvestment to keep pace with changes in technology.

The college and university sector in Ontario is no exception. According to a November 2000 study for the Ontario college system by KPMG, the Ministry of Training, Colleges and Universities estimates that, even with Super Build funding, colleges will have unaddressed deferred maintenance of $317 million as of March 31, 2006.[11]

A November 2004 report prepared for the Council of Ontario Universities presented the results of a facilities audit that revealed a deferred maintenance backlog of $1.5 billion. The report estimates that present funding for facilities renewal is at 0.2% of current replacement value, a figure that is a fraction of the annual rate of depreciation. The report estimates that funding would have to increase to 1.85% of replacement value merely to maintain a "poor" average facility condition rating.[12]

Ontario's problem with infrastructure funding in general and with infrastructure funding for colleges and universities in particular is often described as a phenomenon that emerged for the first time in the early 1990s and reached crisis proportions as first the recession and then changing government policies took their toll on the funds available for all public services, including public capital investment.

A review of the available data, however, paints a different picture.

Data on investment, depreciation and the capital stock prepared by Statistics Canada demonstrate that under-investment in infrastructure in Ontario is a chronic problem that has its origins in the 1970s.[13]

Statistics Canada's data on capital stock and investment measure three aspects of infrastructure investment: annual investment; annual depreciation; and the year-end capital stock, after allowing for new investment and depreciation.

Chart 7 shows the year-end capital stock for colleges and universities in Ontario from 1955 to 2003.

The college and university capital stock reached a peak in the early 1970s as the period of rapid expansion of the university system and the creation of the community college system was completed. The college and university capital stock declined steadily in relation to GDP until 1999-2000, when building to accommodate the double cohort reversed the downward trend.

As one would expect, investment as a share of GDP led the trend in year-end capital stock. Investment collapsed abruptly in 1970-71, and did not recover until the late 1990s. The decline was so pronounced that from 1974 to 1981 investment fell short of the depreciation of the pre-existing stock of capital. In fact, between 1974 and 1986, total investment in colleges and universities was less than depreciation. Ontario was literally consuming assets in the postsecondary sector.

Chart 8 shows the trends in investment, depreciation and investment net of depreciation.

While it is evident from the data that investment declined steadily during the 1990s, the chart shows that the major reduction took place nearly 20 years earlier and that it came at the end of a lengthy period in which investment had failed to keep pace with depreciation.

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[10] Assumes double cohort results in increase in enrolment of 15% and 2% annual inflation since 1998-99.

[11] "Future College Capacity Issues Resulting from the Double Cohort And Other Demographic Considerations", a report by KPMG to the Administrative Services Coordinating Committee of the Association of Colleges of Applied Arts and Technology, November 2000 p. 7

[12] "Campus in Decline", A Report of the Joint Task Force of CSAO/OAPPA on the Need for Increased Facility Renewal Funding for Ontario Universities, 2004, p. 4

The figure of 1.85% of Current Replacement Value is equivalent to the renewal budget recommendation of the Education Equality (Rozanski) Task Force in 2002 for elementary and secondary schools. The current government in its May 2004 budget adopted this recommendation. It should be noted, however, that according to the COU report, maintenance in the university sector has been deferred to the extent that the 1.85% recommended renewal investment would be sufficient only to maintain the system's current overall "poor" average condition rating.

[13] Statistics Canada, CANSIM Table 031-0002, special tabulation for Ontario.

Funding for postsecondary education in Ontario, 2004-5

Funding for postsecondary education in Ontario arises from a number of different sources:

- Core operating funding for colleges and universities from the Ministry of Training, Colleges and Universities
- Targeted operating and transitional funding for colleges and universities from MTCU
- Capital funding transfers to colleges and universities
- Funding for student support, (provincial – OSAP)
- Funding for student support, (federal – Millennium Scholarships)
- Subsidies for education savings through RESPs (federal)
- Non-refundable tax credits – tuition and education amount (federal and provincial)
- Non-refundable tax credit – student loan interest (federal and provincial)

The main funding sources are summarized in **Table 1**.

Just over 18% of the estimated total public support for postsecondary education in Ontario is delivered invisibly, through the tax system. That amount of money, if invested in operating funding for educational institutions instead of in tax expenditures, would be sufficient to increase operating funding for colleges and universities in Ontario by more than 25%. If such an increase in funding were used to displace tuition, it would finance a reduction in tuition and fees by approximately 45%.

More than 25% of Ontario's funding for postsecondary education is delivered to individuals, rather than to institutions. The 2004 report of the Millennium Scholarship Foundation made the following observation about this phenomenon:

> "[G]overnments are increasingly moving away from funding postsecondary education through direct transfers to postsecondary institutions (though these still account for the largest portion of the spending) and have increased significantly transfers to individuals (students and families). In 1990, over 87% of all postsecondary education transfers went directly to institutions, but by 2002 that proportion had slipped to 78%. This change is moving Canada closer to a type of "voucher" system where money bypasses institutions and goes directly to individuals, as is the practice in the US."[14]

Table 1

Funding for postsecondary education

Ministry of Training, Colleges and Universities	2004-05
Institutions	**$ million**
Operating Expenditures	
College operating	823
College Quality Assurance Fund	60
University operating	2,165
University Quality Assurance Fund	75
In lieu of municipal taxes	35
Nursing baccalaureate transition	47
Access to opportunities	69
Total operating	3,273
Capital transfers	
Postsecondary	147
College equipment and renewal fund	10
Total capital	157
Total institutions	**3,430**
Students	
Student support programs (OSAP)	310
Ontario Student Opportunity Trust Fund II	50
Total students	**360**
Total MTCU	**3,790**
Tax expenditures, Income Tax Act	
Registered Education Savings Plans (est. total)	250
Tuition and education amounts non-refundable credit	
Federal	400
Ontario	151
Total	551
Student loan interest deduction	
Federal	30
Ontario	11
Total	41
Total Tax expenditures	**842**
Total funding for postsecondary education	**4,633**

Notes:

MTCU data from ministry expenditure estimates, 2004-5
Tax expenditures estimated Canada Revenue Agency Income Statistics – 2003: 2001 tax year, table 2a, Ontario
– Assumed increase of 4% per year, converted to fiscal year equivalent
RESP Source: Kevin Milligan, Tax Preferences for Education Saving: Are RESPs Effective?
CD Howe Institute Commentary No. 174, November 2002
Assumes RESPs contributions increase at 4% per year and Ontario's share is 40%.

[14] "The Price of Knowledge 2004: Access and Student Finance in Canada", Millennium Scholarship Foundation, November 2004, Summary of Major Themes, 4

Such a shift might be justified if, in the process, support were being directed disproportionately to students who face family-income-based access barriers. That, however, is not generally the case. The OSAP loan program is linked to student and family resources on the way into the program and, by default, ends up having a relationship – albeit erratic – with a graduate's income on the repayment side of the program.[15] The support delivered through the tax system is another matter. The non-refundable tax credit calculated from the tuition amounts reported for tax purposes is proportional to tuition and, as we will see in Part 2, distributed relatively evenly across income classes.

The impact of RESPs, the other major tax-system-delivered support, is substantially different. A study for the C.D. Howe Institute found as follows:

Among children in families with household incomes less than $30,000, only 6.3 percent are beneficiaries of RESPs. The percentage participating in RESPs rises to 29.9 percent of households with income over $80,000.

This increase with income is unsurprising for two reasons. First, relatively high-income households generally have higher-than-average savings overall, so they are apt to have higher levels of savings in a particular form. Second, as discussed above, high-income households are more likely than others to have exhausted the room available for RRSPs and can, therefore, be expected to participate more actively in the tax-exempt accrual RESPs offer. Households with available RRSP room do not need the extra opportunity.[16]

[15] Ibid, "Focus on: Ontario". The relationship on the repayment side is erratic because the remission program is not well publicized, and because it is triggered not by a graduate's income or employment status, but by a failure to repay, which is then followed by an assessment of the graduate's ability to repay.

[16] Kevin Milligan, "Tax Preferences for Education Saving: Are RESPs Effective?", C.D. Howe Institute Commentary no. 174, November 2002 p. 13

CHART 1

Ontario University Operating Funding 1993-1994 to 2002-2003
Nominal and in 2002-2003 dollars

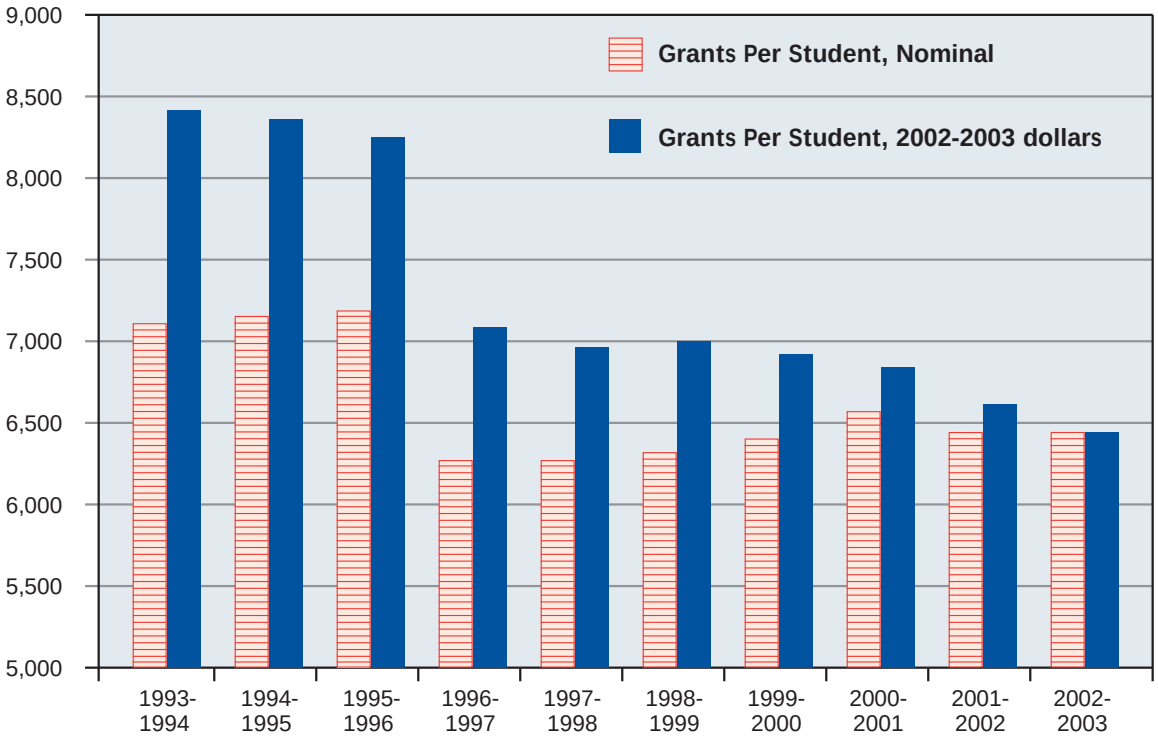


CHART 2

Provincial grants to colleges and universities as share of GDP
Ontario 1976-1977 to 2001-2002

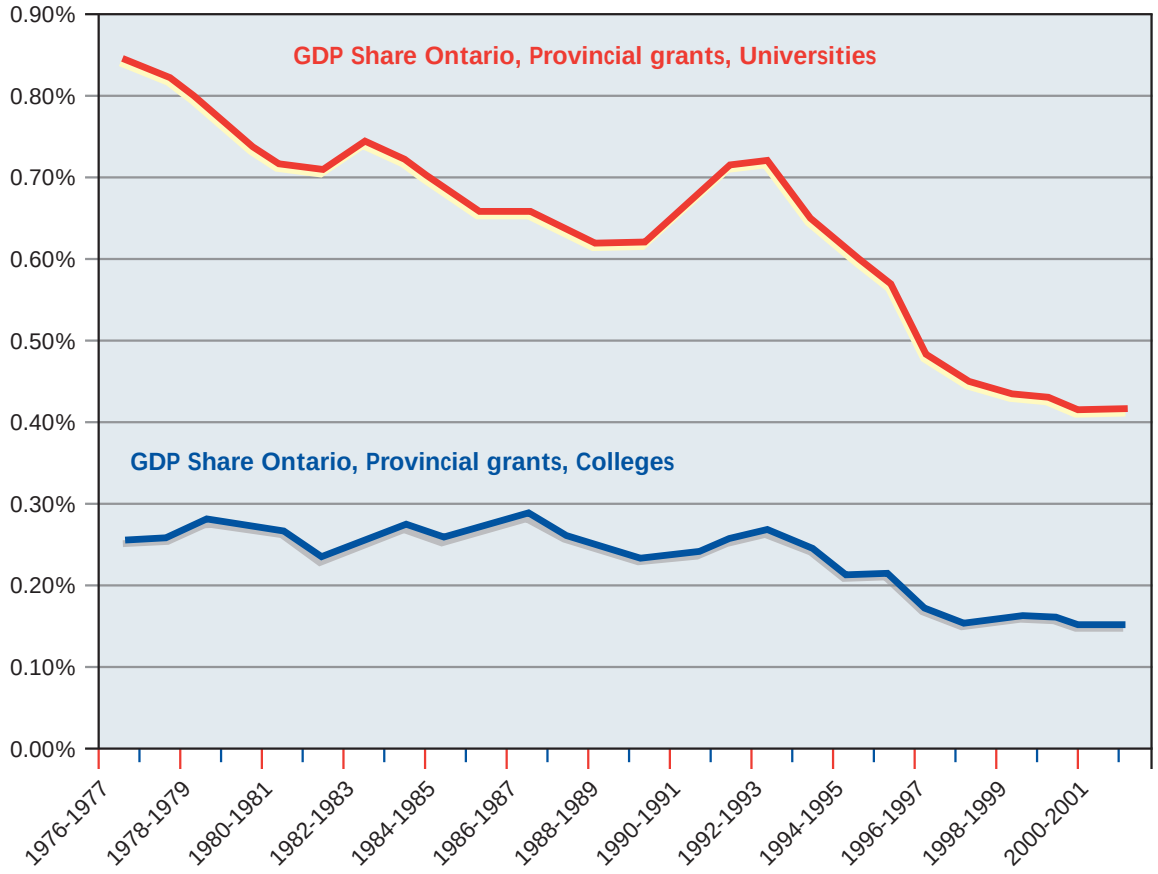


CHART 3

Provincial grants to colleges as % of GDP
Ontario and Rest of Canada 1976-1977 to 2001-2002

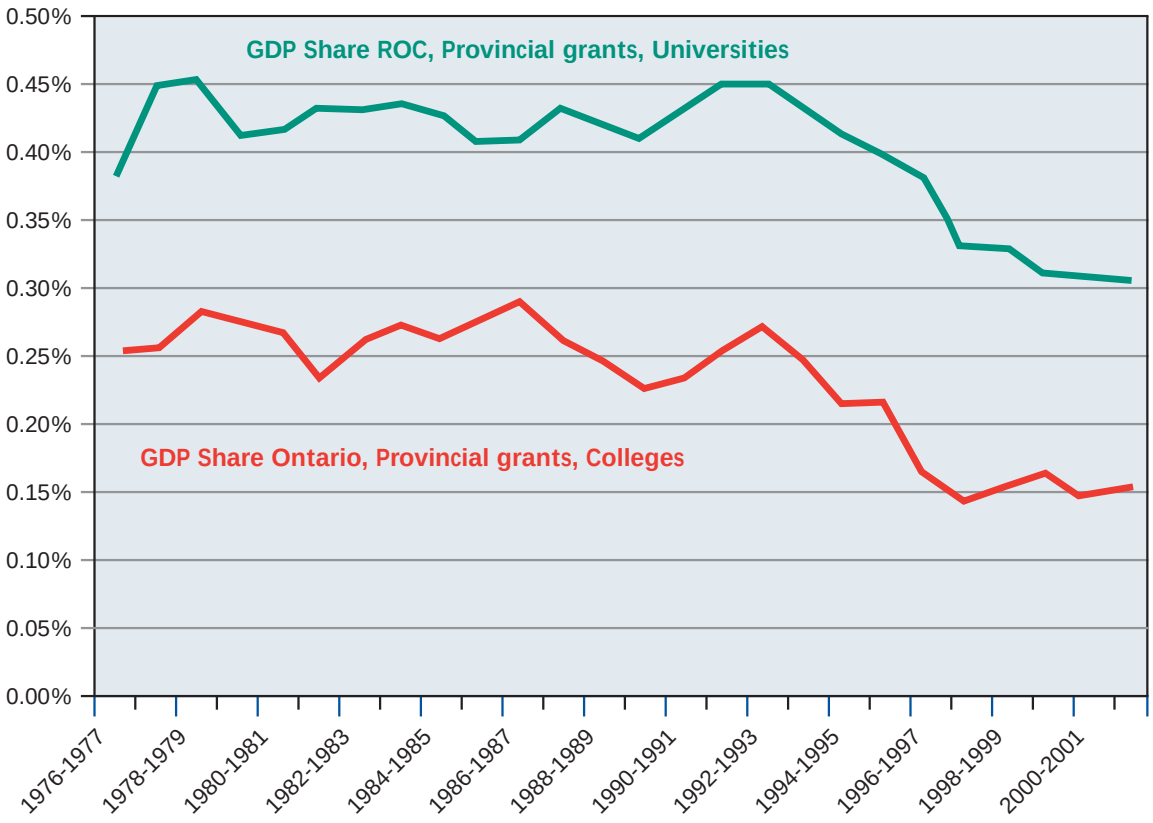


CHART 4

Provincial grants to universities as share of GDP
Ontario and Rest of Canada, 1976-1977 to 2001-2002

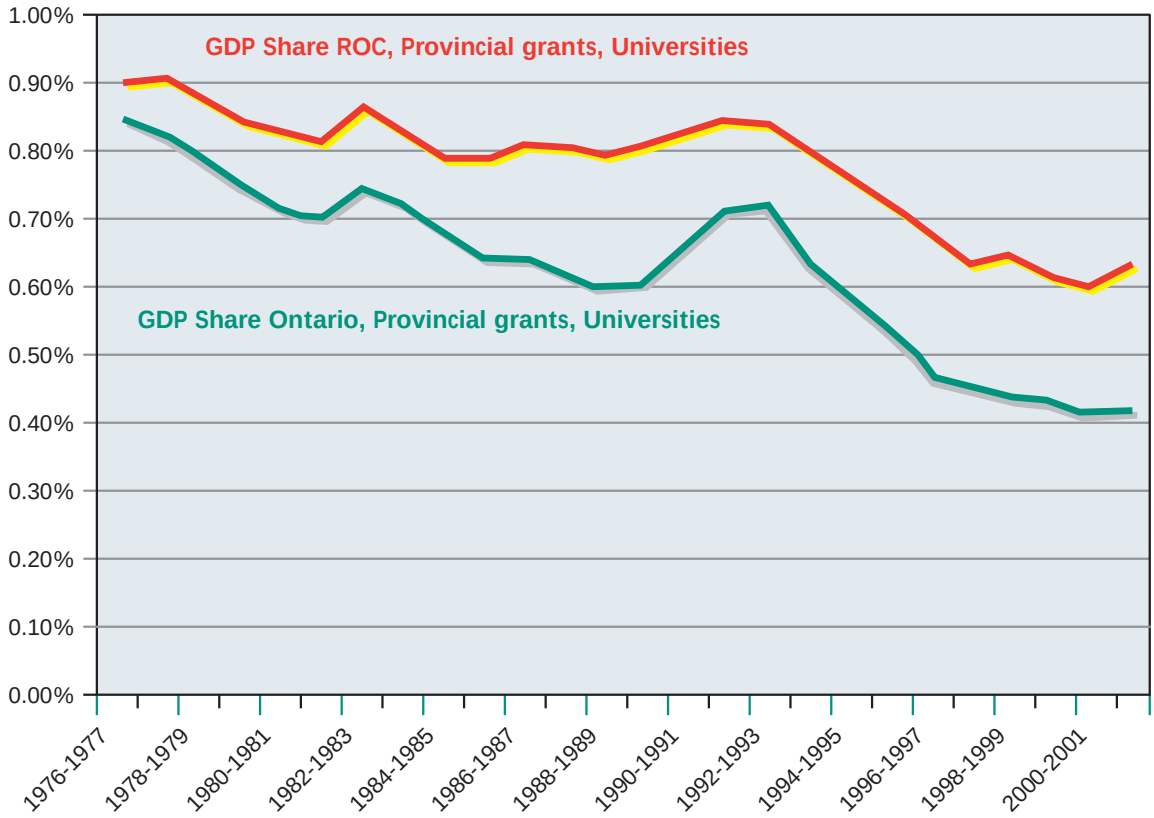


CHART 5

Universities – Provincial Grants Per Student
2002-2003 dollars, 1975-1976 to 2001-2002

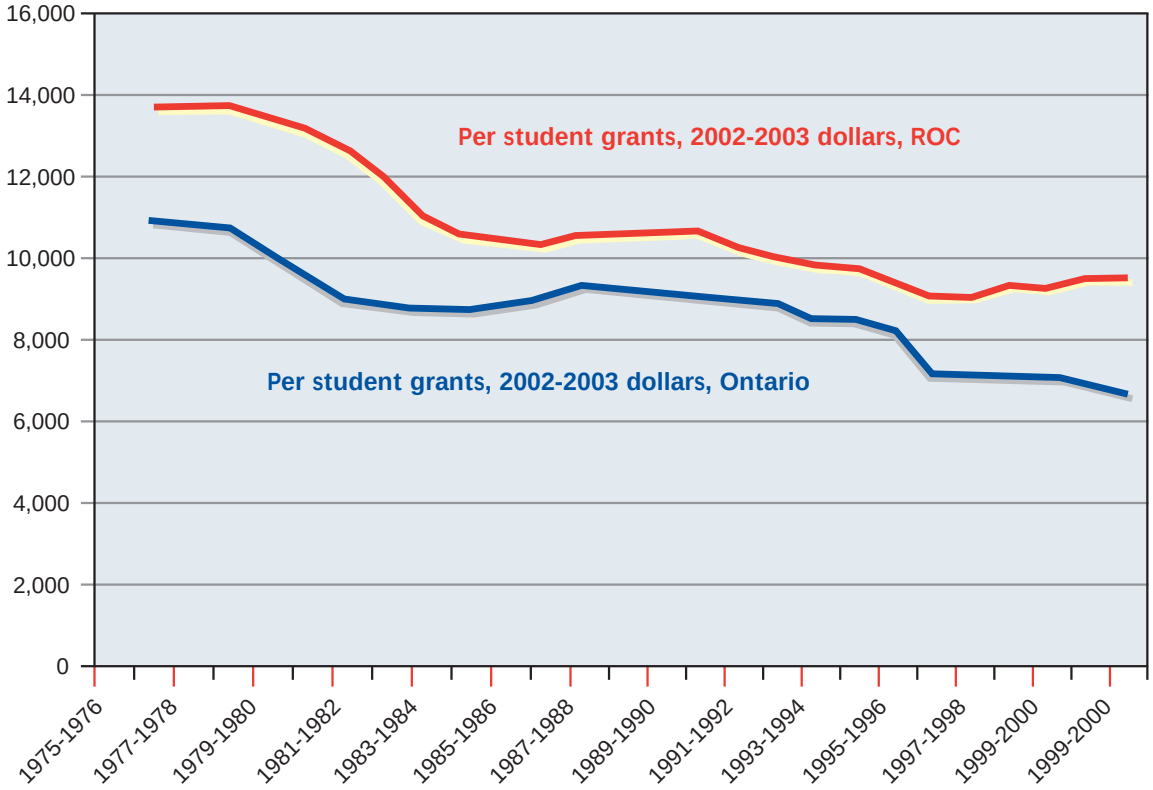


CHART 6

Colleges – Provincial Grants Per Student
2002-2003 dollars, 1998-1999 to 2001-2002

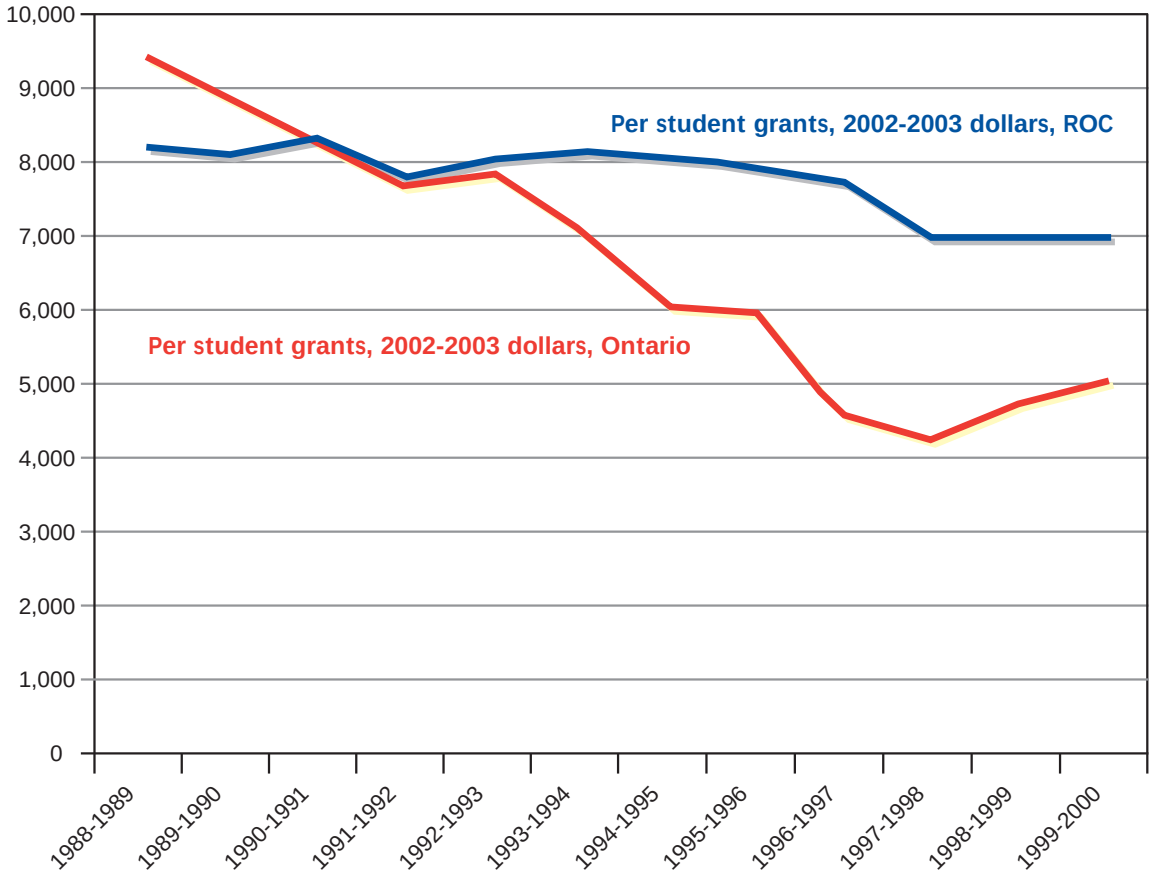


CHART 7

College and University Capital Stock, Ontario
End-year net value relative to GDP, 1955 to 2003

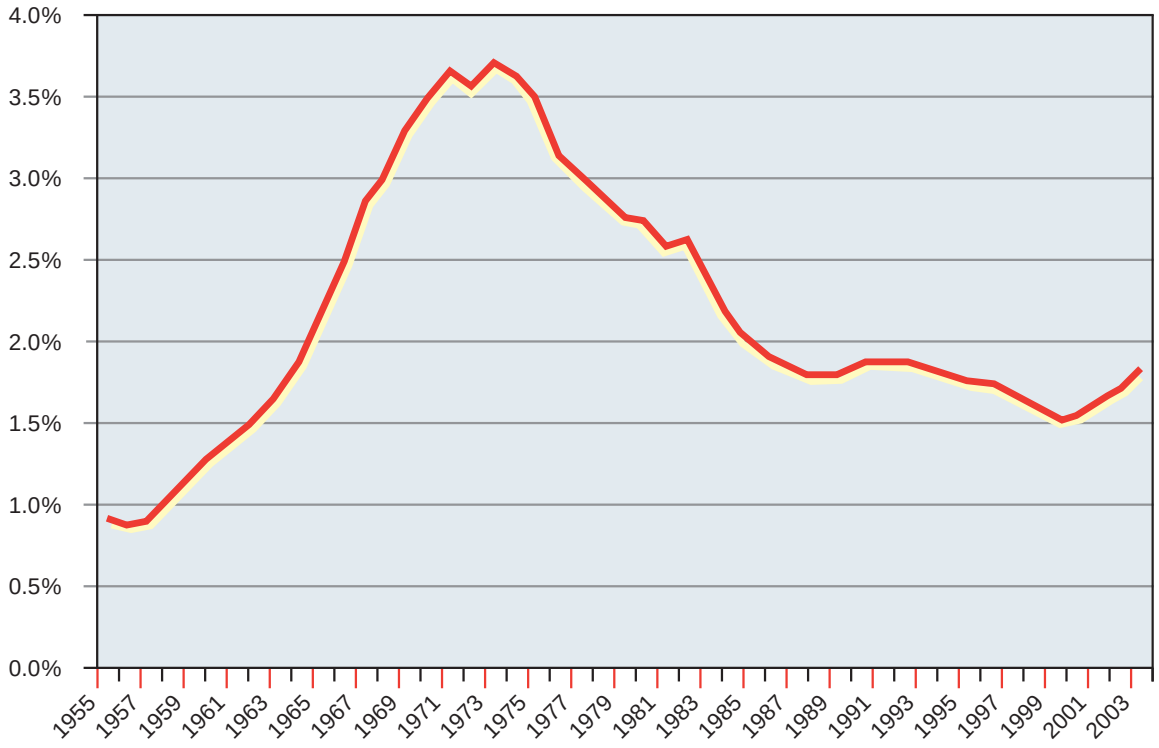
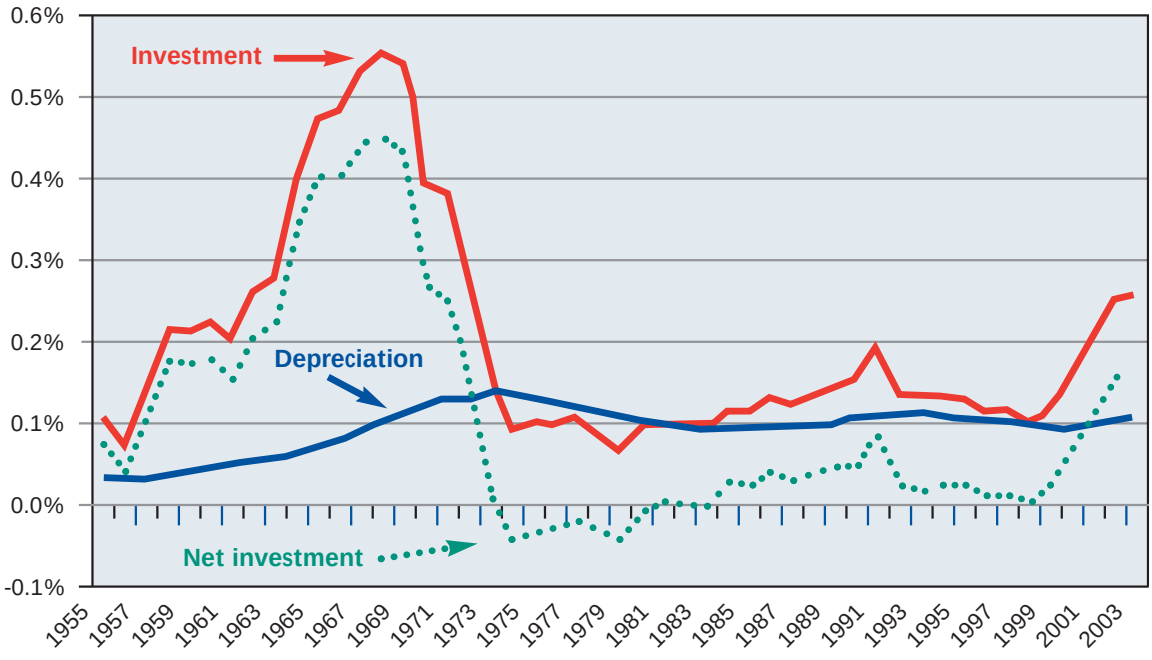


CHART 8

Colleges and universities, investment and depreciation
% of GDP Ontario, 1955 to 2003



PART 2

THE ROLE OF STUDENT TUITION IN COLLEGE AND UNIVERSITY FINANCE IN ONTARIO

Tuition in college and university finance

In its efforts to reduce public spending in the 1990s, initially to constrain the deficit and later to create the fiscal room for further income tax cuts, provincial governments found a path of least resistance to spending cuts in the college and university systems. Governments were able to create the space in the postsecondary education system for substantial cuts in provincial grants by imposing massive increases in tuition and fees on college and university students.

Chart 9 illustrates the role that college and university tuition has played in provincial fiscal policy, documenting the steady increase in the share of operating costs made up by students' tuition and fees as provincial funding has been reduced in response to fiscal pressures.[17]

From 1990 to 2002, the share of tuition in university operating expenditures has more than doubled, from 21% to 43%. The share of college operating expenditures accounted for by tuition jumped from 17% to 31%.

[17] Source: Statistics Canada, CANSIM Tables 478-0004, 478-0007

CHART 9

Tuition share of operating expenditures, colleges and universities
Ontario 1976-1977 to 2001-2002

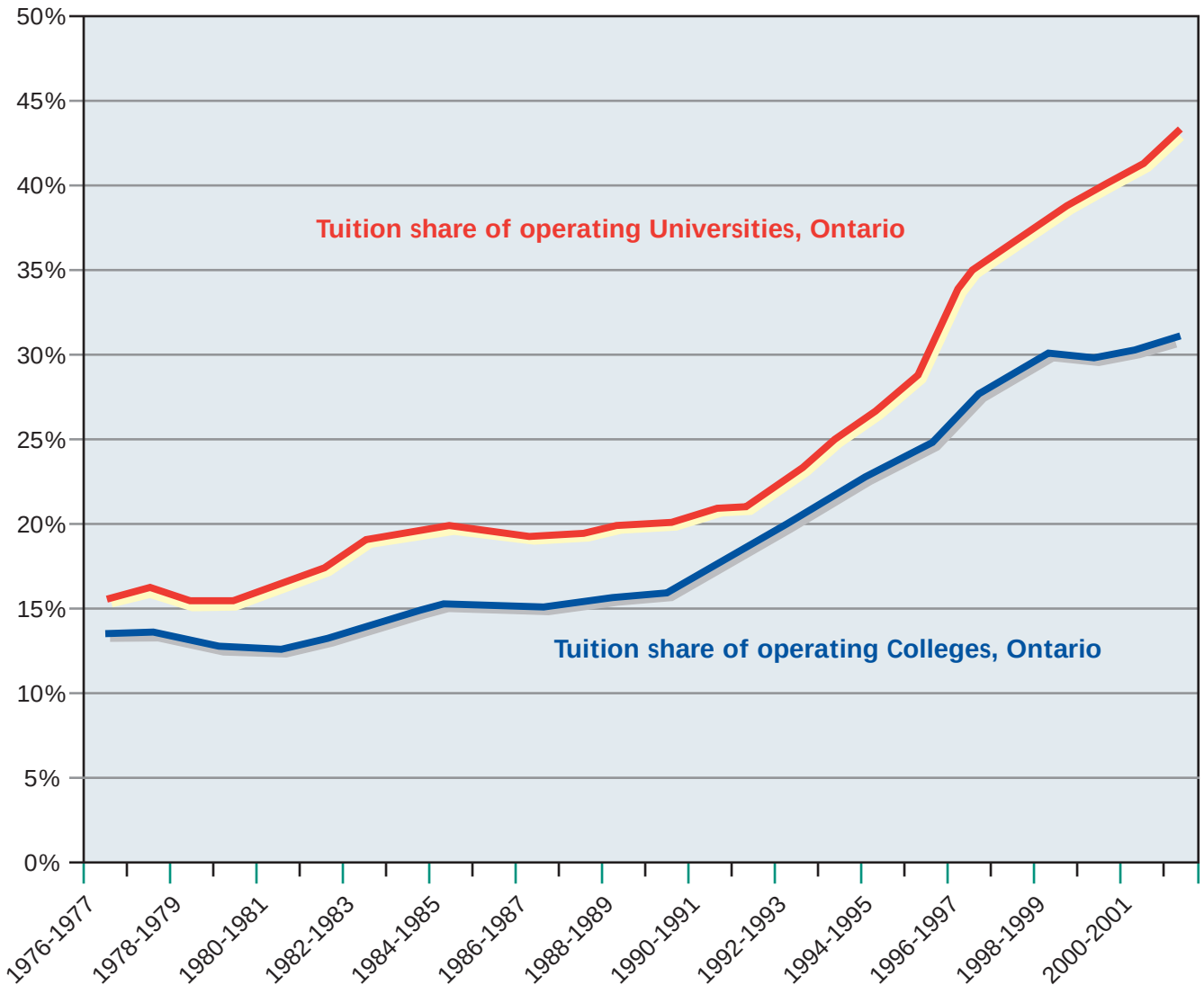
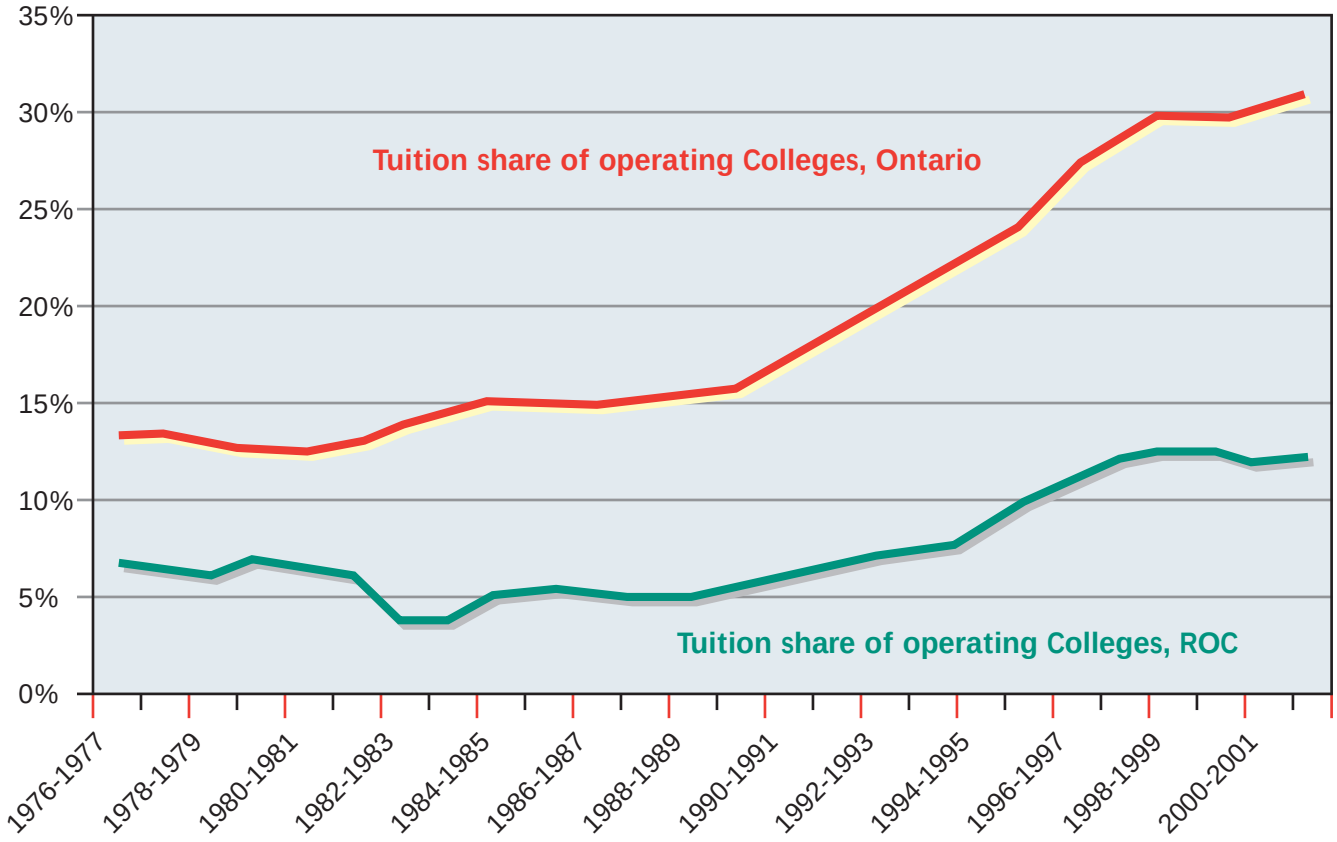


CHART 10

Tuition share of operating expenditures, colleges Ontario and Rest of Canada, 1976-1977 to 2001-2002



While tuition has been increasing in every province in Canada, the extent of its shift towards tuition in postsecondary education finance puts Ontario substantially out-of-step with the rest of Canada.

Charts 10 and 11 compare tuition as a share of operating expenditures in Ontario and in the rest of Canada, for colleges and universities respectively.

Tuition pays a much higher percentage of college costs in Ontario than in the rest of Canada, and that share has been growing more quickly.

While Ontario has always relied more heavily on tuition to finance university operating costs than the rest of Canada, the gap widened dramatically in the 1990s. The share of tuition in university operating expenditures in Ontario is now rapidly approaching double the share in the rest of Canada.

Average tuition has been increasing steadily across Canada, at both the college level and the university level. While Ontario's college tuition increases have been close to the average in Canada, its increases in university tuition have been at or near the top.[18]

[18] See Appendix A

Equity issues raised by college and university tuition

Ontario's province's funding of postsecondary education draws a bright line between funding for postsecondary education and funding for elementary and secondary education, which is provided at no incremental cost to either the student or his or her parents. That approach is shared with all Canadian provinces, except for the Province of Quebec, which extends tuition-free education to the end of the CGEP level, and which maintains a low-tuition policy at the university level.

This situation did not arise from an explicit decision, but rather from a combination of the history of the relationship between government and the post-secondary education sector in Ontario and fiscal considerations that affected that relationship as it evolved.

In other words, tuition and fees were already in place when the system completed its transition from the private non-profit sector to the broader public sector and that, combined with the fiscal pressures that began to dominate policymaking in the 1970s, served as part of the rationale for keeping them in place. As an overlay

on the weight of history and the pressure of fiscal exigency, tuition was also defended on the basis that students "should" pay a share of the cost of their education.

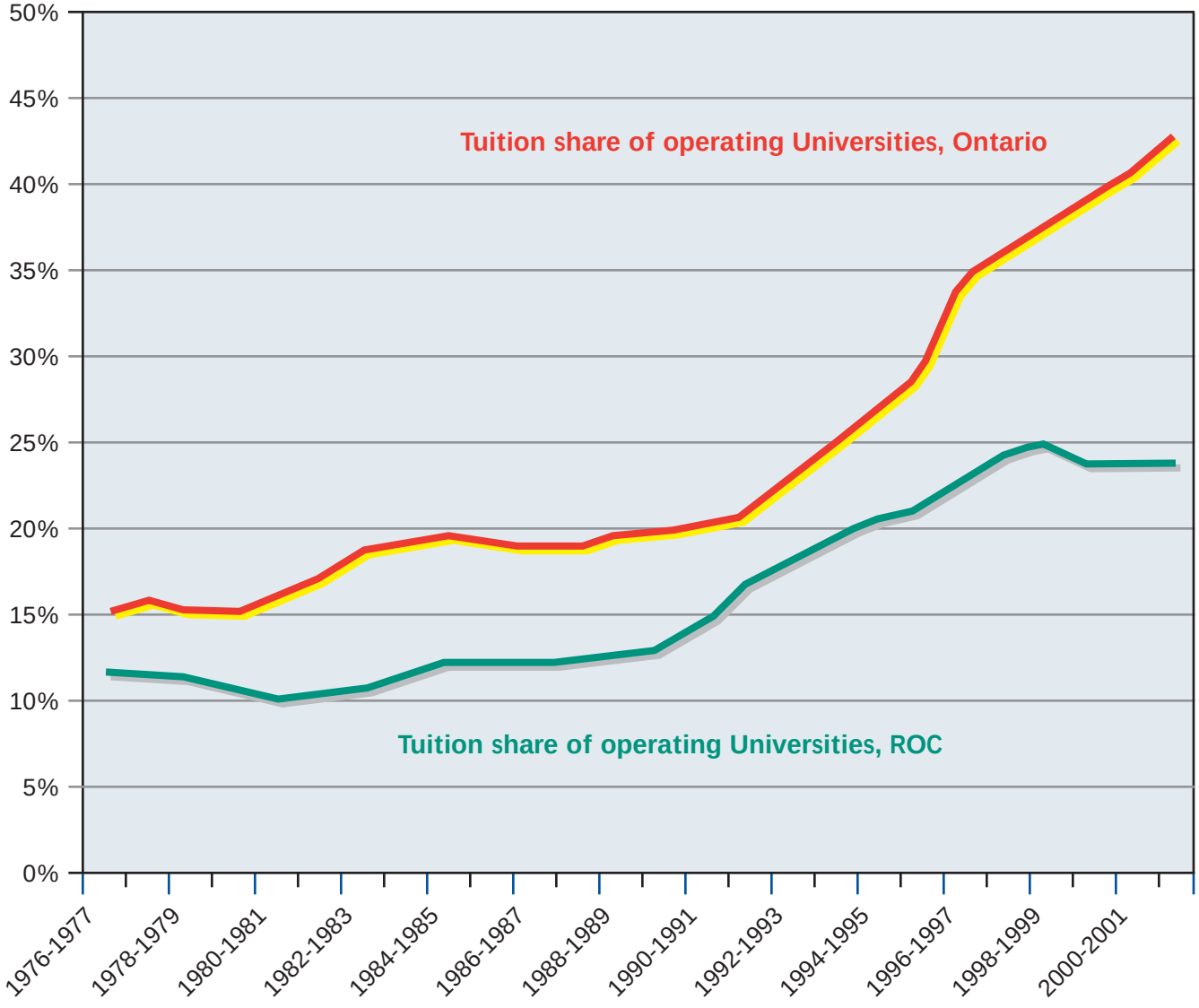
That view was the central feature of the post-secondary education policies of the Conservative governments that held office from 1995 to 2003. In its 1992 education policy document, New Directions II: A Blueprint for Learning in Ontario, the party called for an increase in tuition to 25% of the cost of higher education. In the1999 election platform document, also called Blueprint, the government credited itself with having achieved an even higher target. "Tuition fees are an important part of the way we fund a healthy postsecondary education system. ... To restore the balance in funding for colleges and universities, we brought tuition fees back to the reasonable and affordable 35% [of the cost of providing university and college courses]."

That rationale has evolved into an assertion that since students derive an economic benefit from their college or university education after graduation, they should be prepared to pay for the privilege of attending colleges and universities.

The relationship between postsecondary qualifications and increased earnings underpins the Post-secondary Review's premise that both private (tuition) and public funding of postsecondary institutions must be increased to address the problems with the system, as well as its active interest in loans with income contingent repayment as a way to address any problems with access associated with high tuition.

CHART 11

Tuition share of operating expenditures, universities Ontario and Rest of Canada, 1976-1977 to 2001-2002



This section examines each of the steps in this logical chain: the historical place of postsecondary education in Ontario's education system; the measurement of the earnings benefit; the relationship between tuition and access; the implications of subsidized tuition for distributional equity; the issues raised by income contingent repayment systems; and the implications of a view of tuition as a benefit tax.

Postsecondary education in Ontario's education system

Public elementary and secondary education has been funded as a purely social service from its beginnings as an optional local initiative in the early 19th century. In the latter part of the 19th century, public education to the end of secondary school was confirmed as universally accessible; participation in education was made mandatory to age 16.

Historically, pre-elementary education and postsecondary education have not been seen in the same light. Until participation by women in the paid labour force reached critical mass, early childhood education and care was considered to be purely a private matter. At that point, subsidized childcare began to be provided in Ontario on an income-tested basis and formal early childhood education was expanded in the public elementary school system. Our view of pre-elementary education is in flux, however, with the advent of universal early childhood education in Quebec and the growth of interest in universal early childhood education in this province. And interestingly, advocacy for a universal early childhood education and care system tends to focus on rights (both for children and parents) and on the social benefits associated with ECE programs.

Postsecondary institutions had their origins in Ontario as private bodies founded by religious denominations.[19] Prior to 1868, these denominational institutions received limited public support. When the University of Toronto was created in 1849 from the original Anglican King's College, its instructional body – University College – was made non-denominational.

After 1868, the denominational college system was cut off from public support. Until the late 1950s and 1960s, when new universities were created as non-denominational institutions from their inception, the expansion of the publicly supported university system arose largely from decisions by denominational institutions to give up the religious connection and join the non-denominational publicly supported system.

The financial and administrative relationship between the provincial government and the university system evolved in parallel with these developments. As a result of early concerns about political interference in the affairs of the University of Toronto in the late 19th century, the model for the current arms-length relationship with public support was established. Funding had a more difficult history, remaining largely unpredictable and unsystematic until the 1960s.

In parallel with the modernization of the secondary education system and the creation of the directly controlled and funded community colleges system in the 1960s, funding for universities was placed on a formula basis that has continued to operate, with variations, until today.

The introduction of formula funding was an important development in three respects. First, as a matter of form, it brought universities into the more broadly defined provincial education system. The use of the term "form" is deliberate, because while a view of universities as part of an embracing coherent system of education inspired the authors of a number of studies, task forces and commissions that looked into education in Ontario from 1972 on, it clearly failed to inspire provincial governments which consistently rejected recommendations for a more comprehensive – and more expensive – system.

Second, it established a relationship, either implicit (in the case of universities) or explicit (in the case of community colleges) between provincial support and tuition and fee revenue as the basis for the funding of postsecondary educational institutions in the province.

Third, it signaled the recognition of college and university education as providing a public benefit and as part of a continuum of Ontarians' educational entitlement.

The earnings benefit

The core of the argument rests on the simple proposition that, because postsecondary graduates tend

[19] This cursory discussion of the history of postsecondary education and funding is drawn from two sources:

A study by David M. Cameron and Diana M. Royce, "Prologue to Change: An abbreviated History of Public Policy and Postsecondary Education in Ontario", Background Paper prepared for the Advisory Panel on Future Directions for Postsecondary Education, December 1996, Appendix B; and

Paul Axelrod, "Public Policy in Ontario Higher Education from Frost to Harris", York University, 2004 forthcoming in anthology edited by Don Fisher and published by UBC Press.

to earn more than non-graduates, they should pay more of the cost of their education.

The earnings evidence shows that, on average, college and university graduates earn more than high school graduates in the job market. A recent comprehensive study by Statistics Canada based on census data identifies a typical ratio of 1.4:1 between the earnings of university graduates and the earnings of high school graduates.[20] The ratios are higher for the under-35 age group than for the 35-55 age group, and higher for women than for men.

This ratio of graduate to non-graduate earnings is consistent with the figure of $1 million set out in the Postsecondary Review Discussion Paper as the estimated lifetime earnings differential between a high school graduate and a university graduate.[21] An independent calculation of the lifetime benefit shows a total earnings differential from age 18 to age 65, between a high school graduate and a university graduate, of approximately $1 million.[22] The net present value of the income differential (a measure that eliminates the distraction in the comparison caused by the impact of compound interest over a 47-year period) is $148,000.

This implies a net benefit to the average university graduate of $148,000, which represents the value of the education to the student. It is this kind of analysis that leads the Postsecondary Review to its apparent conclusion that there is scope for increasing postsecondary tuition in Ontario.

Table 2 [23]

Median Earnings 25-29 year olds working full-time/full-year

Education	1984	1998	Per Cent Change
	In 1998 $'s		
Less than H.S.	$27,949	$20,000	-28%
H.S. completion	$28,583	$27,000	-6%
Some PSE	$29,955	$26,000	-13%
PS cert./dipl.	$30,642	$28,000	-9%
Degree	$37,269	$36,000	-3%

Table 3

25th Percentile, Median and 75th Percentile of Earnings Males and Females Employed Full-Time/Full-Year

Education	Q1	Median	Q3
Less than H.S.	13,500	20,000	31,000
H.S. completion	20,000	27,000	37,000
Some PSE	17,000	26,000	34,000
PS cert./dipl.	19,500	28,000	37,000
Degree	25,000	36,000	48,000

Q1 is 25th percentile.
Q3 is 75th percentile

There are two important qualifications to these results. First, in the context of proposals that use these results as a basis for further increases in postsecondary tuition, the evidence is mixed as to whether the average education premium is increasing or decreasing. Second, the return figures determined in these studies are averages, and do not necessarily reflect the experience of individual students.

A study of the earnings of 25-29 year olds conducted by public policy analyst and statistician Richard Shillington highlights both of these points. With respect to average earnings, Shillington's findings are summarized in **Table 2.**

These findings are generally consistent with the findings of the studies cited above. The average premium in this age group for a degree relative to high school completion is 33% – a multiple of 1.33. However, over the period covered by the analysis, real earnings of 25-29 year olds went down for all educational groups. The real change was the dramatic decline in the real earnings of individuals with less than a high school education.

For the use of future earnings data as a basis for tuition policy, however, the important finding from this analysis has to do with the high degree of variability of earnings, and therefore of the postsecondary educational premium.

[20] René Morissette, Yuri Ostrovsky and Garnett Picot, "Relative Wage Patterns among the Highly Educated in a Knowledge-based Economy", Analytical Studies Branch research paper series, No. 232, Catalogue no. 11F0019MIE, September 2004, pp. 24-27

[21] Discussion Paper, Postsecondary Review, September 2004, p. 8

[22] Assumes a 2% inflation rate, a 1% annual real income increase, a 1.5:1 earnings ratio and an initial overall average income at the average industrial wage for employees aged 15-24. For the university graduate, the calculation accounts for foregone income (at the estimated average wage for high school graduates aged 15-24) as well as for out-of-pocket costs of $5,000 per year.

[23] Source: special tabulation from Statistics Canada databases; calculations by Richard Shillington, Tristat Resources Ltd.

Table 3 shows that while the median earnings of 25-29 year olds who have a university degree are $36,000 per year, 25% of that group earned less than $25,000 and 25% earned more than $48,000. What this means is that, relative to the average earnings of high school graduates ($27,000), the "premium" is actually negative for 25% of degree holders, and is more than 80% for 25% of degree holders.

Other than the conclusion that the average student could pay higher tuition without pushing the return on his or her investment in higher education into the negative, however, or alternatively that the average graduate could be expected to generate differential income with which he or she could repay debts incurred to finance education, it is not clear what one should do with this kind of analysis.

Furthermore, apart from the dubious implicit assumption that students make their decisions to attend or not to attend postsecondary institutions by computing the present value of the earnings advantage that they expect to gain, there are some substantial weaknesses associated with using this kind of calculation as a foundation for public policy. The most obvious problem is that the income differential is subject to tax. An after-tax analysis would yield a significantly lower estimate of return.

More important, the conclusions reached are sensitive to the simplifying assumptions that make this analysis possible. In particular, the use of averages obscures issues of variability and risk that have a substantive impact on the results. The conclusions may be valid for the average; the fact that there is substantial variability around the average limits their value in designing policy.

Tuition and distributional equity

One of the key features of the current debate over the sharing of funding between general government revenue and student tuition is an appropriation of the language of distributional equity by advocates of higher tuition coupled with income-tested student assistance.

The argument runs roughly as follows. First, students who attend postsecondary institutions come disproportionately from higher-income households; students who do not attend postsecondary institutions come disproportionately from lower-income households. Consequently, a subsidy for postsecondary education is essentially a subsidy for middle- and upper-income households, who do not need the assistance, financed by lower-income taxpayers. Second, graduates of postsecondary institutions earn significantly more than non-graduates. They can therefore afford to pay for their education, after the fact, from the additional earnings made possible by their education.

By charging higher tuition, the argument goes, the government would reduce the unjustified subsidy indirectly provided to undeserving families through college and university operating grants. And making financial assistance available on a basis that would require repayment from post-graduation earnings would take care of any problems of student access created by the increase in fees.

There are a number of problems with the premise from which this argument flows; the stated facts that form its foundation; and the logical construction of the claim that its outcome is more equitable than the alternatives.

The premise

The premise of the argument is that a spending program can only be justified if it can be demonstrated that expenditure directly enhances distributional equity. But that is not the premise on which our system of public services is based.

Some public services are intended, explicitly, to promote distributive equity. Social assistance, for example, is intended to offset inequalities in market incomes and to ensure that low-income households are able to afford basic life necessities.

Some public services have no individual distributional objective whatsoever. Roads, sewage and water treatment, public health, environmental protection, correctional services and policing are all examples of public services with no individual redistributive purpose.

Some public services have an indirect distributional impact. Health care is a good example. Health care is made available on a universal basis and funded from general government revenues. It is redistributive, relative to the alternative of no public medicare in that lower-income households consume more health care than they would if all medical services had to be purchased at market prices.

Elementary and secondary education is a service that is universally available, but not universally used. Funding education from general revenue means that individuals and families without children in effect subsidize a service that is only available to families with children. Families that choose to send their children to private schools in effect subsidize a service that is used

only by families that send their children to public schools. Families whose children drop out of school before graduation effectively subsidize families whose children stay in school.

To suggest that subsidized college and university tuition is undesirable on the basis that it provides a service that is not equally distributed across income groups is to suggest that the only legitimate public services are those that provide direct relief to the poor. On its face, that is an absurd proposition.

In addition to the theoretical difficulties posed by a proposition that rejects all programs that either explicitly or implicitly deliver services that are used disproportionately by middle and upper-income households, it also confronts a practical political obstacle. The middle- and upper-income households that would be prevented from using public services pay a disproportionate share of the taxes that support public services and make up a majority of the electorate.

Tuition and distributional equity – the facts

In its response to the Postsecondary Review's Discussion Paper, the Council of Ontario Universities essentially repeats the Paper's flat assertion that subsidized tuition constitutes a subsidy of the rich by the poor.

> "Studies have demonstrated that the practice of keeping university tuition levels artificially low as a mechanism to ensure accessibility leads to the perverse result of having lower income taxpayers subsidize wealthier students."[24]

It is a dramatic statement, but not one that is supported by the facts.

It is generally accepted that participation in postsecondary education is positively related to socio-economic status. That is, the higher the socio-economic status of a student's family, the more likely he or she is to attend a postsecondary educational institution. A number of studies point to this conclusion. For example, a recent study published by the Educational Policy Institute[25] summarizes the findings in other studies, as follows:

> At a national level, Bouchard (1999) observed that in 1986, the percentage of youth from the top SES quartile attending university was twice what it was for those from the bottom SES quartile. Zhao and DeBroucker (2001), showed a similar ratio for students in 1998 (using family income rather than SES).[26]

The Statistics Canada analysis by Zhao and DeBroucker referred to in the EPI study produced the following results: [27]

However, the fact that students from higher-income families are more likely to participate in postsecondary education than students from lower-income families does not mean that low-income families are subsidizing high-income families. It does not mean that the appropriate policy response is to eliminate the benefit accruing to middle and high-income families. It does not mean that the distributional impact of a system with no subsidy for postsecondary education would be more progressive than that of a subsidized system.

The Statistics Canada study cited above offers some additional insights. First, while its authors show the expected positive relationship between family income and participation in postsecondary education, the differences are not as extreme as one would expect, given the emphasis the argument receives in the Postsecondary Review Discussion Paper. Second, they show a remarkably even distribution of participation in the community college system, which shows little variation by family income range. Overall, the range from lowest to highest quartile is +/- 6% from the average, hardly convincing evidence of a strongly skewed distribution.

The studies to which the COU refers demonstrate differences in participation rates related to income.

Table 4

College and University Participation, Canada

	Lowest quartile	quartile half	Middle quartile	Highest Average
All postsecondary	56.1	62.2	69.7	62.7
University	18.8	27.5	38.7	28.4
College	28.8	28.8	28.3	28.7

Family income at age 16
Highest level of education participated

[24] "A vision for excellence; COU Response to the Postsecondary Review Discussion Paper", Council of Ontario Universities, October 2004 p. 5.

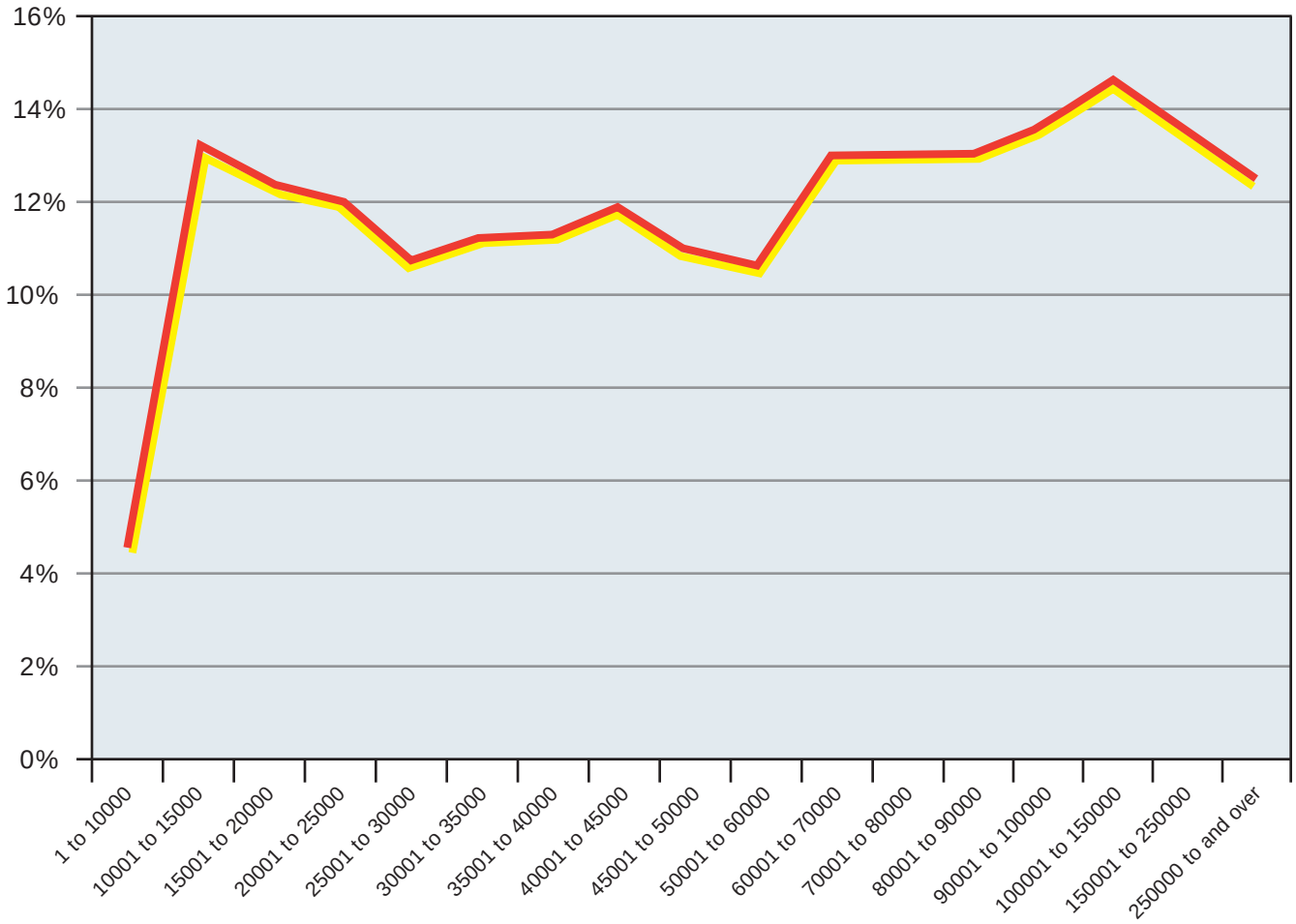
[25] Alex Usher, "A New Measuring Stick: Is Access to Higher Education in Canada Equitable?", Educational Policy Institute, September 2004

[26] Ibid, p.4

[27] Zhao, J., and de Broucker, P. (2002). "Participation in Post Secondary Education and Family Income". The Daily. Cat. No. 11-011-E. Ottawa: Statistics Canada, January 9.

CHART 12

Percentage of taxable returns with tuition amount claims, by income range, 2000 Tax Year



They do not provide the basis for the next step in the COU's reasoning – to the conclusion that poor families are subsidizing wealthy families. To take that next step, one would have to demonstrate that the combined effect of tuition subsidies and the tax system results in a regressive transfer.

The Canada Revenue Agency's annual publication of personal income tax statistics provides the basis for an analysis of the second step in this logic. These data cannot contribute to the discussion of rates of participation in postsecondary education because they are based on individual incomes as reported for tax purposes, rather than household incomes; and because they include all taxpayers, not just taxpayers with children who are potentially students at postsecondary institutions. In addition, the tuition amount can be shifted between generations in the family, and between time periods, weakening the relationship between the claim and participation by the claimant in post-secondary education in that year.

However, the tax data can provide evidence with respect to the contention that public support for post-secondary education results in a systematic transfer from people with lower incomes to people with higher incomes.

Specifically, the Income Tax Act provides for a non-refundable credit for postsecondary tuition. Claims for what is termed the "tuition amount" are reported in the personal income tax data published by the Canada Revenue Agency.[28] Claims for the tuition amount are based on tuition paid for postsecondary educational programs – predominantly public college and university programs. Consequently, the tuition amount can serve as a proxy for postsecondary tuition. Because the individual responsible for paying the underlying tuition and fees generally claims the tuition amount, however, its distribution can provide some useful insights in to the distribution of the benefit associated with subsidized tuition.

[28] Canada Revenue Agency, Income Statistics 2002 - 2000 tax year Final Basic Table 2A - Sample Data for Ontario

Data for the 2000 tax year reveal a notably even distribution of claimants of the tuition amounts for tax purposes, by income range.

The percentage of returns with tuition amount claims is consistent across income ranges, although slightly higher at higher incomes and slightly lower at lower incomes. The uneven pattern of claims at lower incomes is reflective of one of the weaknesses of the data. It is likely that participation in lower-income ranges is higher because it includes claims by students themselves – likely concentrated among graduate and professional program students — as well as by parents.

Even given these caveats, however, it would be difficult to conclude from these data that support for postsecondary education amounts to a substantial transfer from lower-income taxpayers to higher-income taxpayers.

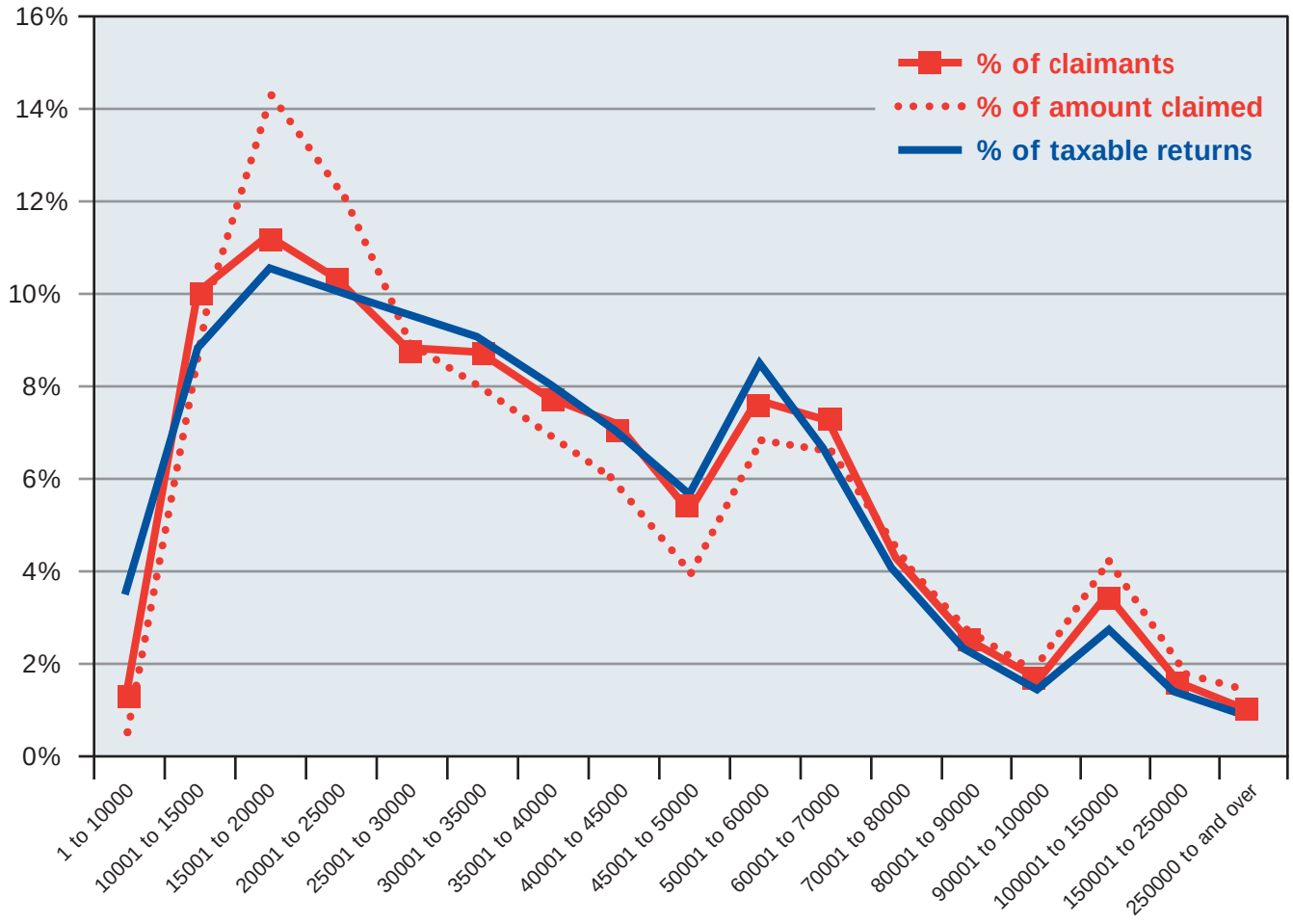
Chart 13 shows the distribution of claimants, amounts claimed and taxable returns, by income range. As one would expect, given the fact that the percentage of taxpayers making a tuition amount claim is relatively consistent across income ranges, the distribution of claimants and taxable returns is almost identical. The variations above and below these distributional curves for amounts claimed is what would be expected, given the likelihood that a non-trivial proportion of claimants in the lower-income ranges are students and what we know to be the higher relative participation in (higher-tuition) university programs by students from higher-income families.

Chart 14 illustrates the relationship between tuition claims and both income and Ontario income taxes paid.

This chart demonstrates that, within the context of the personal income tax system, and using tuition as a proxy, support for postsecondary education is not regressively distributed. Each line shows the cumulative share of a total. For example, the line for taxes shows the percentage of total taxes represented by individual taxpayers with incomes at or below the corresponding income range. Approximately 10% of total personal income taxes paid to Ontario are paid by individuals

CHART 13

Distribution of tuition claims and amounts, by income range, 2000 Tax Year



with incomes below $35,000. Taxpayers in that category, however, reported 25% of the total income and represent approximately 50% of both tuition claims, and the value of tuition claims.

On this chart, a tax measure with a regressive profile would be one for which the cumulative distribution line lies below the distribution line for income assessed.

Support for colleges and universities, as represented by the tax system's tuition amount, clearly does not fit into this category.

Taxpayers with incomes between $20,000 and $60,000 make up 58% of taxpayers; they make 56% of tuition amount claims and account for 53% of tuition amounts claimed. They report 46% of the income and pay 30% of the taxes.

Taxpayers reporting income under $20,000 make up 23% of returns; make 23% of the claims; and account for 24% of the amounts claimed. They report 7% of the income and pay 1.5% of the taxes.

Taxpayers reporting income between $60,000 and $100,000 make up 14% of returns; make 16% of the claims; and account for 15% of the amounts claimed. They report 22% of the income and pay 23% of the taxes.

Taxpayers with incomes over $100,000 make up 5% of returns; 6% of the claims and 8% of the amounts claimed. They report 25% of the income and pay 45% of the taxes.

This addresses one equity issue: the distribution of the benefit from tuition subsidy among personal

CHART 14

Taxes, income and tuition amount claims
Cumulative percentages, by income range, 2000 Tax Year

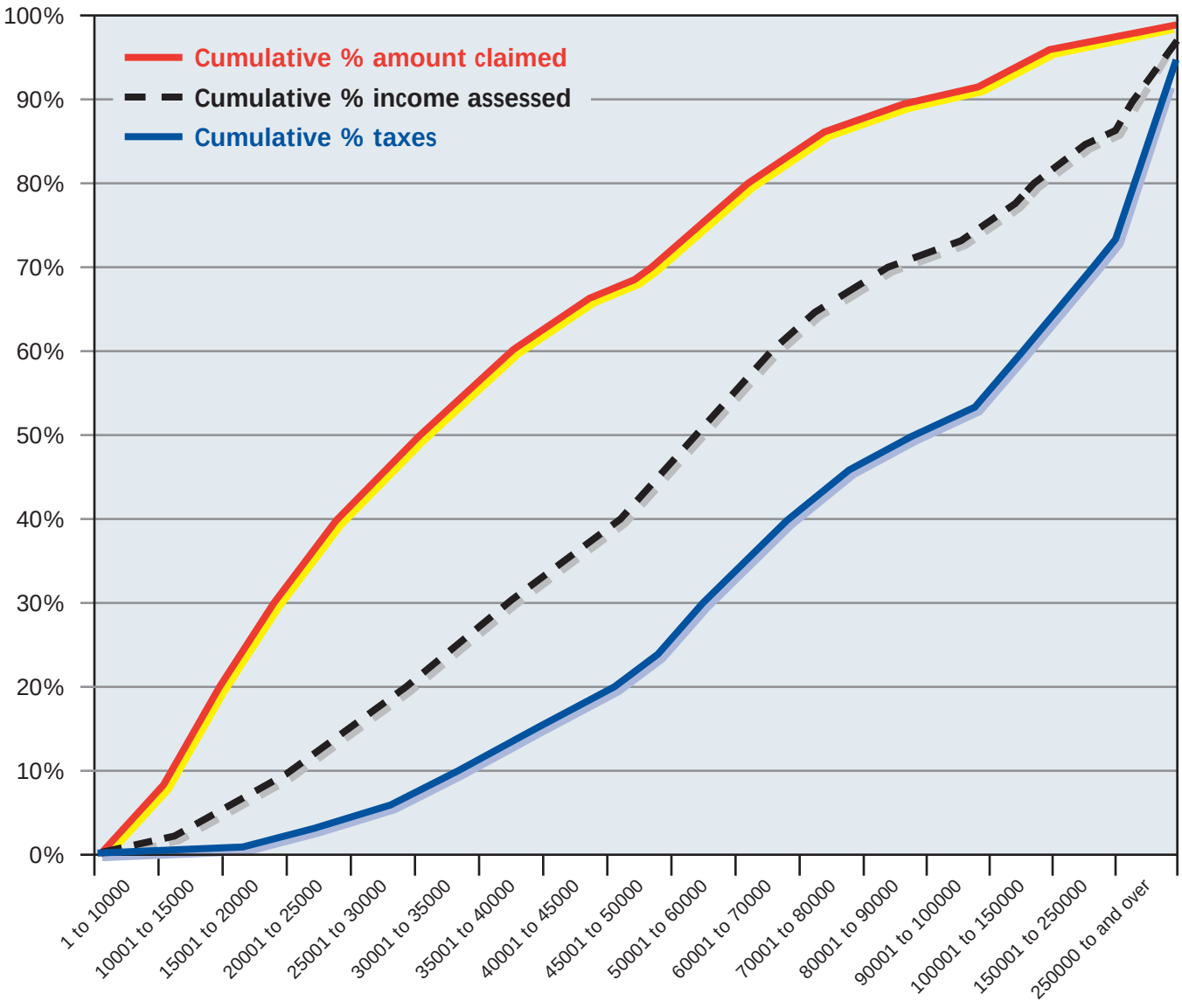
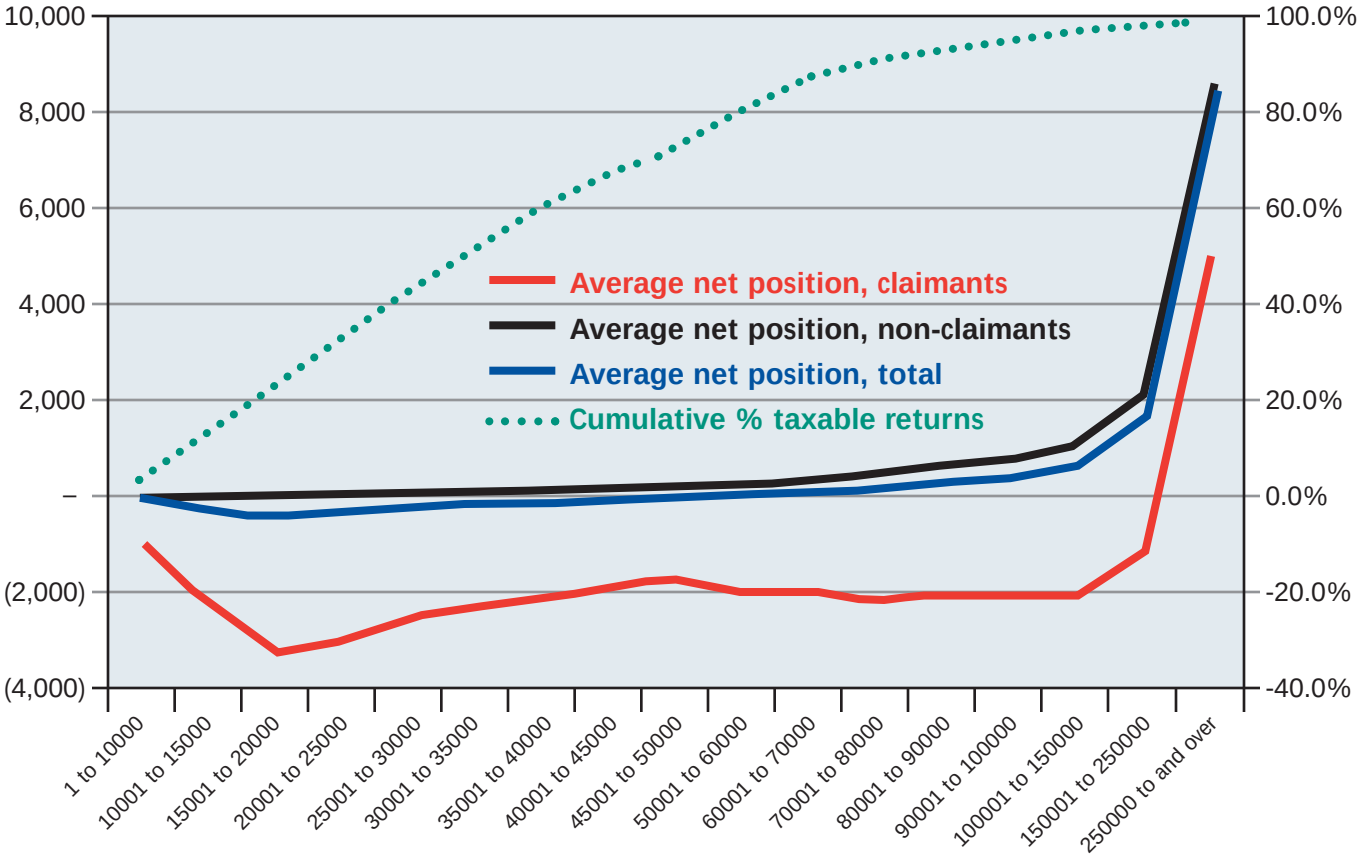


CHART 15

Replacing tuition with general income tax
Average net position by personal income group
Tuition claimants, non-claimants and total



income groups. It does not address the distribution of that benefit between those who claim the tuition amount and those who do not. In other words, it addresses the question of vertical equity among participants in postsecondary education or their families; it does not address the question of horizontal equity between participants and non-participants.

To measure this combined effect, a policy combination consisting of eliminating tuition (measured by the tuition amount) and paying for it with an across-the-board percentage increase in income tax was investigated. Specifically, the analysis involved measuring the distributional impact of providing a grant equal to the tuition amount claim (net of the foregone tax savings resulting from the loss of the non-refundable credit claim based on the tuition amount) and paying for it with an across-the-board personal income tax increase.[29]

Chart 15 shows the average net position of taxpayers in each income range, for taxpayers making tuition claims; taxpayers not making tuition claims; and all taxpayers combined. It also shows the cumulative distribution of taxpayers, by income range.

Taxpayers fall into two categories: taxpayers who made tuition claims, and would therefore benefit directly from the elimination of tuition; and taxpayers who did not make tuition claims. All income groups who made tuition claims gain, with the exception of taxpayers with incomes over $250,000. For taxpayers with incomes over $250,000, the increase in income tax outweighs the benefit from eliminating tuition. The benefit is virtually a flat $2,000 for incomes between $30,000 and $100,000, implying a benefit that declines as a percentage of income as income increases.

For taxpayers who did not make tuition claims, the additional cost is less than $250 for the 75% of taxpayers whose incomes were less than $50,000. The additional cost reaches $500 for taxpayers with incomes between $70,000 and $80,000.

There are a number of conclusions that emerge from this analysis. First, it clearly does not support the contention that tuition subsidies are a subsidy of the rich paid for by the poor. One can only come to that

[29] In the 2000 tax year, the percentage increase in personal income taxes needed to generate the tuition amount, net of the tax credit savings, would be 10.1%.

conclusion if the comparator to subsidized tuition is a head tax. When the comparator is either income (a proxy for general revenue, which is roughly proportional to income) or income tax, the clear conclusion is the opposite. Second, it is an error to base one's thinking about the impact of tuition subsidies on the participation rates of children with high-income parents. Individual returns reporting income of over $100,000 account for only 6% of tuition amount claims. Cutting back on subsidized tuition as a subsidy for the rich amounts to an attack on 6%, with collateral damage of 94%. Hardly an efficient policy, if distributive fairness is the objective. Third, it is clear that a policy that substitutes higher tuition for income tax revenue, or even general government revenue, would itself be regressive.

To the extent that distributive fairness should be an overriding criterion in setting tuition policy, the evidence suggests that higher tuition produces the opposite effect to that claimed by its advocates.

Tuition and access to postsecondary education

As is noted above, it is generally accepted that rates of participation in postsecondary education are systematically related to characteristics of a student's family. Whether the measure is family income, a broader measure of socio-economic status or a characteristic of the head of household, studies tend to find, regardless of the country or time period, that participation increases with family income or socio-economic status, and that students' participation in postsecondary education varies with the level of education attained by their parents.

Relationships between participation rates in higher- and lower-income families vary from measure-to-measure and from study-to-study, but the order of magnitude found in the Statistics Canada study cited above – a participation rate in the highest quintile that is double the participation rate in the lowest quintile – would be typical.

Given the importance that our society assigns to equality of opportunity and the demonstrated relationship between educational attainment and earnings potential, it is not particularly surprising that the under-representation of students from lower-income families in postsecondary education is considered to be a public policy problem.

What is surprising, however, is the tendency of some participants in the debate over education funding to downplay the fundamental insights of economics in considering the impact of the costs of postsecondary education on participation. Basic economics tells us that there is a relationship between the demand for any good or service and its price: the higher the price, the less is demanded of it. Users of the good or service derive varying amounts of benefit from that service. Those who believe that they derive the greatest benefit from the service will tend to be relatively price-insensitive; those who believe that they derive less benefit from the service will tend to be more price-sensitive. On the margin, consumers will either not purchase the service or seek a lower-priced alternative if the price increases. Furthermore, one would expect that students and families with lower incomes would tend to be more price-sensitive than those with higher incomes.

Two types of studies have looked at the impact of tuition on participation in postsecondary education. One type takes total enrolment as the indicator of participation, and follows enrolment or rates of participation over time as tuition changes. The other compares participation in different socioeconomic groups at a particular point in time.

One of the difficulties with longitudinal studies of tuition/enrolment relationships is that tuition impacts can easily be masked by long-term trends towards increased participation. For example, studies of the impact of the introduction of tuition into the university system in Australia have been unable to isolate tuition from long-term trends towards greater participation in that country. Another difficulty lies in distinguishing between demand factors and supply factors in the analysis. If tuition is increasing at the same time as the overall capacity of the postsecondary education system is expanding, enrolment may increase for reasons that have little to do with tuition levels. Both of these difficulties are related to a third factor: the fact that access to postsecondary education is dependent on both financial resources and academic performance relative to admission standards. In other words, the postsecondary education "market" is subject to two different rationing mechanisms: costs; and academic standards.

A recent review conducted by the Educational Policy Institute for the Millennium Scholarship Foundation summarizes the results of the studies as follows:

> "Taken together, the studies of the 1980s and 1990s came to the same conclusion: that increases in tuition fees decrease enrolment. In 1997, Heller listed five key observations based on his meta-analysis of price-response findings:

1. Increases in tuition lead to declines in enrolment.
2. Decreases in financial aid may lead to declines in enrolment.
3. Low-income students are more sensitive to changes in tuition and aid than other students.
4. Black students were more sensitive to tuition and aid changes, while the evidence for Hispanic students was mixed.
5. Students in community colleges were more sensitive to tuition and aid changes."[30]

The core of the EPI study was a review of the impacts of tuition changes in ten jurisdictions: one abolished tuition (Ireland); two froze tuition (Quebec and British Columbia); two increased tuition (England and Australia); and five reduced tuition (Newfoundland and Labrador; Manitoba; Massachusetts; California; and Virginia).

The study conclusions were: "… when tuition fees were frozen, reduced or eliminated, enrolment generally increased, although sometimes by only a small amount. Two countries ran counter to expectations: England, where enrolment increased slightly when tuition was introduced for the first time, and Australia, where it rose dramatically despite large fee increases. This suggests that variation and trends in enrolment are the result of a complex interaction of factors, only some of them based on price." In other words, the extraneous factors influencing enrolment over time make it difficult to draw any clear conclusions about the impact of tuition on enrolment from these longitudinal studies.

These do not address the specific question of the impact of tuition on access to postsecondary education by socio-economic and demographic groups that are currently underrepresented in the postsecondary education system.

The second group of studies, which focuses on differences among socioeconomic groups, is of much more value in addressing access issues. A survey of Ontario community college applicants for the Millennium Scholarship Foundation explored student concerns about financing their education.[31] The survey dealt with three issues: debt-free money (principally from family resources); the expected debt load; and debt repayment.

With respect to debt-free money, the survey found that: "[O]nly 14% of respondents from lower-income households (e.g., incomes under $30,000) said that their parents saved for college. This proportion increases with each income category until it reaches 54% among respondents from households with incomes over $120,000."[32]

Expected debt loads were inversely related to family income. Students from families with incomes below $30,000 expected to accumulate a debt of $7,632 after their first year of college; students from families with incomes between $30,000 and $50,000 expected to accumulate a debt averaging $6,608; students from families with incomes between $50,000 and $90,000 expected a debt of $4,986."[33]

"The expected debt load of many students naturally translates into concerns about funding. … 53% are very concerned about not having enough funds to complete their education (M=3.12), 46% are very concerned about their level of debt upon graduation (M=2.99) and 41% are very concerned about their ability to repay their debts within a reasonable timeframe (M=2.81). … [M]ean levels of concern about funding college education do not vary as much by age as they do by income. Understandably, applicants with lower household incomes tend to report significantly higher levels of concern about all three funding concerns."[34]

Another recently-published study funded by the Millennium Scholarship Foundation provides a useful snapshot of access in postsecondary education generally in Canada and in Ontario.[35] The report summarizes its major findings as follows:

> "More Canadians than ever before are attending college or university, and in the most recent period university enrolment has risen particularly sharply. Yet Canada is still falling short in terms of providing equitable access. This failure serves to deny a significant number of Canadians, particularly those from low-income families, the opportunity to benefit from today's knowledge economy. …
>
> "The costs of attending postsecondary institutions have been rising and universities have become more selective in admitting students. These changes

[30] Watson Scott Swail and Donald E. Heller, Educational Policy Institute "Changes in tuition policy: natural policy experiments in five countries" Canada Millennium Scholarship Foundation, August 2004, p. 3

[31] The 2003 Ontario College Applicant Survey, Canada Millennium Scholarship Foundation, October 2004

[32] Ibid, p. 74

[33] Ibid, p. 83

[34] Ibid, p. 86

[35] "The Price of Knowledge 2004: Access and Student Finance in Canada", Millennium Scholarship Foundation, November 2004

highlight the continuing importance to many students of financial and other barriers to participating in postsecondary education. While these barriers are, for the most part, income-related, this does not mean that the problem is simply insufficient funds. Young people from lower-income families are also affected by poorer secondary school performance and poor information about the costs and benefits of postsecondary education. …

"Student debt has been rising steadily for the better part of two decades. The rate of increase has leveled off in more recent years, but this development is not entirely benign, since it reflects changes in eligibility rules and the fact that student assistance limits are not as generous as they used to be. Once assistance limits increase in 2005 as a result of changes announced in the 2004 Federal Budget, student debt levels will likely experience another significant increase. …

"Governments have increased their overall spending on postsecondary education, but a lesser portion of the money spent on helping students finance their studies is being set aside to help those who need it most. New government spending is therefore not being specifically targeted to promote greater access among traditionally under-represented groups in colleges and universities. …

"Investment in postsecondary education – including investment in financial assistance to help disadvantaged students – pays off, not only for those who attend college or university, but for society as a whole. For instance, the taxes paid on incomes earned by university graduates provide a disproportionate share of the funds government can use to support the social programs that benefit all citizens."[36]

Table 5

Distribution of Medical Students by Neighbourhood Income

Neighbourhood income quintile	% of students
Highest	43.5%
Second	21.6%
Middle	15.1%
Fourth	13.7%
Lowest	6.2%

All of the major findings of this paper are echoed in the report's major themes: problems with access among the children of low-income families; high levels of student debt; and reduced investment in postsecondary education in the face of demonstrated social benefit.

At the university level in Canada specifically, the issue of accessibility in general, and of the impact of tuition increases on accessibility in particular has not been the subject of extensive research. Much of the research in Canada has focused on professional programs. A study by Dhalla et al. published in the Canadian Medical Association Journal in 2002 analyzed the characteristics of the incoming medical school class.[37] In the study, students were assigned to income quintiles based on the median family income in their home census area. The authors found a distribution of students substantially more skewed by income than had comparable studies of undergraduate populations more generally:

In 2002, the Provost of the University of Toronto in a study prepared in support of the U of T Law School's plans for substantial tuition increases highlighted the inequity of access in the status quo.[38] The study found that only 60 of the U of T Law School's 200 incoming students in the year under consideration came from families with incomes below $80,000 per year – an income well above the average family income. The report's conclusions with respect to access – not surprisingly, it found that tuition increases would have no impact – have been the subject of intense criticism on methodological grounds.[39]

A 2004 study of students and graduates in five Ontario law schools by the Social Program Evaluation Group at Queen's University looked at the characteristics of law school students and graduates over a period in which law school tuition had been

[36] Ibid, Summary of Major Themes

[37] Irfan A. Dhalla, Jeff C. Kwong, David L. Streiner, Ralph E. Baddour, Andrea E. Waddell, Ian L. Johnson, "Characteristics of first-year students in Canadian medical schools", CMA Journal 2002 CMAJ,166(8):1029-35

[38] Provost Study of Accessibility and Career Choice in the Faculty of Law, Shirley Neuman, Vice President and Provost, University of Toronto, February 24, 2003

[39] See, for example "Response to the Provost Study of Accessibility and Career Choice in the University of Toronto Faculty of Law", Canadian Bar Association, April 2003.

deregulated, and tuition had increased.[40] Notably, the report found "an increase of 4.7 percent in the proportion of law students' parents who earn incomes in the top 40 percent of the average family income distribution in Canada and a decrease in the proportion of students whose parents earn incomes in the middle 20 percent of the distribution."[41] With respect to student debt, it found wide variances in student expectations. "One fifth of all current law students expected to graduate from law school with no debt, but 27 percent expected to have debt of $40,000 to $70,000 and 13 percent expected to graduate with over $70,000 of debt. … For students and graduates with low debt, personal savings and parents were the primary sources of support, while for students and graduates with high debt, bank and government loans provided the major portion of educational funding."[42]

A study of medical students looked specifically at the income of medical school classes at the University of Western Ontario, before and after substantial tuition increases.[43] It found that, over a four-year period during which tuition increases were phased in, the average family income of a medical student increased from $80,000 to $140,000. In the first year of the study, when tuition was $4,000, 17.3% of students came from families with incomes under $40,000. By the fourth year of the study, students coming from families with incomes under $40,000 had dropped to 7.7% of the incoming student body.

Tuition increases and student aid

The general response from advocates of higher tuition as a way to finance postsecondary education to concerns about equity of access has been, first, to claim that overall equity is better served if postsecondary education is financed from tuition than from general government revenue and second, to assert that issues of equity can be resolved through student financial aid, either grants or loans with favourable repayment terms.

As the income tax data suggest, however, an increase in tuition offset by an equal across-the-board reduction in personal income taxes would in general redistribute income in favour of higher-income taxpayers, at the expense of largely middle-income parents of postsecondary students.

The suggestions that equity concerns can be fully addressed through financial aid to individual students and that grants and loans with favourable repayment terms are reasonable substitutes for each other beg closer examination.

To begin with, the equitable proposition is not as simple or straightforward as it might first seem because of the intergenerational transfer involved in family support for a student's education. Is the objective to offset inequities in family support available for postsecondary education? Or is the objective to offset inequities in the capacity of postsecondary graduates to service debts that they accumulate in the course of their education? The distinction is important, both because the same mix of student aid policies cannot achieve both objectives and because unaddressed differences in family financial resources will influence debt levels, which in turn affect the equity outcomes of debt repayment schemes.

If student assistance is biased towards loans rather than non-repayable assistance, the student's financial position after graduation will be directly affected by the financial circumstances of his or her family. Students from poor families will graduate with substantial debt; students from wealthy families will graduate with no debt. While it is true that providing assistance in the form of non-repayable assistance means that the student will make no extraordinary contribution towards the cost of his or her education, that result puts the student in exactly the same position as that of the student whose parents were able to afford to provide support sufficient to enable the student to avoid incurring debt.

The dubious nature of the equitable proposition involved in providing assistance through loans rather than grants is most clearly illustrated in the context of income contingent repayment plans. Under an income contingent repayment plan like that in operation in Great Britain, students repay their loans at a rate of 9p for each £ of income in excess of a threshold amount. In effect, students with loans will face a marginal tax rate nine percentage points higher than students without loans.

So the equitable proposition looks like this: some

[40] Alan J.C. King, Wendy K. Warren and Sharon R. Miklas "Study of Accessibility to Ontario Law Schools", Social Program Evaluation Group, Queen's University, October 2004

[41] Ibid, p. ii

[42] Ibid, p. v

[43] Dalice A. Sim, "Report of the 1999 Survey of Medical Students (London: Telephone Survey Unit, University of Western Ontario, Department of Epidemiology and Biostatistics, Faculty of Medicine and Dentistry, University of Western Ontario, 1999

students will face a marginal tax rate nine percentage points higher, post graduation, than that faced by others, based on whether their parents were rich or poor. Students with rich parents will pay the normal marginal tax rate. Students with poor parents will pay the higher marginal tax rate. Not only is this outcome difficult to justify on the basis of fairness, it is also counterproductive, given that students from lower-income families have a lower participation rate than students from higher-income families and that one of our public policy goals is apparently to increase that participation rate.

Student financial aid, grants, loans and income contingent repayment

To say that inequities in access created by high tuition levels can be addressed through offsetting student financial assistance is akin to saying that poverty can be eliminated through the implementation of a guaranteed annual income. There are designs for student financial assistance systems that could, in principle, address the issues raised by increased reliance on tuition as well as other financial barriers to participation in postsecondary education, just as there are designs for a guaranteed annual income that could, in principle, address the issue of poverty.

The fundamental problem in designing an offsetting student aid system is that students from middle-income families make up most of the postsecondary student population. A substantial increase in tuition coupled with a student aid system that is concentrated on the lowest-income students will simply shift the financial stress to middle-income students. On the other hand, an aid system that is broad enough to preserve access for middle-income students will be extremely expensive, raising the question of the value of increasing tuition as a way to tax high-income families as opposed to other mechanisms such as the personal income tax.

Despite these problems, it appears from public statements from the Advisor to the Premier and from the content of the Discussion Paper and Workbook of the Postsecondary Review that loans coupled with income contingent repayment are under serious consideration.[44] The next section addresses issues that arise from plan design.

Income contingent repayment plans – design sensitivity and implications

Setting aside the conceptual difficulties associated with income contingent repayment as a means for achieving equity and enhancing access, the outcomes produced by income contingent repayment systems are critically dependent on the actual design of the system.

Under an income contingent repayment system, a student accumulates debt while enrolled, up to a specified maximum amount. While the student is enrolled, the rate of interest on the debt may be set at zero, or may accumulate at either a subsidized or a market-like rate. Upon graduation, the student enters the income contingent repayment system. The loan accumulates interest at either a subsidized or market-like rate. Once the student's income reaches a specified threshold amount, normally linked in some way to market incomes, loan repayment begins. In a typical system, loan repayment would be set at a fixed percentage of the graduate's income above the threshold, although in the Australian system, graduates pay at a graduated rate on all income once the threshold has been reached.

The theory is that graduates will pay off their education-related debts from the additional earnings made possible by their postsecondary education. The threshold serves as a proxy for the graduate's expected earnings without postsecondary education.

In an income contingent repayment system, the key outcome variable is the number of years it will take a former student to repay his or her loan. That, in turn, depends on the rate of interest charged on the debt, the threshold income that triggers repayment, the repayment rate and the graduate's earnings relative to the threshold.

A model of how an income contingent repayment system would work illustrates the point. In the model, we begin with a debt of $20,000 accumulated over a 4-year period of postsecondary study. In the base case, we assume:[45]

[44] See, for example, "`Study now, pay later' plan touted for schools" Toronto Star Oct. 16, 2004. Interestingly enough, income contingent repayment is not exactly a new idea for Ontario. It was advanced as a policy proposal by the Commission on the Future Development of the Universities of Ontario (Bovey Commission), 1984. Furthermore, the current OSAP system, with its substantial investment in loan remission, functions as a kind of income contingent repayment system, albeit of the back-door variety

[45] The design modeled here as the starting point for the analysis is based on the design currently in place in the United Kingdom. In the UK system, interest is charged at the rate of inflation; the threshold income for payback is the average wage; and the tax-back rate is 9%. It is also comparable to the structure used in Australia.

- Interest at 2% during period of study; 2% thereafter;
- A threshold income (the income at which repayment starts) of $25,000;
- Indexation in the threshold income level at the rate of increase of average wages and salaries;
- Average wage / salary of $40,000;
- Individual earnings that begin at 80% of the average wage and increase at 10% per year until they reach a ratio of 1.4 times the average wage;
- A repayment rate of 9% of income in excess of the threshold.

In the base case, it will take the graduate 11 years to repay the loan.

Variations from this base case affect the number of years to repay, as follows.

- Eliminating interest during the period of study reduces the period of repayment to 10 years.
- Reducing the eventual earnings ratio to 1.2 times the average wage increases the period of repayment to 12 years.
- Reducing the rate of increase of earnings from graduation until they reach 1.4 times the average wage from 10% to 5% increases the period of repayment to 17 years.
- Charging interest at 0% while enrolled and 6% after graduation increases the repayment period to 13 years.
- Charging interest at 6% throughout increases the repayment period to 15 years.

Repayment duration is also closely related to the income threshold for repayment. The examples cited above all assume a repayment threshold income of $25,000. If the plan were instead to follow the model being suggested for England and set the threshold income at the average wage, the repayment period is extended to 16 years.

In scenarios in which the student's accumulated debt on graduation is close to his or her income immediately after graduation, repayment periods can become quite extended. In fact, in a scenario with a debt of $7,500 per year, market interest rates and a 5% annual increase in income from a level 80% of the average wage, the loan is not repaid in a 30-year period. What this means is that the repayment periods are highly sensitive to tuition levels.

Table 6

Income contingent repayment examples

	A	B	C	D
Duration of studies	4	4	4	4
Debt accumulated per year	5,000	5,000	7,500	7,500
Interest rate while enrolled	2%	0%	2%	6%
Interest accumulated while enrolled	1,020	–	1,530	4,778
Debt on graduation	21,020	20,000	31,530	34,778
Interest after graduation	2%	2%	2%	6%
Threshold income	25,000	25,000	25,000	25,000
Threshold income indexation rate	3%	3%	3%	3%
Average earnings	40,000	40,000	40,000	40,000
Average earnings escalation rate	3%	3%	3%	3%
Earnings ratio	1.40	1.60	1.20	1.40
Income on graduation (% of average)	80%	60%	80%	90%
Rate of income growth	10%	10%	5%	5%
Tax-back rate	9%	9%	9%	9%
Years to pay back	11	14	21	28
Income on graduation	32,000	24,000	32,000	36,000

Combination "A" is the base case described above.
Combinations "C" and "D" include annual loan accruals consistent with a 50% higher annual tuition.

Table 6 summarizes the assumptions and results for a number of possible combinations of assumptions.

This modeling of possible income contingent repayment loan designs highlights a number of critical issues. First, to avoid situations in which the repayment schedule could become unstable, with the outstanding loan growing more quickly than the income contingent repayment, interest costs will have to be subsidized. Indeed, if the rate of earnings growth is lower than the rate of interest, there is a high probability that loan balances could grow out of control for people with lower rates of earnings growth. This, in turn, means that design options that have the effect of extending the period of repayment such as pegging a higher threshold income or using a lower tax-back rate will also produce substantially higher program costs.

Second, the impact of labour market conditions is evident from these examples. This has significant implications for equity. Graduates who settle in areas in which living standards are lower – in rural areas or small towns, for example – will tend to take longer to pay back loans. Graduates whose employment prospects are in less well-paid sectors of the economy will also take longer to repay loans.

More important from the perspective of equity, graduates in demographic groups that suffer discrimination in employment markets will see those discrepancies magnified through an income contingent loans scheme. For example, the evidence is clear that women tend to earn less than men, even after correcting for occupation and education. This means that women will tend to take longer to repay income contingent loans than men. To the extent that certain groups in society suffer discrimination in employment related to race, ethnicity or disability, the economic costs to the individuals of that discrimination will be reflected directly in the length of time required to repay loans.

Differences in impact based on the characteristics of individual graduates and their families are inherent in income contingent repayment systems. There is no system design that can eliminate these effects.

Tuition, income contingent repayment and equity of access

The principal problem with income contingent repayment plans, from the perspective of equity of access, is that they tend to shift poverty from one generation to the next by placing the burden arising from the fact that a student's parents are unable to pay for his or her education onto the student.

The potential impact of this phenomenon, ironically, is made most clear in the context of the personal decision making model that underlies the argument in favour of income contingent loans themselves.

The theory behind income contingent repayment plans is that prospective students, when deciding on whether or not to pursue a postsecondary education, will consider the potential income gains flowing from additional education in relation to the costs of pursuing that education. The income gain is so substantial, it is argued, that students will make the rational decision and enroll in a postsecondary program even taking into account the contingent repayment costs.

The case for loans with income contingent repayment itself is internally inconsistent. Loan payments will tend to reduce returns to postsecondary education for lower-income students and will tend to discourage students from pursuing postsecondary studies.

But beyond that, the logic itself should be closely examined. The contention that higher tuition, financed through an income contingent repayment plan, will not affect equity of access rests on a series of assumptions about the way families and students make postsecondary education choices, about the information that they have at their disposal in making those choices, and about their attitudes towards the risks associated with those choices.

In the first place, if students from low-income families made their educational decisions in this way, access would not be a problem. Students and families would already be reaching the conclusion that the income gains from postsecondary education exceed the costs; income would not be an obstacle to participation in postsecondary education. The fact that differences in participation exist which are generally accepted as related to income and socio-economic status suggests that factors other than the simple calculation of cost and benefit influence decisions.

One can easily come up with reasonable influences on postsecondary educational decisions that might have a different impact on low-income or otherwise disadvantaged families than on families and students in general:

- Differences in available information. The decision model assumes that students and their parents have reliable and accurate information about earnings potential post-graduation.
- Differences in attitudes towards risk, and perceptions of risk. Lower-income families may have less confidence that an income contingent

loan system will actually be available on graduation than would middle- or upper-income families.

- Differences in assets. One would expect lower-income families without other assets to be less willing to take the risk associated with investment in postsecondary education than families with strong asset bases.
- Differences in the family's perceived time value of money. This may result in a lower-income family attaching a greater implicit value to current costs and/or foregone current income than a cost-benefit model would suggest.
- Differences in expectations with respect to student success. Given issues of access, lower-income and disadvantaged families may have less confidence than other families in the student's ability to succeed in or benefit from a postsecondary educational environment.

All of these factors will tend to reduce expectations of gain from investment in postsecondary education and increase perceptions of risk associated with that investment.

The problem of equalizing access to postsecondary education is much too complex to be addressed adequately by income contingent repayment schemes. In fact, it is not at all difficult to conceive of income contingent repayment designs that would have the effect of shifting access barriers up the income scale into the lower-middle and middle-income ranges.

Indeed, only a very generous – and very expensive – income contingent repayment scheme would avoid that impact.

The only effective way to address these issues is to reduce current costs in a way that does not heighten perceptions of longer-term risk. Increasing tuition and providing loans to cover the increased cost, whether conventional or income contingent, does the opposite.

As a matter of fact, we already have a generally applicable income contingent repayment plan in Ontario. It is called the personal income tax. Gains in income resulting from participation in postsecondary education are subject to tax at the applicable marginal tax rate – in Ontario, a combined federal and provincial marginal tax rate of at least 22.05%. That means that, for every $1,000 in additional income a graduate earns as a result of having graduated from college or university, that student pays at least $220 back to the society that made his or her education possible, in the form of increased income taxes.

Experience with income contingent repayment

Tuition with income contingent repayment is largely a creature of the English speaking nations in the OECD. Australia introduced its income contingent repayment system in 1989; New Zealand in 1992; and the United Kingdom, which introduced its income contingent loan system in 1998 and will be expanding it substantially for the 2005-6 academic year. Scotland introduced its own limited variant of income contingent repayment when it abolished tuition fees in 2001 and required a lump-sum payment upon graduation, contingent on income, to the Graduate Endowment Fund of Scotland. Income contingent payments to the GEFS are administered by the same agency as has the responsibility for the rest of the U.K.[46]

Australia's system is the most well-established of the income contingent repayment systems for student support. It was created in 1989 at the same time as student tuition fees were increased substantially. Although the system has been made more complex through periodic amendments, it essentially works as follows: students are obligated to pay a fee to the government for each year of postsecondary education. The fee is variable, depending on the area of study. Students can pay the fee up-front, and receive a discount of 25%, or they can borrow the money under the Higher Education Contribution Scheme (HECS). HECS loans accumulate interest pegged to the rate of inflation, and are repaid from income earned after the completion of studies at a graduated percentage (maximum 6%) of income earned in excess of a threshold level. The current threshold (for the 2003-4 income year) is $A 25,348 ($23,827).

To date, the HECS payment has been the student's academic fee. Beginning in 2005, however, HECS payments and tuition will be de-coupled, with universities permitted to levy fees up to 30% above the HECS charge.

New Zealand's system, although broadly similar in structure, has a much more onerous repayment system. In its system, loans accumulate at market interest rates, the repayment threshold is much lower ($NZ 16,172, $13,746) and the percentage of income directed towards repayment is higher (10%).

The Scottish system is similar to the Australian and New Zealand schemes in broad structure only. In 2001,

[46] Exchange rates: $1.00 AUS = $0.94 CDN; $1.00 NZ = $0.85 CDN; £1.00 = $2.20 CDN.

the Scottish Parliament abolished tuition fees in Scottish universities. Graduates are instead required to make a contribution of £2,000 ($6,600) to the Graduate Endowment Fund of Scotland. This amount can be paid either as a lump sum, or through an income contingent loan administered on the same basis as the system in the rest of the United Kingdom. Interest is at the rate of inflation; the repayment threshold is £10,000 ($22,000), increasing to £15,000 ($33,000) in 2005; and the tax-back rate is 9%.

The new system to take effect in the U.K. in 2004-5 will follow the income contingent model for loan repayment. However, it is important to note that the income contingent loan repayment system makes up part of an integrated system of financial support for students which includes grants geared to parental income and which also requires universities to provide bursaries of at least £300 ($660) to students from the poorest backgrounds. It is too early to say what the overall impact will be of the system. In light of the fact that the introduction of the new system coincides with a substantial increase in university tuition fees (to a maximum of £3,000, $6,600), however, it is likely that the same issues that have arisen in other jurisdictions that have hiked tuition fees offset by income contingent repayment loans will emerge in the U.K.

The HECS, together with the changes in higher education policy that have accompanied it, has been extremely controversial and divisive in Australia. The main issues concern the impact of the scheme on students from lower-income families and on the finances of Australian universities. In a report published in July, 2004 the National Tertiary Education Industry Union found that, between 1996 and 2003, the amount paid by the average student had increased by 94%, from $A 2,276 to $A 4,413.[47] At the same time, the funding received by universities was reduced by $A 1,740[48] per student.[49]

In New Zealand, controversy has arisen over the differential impact of its income contingent loans scheme on students from disadvantaged demographic groups. A study by the New Zealand Students' Association based on 2001 New Zealand Census data and a model of the loan repayment system commissioned by the NZ Ministry of Education highlights dramatic differences in repayment periods by ethnic group and gender.[50]

It found an average repayment time for men of 15 years; for women, 28 years. For European ethnic groups, the average male repayment time was 13 years; for women, 22 years. For Maori, average male repayment was 16 years; for women, 24 years; and for Pacific ethnic groups, the average male repayment time was 21 years; the average for women was 33 years.

Tuition as a benefit tax

The analysis above questions the use of postgraduate economic benefit as the rationale for a high tuition policy in postsecondary education finance. It challenges assertions concerning the distributional impact of tuition subsidies that fuel the current debate, and highlights the issues of equity raised by the income contingent loan repayment proposals that flow from the economic benefit argument.

This section takes the benefit tax argument at face value, and poses two critical questions: is postsecondary education a good candidate, in principle, for funding through a benefit tax; and even if it is, what share of postsecondary costs would appropriately be paid by students, through tuition.

In traditional public finance analysis of appropriate revenue sources, postsecondary tuition would be seen as a user fee or benefit tax. The public policy choice between grants and student tuition is then a choice between funding from general government revenue and funding from a user fee or benefit tax. In principle, public services can be organized along a continuum between services that are clearly equivalent to services delivered in private markets (public automobile insurance, for example) at one extreme, and services which are either explicitly redistributive (social assistance, for example) or which deliver benefits to society which are indivisible, in the sense that an individual's consumption of the service does not reduce the amount available to others in society (national defense, community policing, etc.).

Even for services that are divisible, the case for benefit taxes is not automatic. There may be an overriding public interest in ensuring that consumption of the service is not constrained by the financial

[47] $2,139 to $4,148 per student

[48] $1,636 per student

[49] "Students Pay (Even) More. Universities Get (Even) Less. An Analysis of the Funding of Government Subsidized Student Places at Australian Universities 1996 to 2003", National Tertiary Education Industry Union, July 2004

[50] "Pacific Students and Debt", New Zealand Students' Association, 2004

resources of the individual, because the service is essential to what is considered to be a basic right, because society as a whole derives benefits from the consumption of the service by individuals, or because subsidizing the consumption of the service is seen as a way to counterbalance an underlying inequity.

Elements of all three rationales are present in the case for public medicare, for example. On the surface, medical care would appear to be a classic case of a market-like public service. However, each of the three qualifications noted above applies. First, as a society, we have come to the conviction that health is a basic human right, and that access to health services is essential to the support of that right. Second, we are all affected to some extent by the health status of others. A portion of the benefit from health care is not divisible and attributable to individuals. Third, to the extent that health status is influenced by social or environmental factors, publicly funded medical care can be seen as a way to offset in part the inequities represented by systematic variations in those factors.

Postsecondary education would appear to be subject to all three of these exceptions to the general benefit taxation principle. Canada is a signatory to international conventions that proclaim education as a basic human right. The conviction that the education of our workforce is the key to our future economic prosperity underlines the social value that is placed by Canadians on education, not just for themselves and their own children, but also for society as a whole. Public education is also the primary mechanism through which our society promotes equality of opportunity, regardless of income or origin. The accepted view of education as 'the great leveler' reflects a social consensus that public education plays an important role in alleviating prior inequities.

The point is that even in cases where a public service delivers a private benefit, it is not obvious that the appropriate way to pay for the service is through benefit taxes. In general, the conclusion with respect to appropriate funding depends on political and social factors as well as on the nature of the benefit provided by the service. The outcomes are sometimes neither internally consistent nor stable over time.

Benefits taxation and the share of tuition in postsecondary funding

Even if one sweeps aside objections in principle to the benefits justification for tuition, the question remains as to the appropriate share for tuition in postsecondary funding.

Historical relationships

One way to approach this question is to look at the relationship between tuition and postsecondary institutions' operating costs over time.

Chart 9 presented the relationship between tuition and Ontario university operating costs from 1976-7 to 2001-2, the most recent year for which final data are available.

Between 1975 and 1980, tuition accounted for roughly 15% of university costs. In the 1980s, the share increased gradually to 20% by 1990. College fees stayed in the range of 10% to 15% of operating expenditures until 1990. By the end of the 1990s, university tuition had jumped to 43% of operating costs; college tuition to more than 30%, as governments took the path of least resistance in response to fiscal pressures, and turned to students for an increased share of university funding.

One possible starting point for an analysis of the appropriate level of tuition from a benefit tax perspective is to assume that the share of expenditures accounted for by tuition at critical turning points in the development of the university funding system in Ontario reflects an implicit view of the division between individual benefit on one hand and societal benefit or social policy on the other. In the mid-1970s, when the basic structure for university funding was complete, tuition made up 15% of the operating costs of Ontario universities. In the late 1980s, when the current system of corridor funding was introduced, the share was 20%.

Tuition currently makes up approximately 45% of the operating funding of universities. This means that tuition levels are 200%, or an average of $3,300 per student, above the level implied by the mid-1970s implicit benefit share. Based on the implicit benefit share from the late 1980s, tuition levels are 100% or $2,500 above the standard.

Obviously, government is under no obligation to preserve historical relationships. However, it is important to recognize that, implicit in the premise that students' share of operating costs must increase is a view that the balance of benefit between individuals and society generally (either as social benefit or as an element of social policy) has shifted substantially towards individuals.

Given the growing recognition of the importance of higher education to Ontario's economic future, such a shift is counter-intuitive.[51] It certainly suggests that the onus should be on those who advocate greater reliance on student tuition for the funding of postsecondary

education to demonstrate that private benefits have grown more quickly than public benefits.

Allocating benefits and costs

Another way of looking at the role of tuition in postsecondary finance is to develop a measure of the share of the benefits generated by colleges and universities that is associated with students' individual economic benefit from postsecondary education.

Because most public services are not traded and therefore do not return a market value to government, the accounting convention is to value public services at their cost.

In postsecondary education finance, the measure of the cost of the service would be the operating cost of the university. From a benefits taxation standpoint, however, the appropriate measure cannot be the entire operating cost of the university. Universities perform a variety of different functions, only one of which is the teaching function that, logically, generates the direct benefit at issue. It is that function that gives rise to the increase in the earnings of individual students, and it is that function that generates the benefit that society enjoys as a result of its investment in students' education.[52]

Consequently, to apply the benefit principle to student tuition and fees, we have to go through a two-step process. First, we have to determine the share of university operating costs attributable to teaching. This tells us what share of university operating cost is appropriately used as a proxy for the benefit generated by teaching. Then we have to attempt to allocate the benefit so determined between the individual and society. This provides us with a measure of the share of university teaching costs that appropriately represents the benefit to students.

A technical paper prepared for the Task Force on Resource Allocation of the Ontario Council on University Affairs in 1994 sheds some light on the first issue.[53] In its major findings, the study concluded as follows:[54]

> "Based on the model described in this technical paper, it is estimated that university expenditures of $3,990 million in 1992-3 can be allocated to teaching, research and community service as follows: between $2 billion and $2.3 billion to teaching; between $1.3 billion and $1.6 billion to research; and approximately $400 million to community service."[55]

This suggests that between 50% and 57.5% of university operating costs can be attributed to teaching and therefore represent the cost-based measure of the benefit arising from student instruction.

For a distribution of benefit between the individual and society, one approach is to look at measures of the individual and social returns to investment in postsecondary education. Two papers cited by the Postsecondary Review provide a range of estimated returns. One, by Craig Riddell of the University of British Columbia, reports a range of 7-10% for private returns to investment in postsecondary education in Canada.[56] The same paper, referring to British and American studies, suggests social returns in the 2% to 4% range.[57]

The second study, by Herb Embry of the University of Calgary, analyzes data on returns to higher education

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[51] It also seems counter-intuitive to be hardening the dividing line between (freely-accessible) high school education and postsecondary education at a time when a first-level postsecondary qualification is replacing high school graduation as the basic standard for new jobs. " Human Resources Development Canada has stated that, by 2004, more than 70% of all new jobs created will demand a university or college education." Denise Doherty-Delorme and Erika Shaker eds., "Missing Pieces: An Alternative Guide to Canadian Postsecondary Education", Canadian Centre for Policy Alternatives, May 2003, p. 30

[52] It should be noted that the simplifying assumption that teaching is the source of the direct benefit to the student from postsecondary education ignores the potential role of reputation or credential in determining earnings after graduation. Although the impact of factors related to reputation has not been quantified in Canadian studies of postgraduate earnings, it is likely that those factors are more likely to play a role in earnings after postgraduate or professional studies than after undergraduate studies. To the extent that such factors, which would be heavily influenced by functions such as research, have an influence on earnings after graduation, this simplifying assumption would tend to understate the share of university operating expenditures that would appropriately be attributed to an undergraduate student's college or university experience. On the other hand, the implicit assumption that the share is a constant across all categories of students – including professional and graduate students – likely results in an overstatement.

[53] "An analysis of the costs of teaching, research and community service; An Estimation Model for the Ontario University System", Technical Paper, Task Force on Resource Allocation, Ontario Council on University Affairs, August 1994.

[54] For reasons unrelated to its use here, the release of this report gave rise to considerable controversy within Ontario's academic community. From the perspective of the university as an intellectual community, distinctions among service, teaching and research are artificial and potentially counterproductive. It was argued that the functions of the university are interdependent and mutually reinforcing and that, as a result attempts to attribute costs to one or another function were, at best, misleading and at worst, an invitation to government and corporate funding agencies to intervene in universities' setting of priorities.

[55] Ibid, p.6

[56] W. Craig Riddell, "The Role of Government in Postsecondary Education in Ontario", a Background Paper for the Panel on the Role of Government in Ontario, August 2003 (Revised October 2003), p. 9.

[57] Ibid, p. 14

in Canada in the period 1960 to 2000.[58] He concludes that private returns of 10% and social returns of 6% are representative of the findings of these studies in the 1960 to 1980 period.[59]

It should be noted that these results measure only direct economic impacts. In particular, the social return estimates do not measure social, community or cultural benefits associated with education, nor do they reflect the value attached by society to the opportunity represented by higher education. Taking these results at face value, they suggest that between 60% and 80% of the total return to investment in undergraduate postsecondary education is a private return to the student.[60]

With teaching accounting for between 50% and 57.5% of university operating costs, this suggests that a student's share of the cost – on a benefits basis – should be between 30% (60% of 50%) and 45% (approximately 80% of 57.5%) of operating costs, with a mid-range estimate of 37.5%.

Given the fact that the current share sits at the top of this range, this analysis suggests that even if one sees postsecondary instruction as delivering a private benefit, the share currently being paid by students more than fully captures that benefit, as measured by the cost of its delivery.

[58] Herb Embry, "Total and Private Returns to University Education in Canada, 1960 to 2030 and in Comparison to other Postsecondary Training", Prepared for: Higher Education in Canada, John Deutsch Institute for the Study of Economic Policy, February 13-14, 2004.

[59] Ibid, p. 23

[60] The low end of the range (60%) is based on the highest estimate of the public return and the lowest estimate of the public return; the high end of the range is based on the lowest estimate of the public return and the highest estimate of the public return. It should be noted that these return estimates measure only direct and indirect economic benefit. They do not take into account secondary social benefits from higher education, such as improved public health etc.

PART 3

POSTSECONDARY FUNDING IN OTHER JURISDICTIONS

In policy research it is common to look to other jurisdictions for examples and ideas. At the same time, however, it is important to ensure that the examples chosen are sufficiently similar to make comparisons meaningful. Virtually the only useful data available for international comparisons of overall levels of expenditure on postsecondary education are collected by the OECD and published annually in the annual Education at a Glance. Because these data are collected at the national level, the OECD data set includes only information for Canada.

There are three measures that are traditionally used to compare national investments in postsecondary education: as a share of GDP; as a share of total public spending; and on a per-student basis. **Table 1** presents all these three measures, for selected OECD countries, for the year 2001.

If one follows the lead of the Postsecondary Review Discussion paper and compares investment in postsecondary education as a share of total public spending, Canada appears to be among the leaders in the OECD, along with the United States. Australia, which promises to figure prominently into the work of the Review, appears to have a commitment to postsecondary education that is comparable to that of Sweden.

There are two substantial problems with this analysis. First, as the OECD notes in a footnote to its tables, the data on postsecondary education expenditures in Canada and the United States include expenditures in areas other than college and university; the data for other countries do not. The Canadian and US figures include expenditures on apprenticeship and trades training, for example, whereas those expenditures are not included for other countries. As a consequence, the data will tend to overstate expenditures in Canada and the United States. Furthermore, comparisons between Canada and the United States will be distorted by differences that are unrelated to college and university investment.

The other more important problem with an analysis based on shares of public spending is that the data are dependent on the size of the public sector in each country. On a "share of public spending" basis, countries with relatively small public sectors such as Australia and the United States will appear to have a larger commitment to public spending on postsecondary education; countries with relatively larger public sectors, such as the Scandinavian countries, will appear to have a relatively smaller commitment.

Measuring public investment in relation to GDP eliminates the distortion created by differences in overall public sector size.

Measured as a share of GDP, Canada's investment in postsecondary education ranks on a par with or slightly below that of the Scandinavian countries, and substan-

Table 7 [61]

Public spending on postsecondary education % of GDP

	% of GDP	% of Total Public Spending	Per-student $US at PPP
Australia	1.18% 3	37%	9,707
Austria	1.37%	2.62%	12,828
Belgium	1.37%	2.76%	11,463
Canada	1.88%	4.58%	16,674
Denmark	2.73%	4.94%	21,384
Finland	2.06%	4.18%	13,078
France	1.01%	1.98%	8,258
Germany	1.12%	2.38%	11,245
Iceland	1.12%	2.53%	9,559
Ireland	1.24%	3.70%	9,291
Netherlands	1.32%	2.83%	13,276
New Zealand	1.77%	n/a	n/a
Norway	1.85%	n/a	19,061
Sweden	2.05%	3.58%	18,549
Switzerland	1.27%	n/a	n/a
United Kingdom	0.81%	1.97%	8,059
United States	1.48%	4.51%	12,077

Note: Data for Canada and United States include postsecondary expenditures other than college and university based on the lowest estimate of the public return. It should be noted that these return estimates measure only direct and indirect economic benefit. They do not take into account secondary social benefits from higher education, such as improved public health, etc.

[61] Source: "Education at a Glance, 2004", OECD 2004, tables B4.1 and B1.6

tially above that of Australia, New Zealand, Britain and the United States.

Chart 16 presents the data graphically.

Measuring on a per-student basis[62] produces a similar result to the "share of GDP" comparison. Canada's per-student public expenditure falls within the range of the Scandinavian countries, and substantially above that of Australia, Britain, and the United States.

The OECD data also provide the basis for a comparison of funding levels and sources for postsecondary educational institutions.

The data for 2001 are presented in **Table 8**.

From these data, we see a public commitment to postsecondary education in Canada that is significantly greater, as a share of GDP, than that of the UK, USA, Australia or New Zealand. As is the case for public spending overall, Canada's investment is most closely comparable to that of the Scandinavian countries. With respect to public/private mix, Canada occupies a middle ground, between the United States and Australia on one hand with relatively high private shares and most of Europe on the other, with relatively small private shares.

Despite similarity in public investment relative to GDP between Canada and the Scandinavian countries, Canadian studies of postsecondary education finance tend to focus on the English-speaking members of the OECD as international comparators. For example, the Advisory Panel on Future Directions for Postsecondary Education (known as the Smith Committee) in its 1996 report conducted for the Harris Government in Ontario looked to postsecondary education funding at public universities in the United States as a measure of how Ontario's funding stacked up against the competition in the U.S.[64] It found that, in 1994-5, total revenue

Table 8 [63]

Spending on postsecondary institutions % GDP

	Public	Private	Total	Share of total represented by public expenditure
Australia	0.80%	0.73%	1.54%	52%
Austria	1.19%	0.01%	1.20%	99%
Belgium	1.22%	0.16%	1.38%	89%
Canada	.53%	1.01%	2.52%	61%
Denmark	1.78%	0.04%	1.82%	98%
Finland	1.68%	0.04%	1.73%	97%
France	0.95%	0.13%	1.08%	88%
Germany	0.95%	0.09%	1.04%	91%
Iceland	0.85%	0.04%	0.90%	95%
Ireland	1.14%	0.20%	1.34%	85%
Netherlands	1.03%	0.26%	1.29%	80%
New Zealand	0.93%	n/a	n/a	n/a
Norway	1.28%	0.04%	1.28%	100%
Sweden	1.48%	0.20%	1.68%	88%
Switzerland	1.27%	n/a	n/a	n/a
United Kingdom	0.79%	0.29%	1.08%	73%
United States	0.93%	1.80%	2.73%	34%

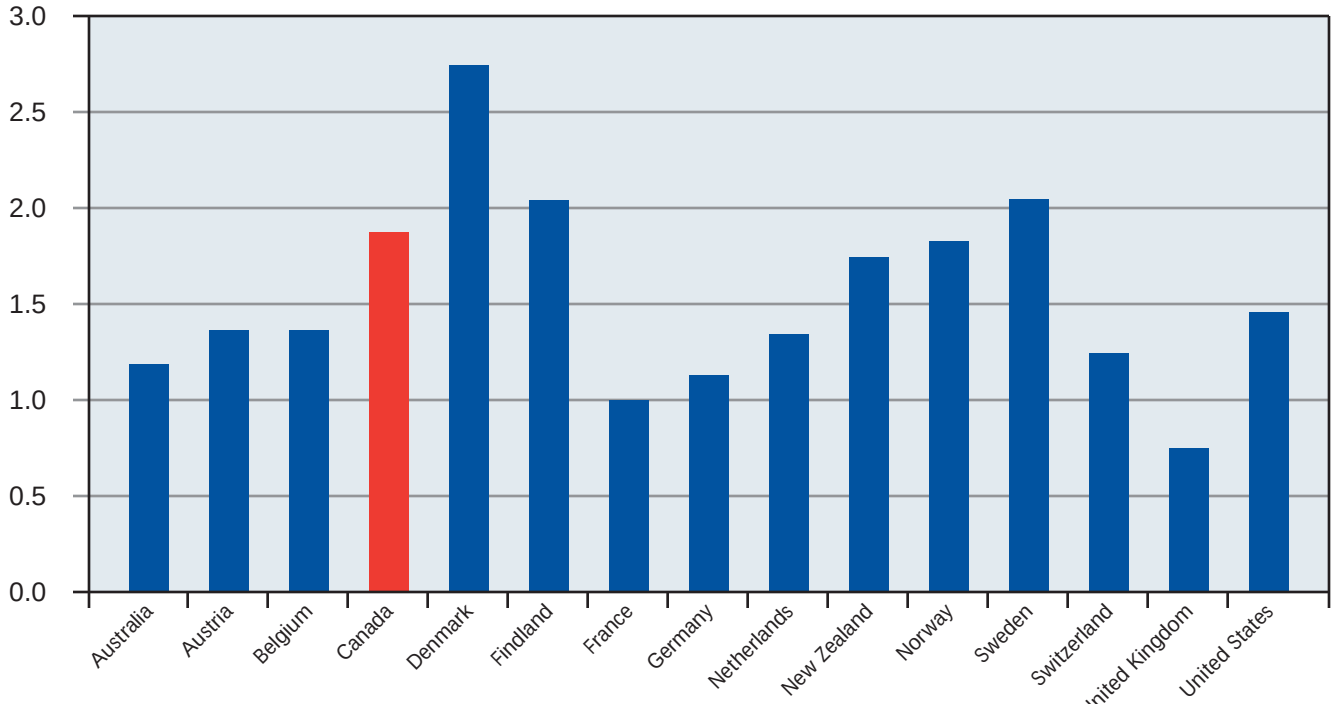
Column 1 shows public spending on postsecondary institutions as a share of GDP. Column 2 shows private spending as a share of GDP. Column 3 is the total. Column 4 presents public spending on postsecondary educational institutions as a share of the total.

[62] Canada did not report enrolment data to the OECD for the 2004 Education at a Glance publication. Per-student numbers for Canada are estimated using data obtained separately from other sources.

[63] Source: "Education at a Glance, 2004", OECD, table B2.1b

CHART 16

Public Expenditure on postsecondary education % of GDP
Selected OECD Countries – 2001



Note: For Canada and the USA, includes postsecondary expenditures other than college and university

per FTE enrolment was $14,637 in Ontario, $19,404 in the U.S. as a whole and $20,022 in 11 states selected as peer states.[65]

In addition to reinforcing the conclusion from domestic data that Ontario lags behind other jurisdictions in North America in its funding for postsecondary education, the Smith Committee's comparison with the United States highlights two problems associated with international comparisons: the implicit assumption that the system in the comparator jurisdiction is considered appropriate in that jurisdiction; and the fact that such comparisons are inevitably only snapshots of often evolving situations.

Each of these points is addressed in major studies of affordability in higher education conducted by the National Centre for Public Policy and Higher Education.[66] In 2002, six years after the Smith Committee's report, the National Centre identified five national trends in public higher education in the United States:

- "Increases in tuition have made colleges and universities less affordable for most American families.
- Federal and state financial aid to students has not kept pace with increases in tuition.
- More students and families at all income levels are borrowing more than ever before to pay for college.
- The steepest increases in public college tuition have been imposed during times of greatest economic hardship.
- State financial support of public higher education has increased, but tuition has increased more."[67]

An update in 2003 concluded as follows:

"State spending for public colleges and universities

[64] "Excellence, Accessibility, Responsibility: Report of the Advisory Panel on Future Directions for Postsecondary Education", Ministry of Education and Training, Government of Ontario, December 1996

[65] Ibid, p. 24 Comparisons are in Canadian dollars, converted from U.S. dollars at purchasing power parities. The ten peer states used were California, Florida, Indiana, Michigan, Minnesota, New York, Ohio, Pennsylvania, Texas and Wisconsin.

[66] "A National Status Report on the Affordability of American Higher Education", The National Centre for Public Policy and Higher Education, San Jose California, 2002 and "College Affordability in Jeopardy: A Special Supplement to National Crosstalk", National Crosstalk, The National Centre for Public Policy and Higher Education, San Jose, California, Winter 2003

[67] Losing Ground, p.3

dropped sharply last year, as the state-by-state numbers contained in this special report from the National Center for Public Policy and Higher Education demonstrate. At the same time, tuition and required fee charges rose significantly in many states, and some states reduced their student financial aid programs. The result was the worst fiscal news for public higher education institutions and their students in at least a decade, as the economic recession struck almost every state. So far this year, the picture looks even bleaker, with states continuing to cut higher education appropriations and campuses responding by raising tuition even higher, imposing new fees and reducing student financial assistance."[68]

To select a jurisdiction as a possible policy example to be followed is implicitly to assume an absence of controversy in the jurisdiction. That implicit assumption may or may not be valid, as the example of the United States cited above makes clear.

The Postsecondary Review draws on the examples of England, Australia and New Zealand in support of its inclination towards high-tuition combined with financial aid delivered in the form of income contingent repayable loans as part of its strategy for revitalizing postsecondary education funding.[69] What the Review does not reveal, however, is the extent of the controversy surrounding that very policy in each of the three jurisdictions cited.

The Review's selection of these three jurisdictions as examples illustrates another issue with such comparisons: the selection of the comparator jurisdictions. As useful as international comparisons may seem in support of arguments for one or another approach to reform, it is important to look at comparator jurisdictions in context. Every system operates in its own context, under its own economic and political pressures. And every policy idea, no matter how intriguing, operates within a system.

The most natural place to look for comparisons is to systems that are similar to our own. The English speaking OECD countries – the United Kingdom, Ireland, Australia, New Zealand and the United States – appear to be obvious choices for comparison because the basic architecture of the systems is similar. That similarity, however, masks differences in structure and in approaches to funding that potentially affect the validity of comparisons.

Another approach to comparing international jurisdictions is on the basis of their support for post-secondary students. The European Commission breaks the systems down to four models among the countries of the EU:

- Tuition-free enrolment plus student support to cover the cost of living – the Nordic countries, Scotland, Bulgaria and Malta;
- Tuition-free enrolment, plus support for cost of living provided to students and parents – Germany, Greece, Luxembourg, Lichtenstein, the Czech Republic, Romania and Slovakia;
- Tuition fees plus student support for cost of living and tuition fees – Netherlands, UK, Hungary and Poland; and
- Tuition fees plus support for cost of living and tuition fees provided to students and parents – Belgium, Spain, France, Ireland, Italy, Austria, Portugal and Slovenia.[70]

Finnie et al. suggest a similar typology in their 2004 paper for the Institute for Research on Public Policy.

- The student-centred model, in which tuition fees are high and students are assumed to be primarily responsible for funding their education – Australia, New Zealand, the UK (except Scotland), Japan, United States;
- The parent-centred model, in which tuition fees are low or zero and support for other costs is directed towards the students' family – Austria, Belgium, France, Germany, Italy and Spain;
- The independent student model, in which students do not make tuition payments, and support for other living costs is provided to the student (40% to 60% grants, the remainder loans) – Denmark, Finland, Iceland, Norway and Sweden; and
- The Compromise model, combining tuition, student support and parental support – the Netherlands. [71]

The system currently applicable in Ontario is closest to the models that combine tuition with support for

[68] College Affordability, p.1

[69] "`Study now, pay later' plan touted for schools", Toronto Star Oct. 16, 2004

[70] "Key Data on Education in Europe, 2002", European Commission, EURYDICE, 2003

[71] Ross Finnie, Alex Usher and Hans Vossensteyn, "Meeting the Need: A New Architecture for Canada's Student Financial Aid System" Policy Matters, Institute for Research on Public Policy, Vol. 5, no. 7, pp. 20-26

both parents and students in the form of both loans and grants. In choosing to focus its discussion of international examples on Australia, New Zealand and the United Kingdom (excluding Scotland), the Post-secondary Review is focusing its attention exclusively on approaches to postsecondary funding which fall within a single category – the high-tuition, student focused model.

Canada and Ontario are already characterized by relatively high levels of tuition paid in public systems, by international standards. In that respect, the Review is not straying very far from the status quo in its consideration of alternative models. As far as student support is concerned, however, the option of higher tuition coupled with aid delivered in the form of loans subject to income contingent repayment represents a shift towards student responsibility and away from parental responsibility.

To suggest, by omission, that these are the only available options is misleading.

The countries that follow the "low or zero tuition with student based financial assistance" or the "independent student" models in the typologies cited above also happen to be the only countries in the OECD whose public investment in postsecondary education, as a share of GDP, is in a comparable range to that applicable in Canada: Norway, Sweden, Finland and Denmark.

In Norway, there is no tuition fee, other than a nominal registration fee. Student support is divided between loans and grants.

> "The State Educational Loan Fund allocates grants and loans to pupils and students according to an official cost of living estimate, stipulated in yearly regulations. Over the past few years, this cost of living estimate has been regulated approximately in accordance with the inflation rate. An effort is being made to give a higher share of the total financial support awarded as grants. For a single student taking up the maximum grant and loan according to the cost of living estimate, the share of the grant was 13 % of the maximum in 1992/93, increased steadily to 26 % in 1995/96, 28% in 1997/98 and will be 30 % in 1998/99."[72]

Sweden's system is essentially the same as Norway's, with free tuition, nominal other fees and full support provided, through a blending of grants and loans. Loans are amortized over a period of 25 years, with payments escalating at 2% per year.[73]

[72] "General organization of the education system and administration of education", Ministry of Education, Research and Church Affairs, Government of Norway, 1999 http://odin.dep.no/ufd/engelsk/publ/veiledninger/014005-990621/hov002-bn.html#P1526_98289

[73] Database Student-Parent Cost by Country: Sweden, International Comparative Higher Education Finance and Accessibility Project, SUNY Buffalo, Sweden, http://www.gse.buffalo.edu/org/inthigheredfinance/region_europe_Sweden.htm

CONCLUSIONS

The one common factor in the evolution of Ontario's fiscal policies towards its postsecondary education system is that, when it comes to the fiscal crunch, governments look to students and their parents and increased student tuition as the path of least resistance.

In spite of official statements about the need for students to pay an appropriate share of the costs of their education and about the need to target funding for postsecondary education to those most in need of assistance, the bottom line is inevitably the bottom line. Governments have long recognized that they can cut back on funding for postsecondary institutions, and avoid disastrous impacts on program viability by opening the doors to higher tuition. In effect, it is a relatively painless way to increase government revenue without raising taxes.

It is a consequence of fiscal expediency that Ontario and Canada have come to rely so heavily on student tuition to finance postsecondary education – a reliance that puts this province and this country in a small minority of countries in the OECD that rely heavily on tuition for the financing of public postsecondary education.

Unfortunately, the Postsecondary Review appears to be construing its mandate so as to make a continuation along the path of least resistance almost inevitable.

Beyond the obvious point of agreement – that postsecondary education in Ontario is significantly under funded and requires a major injection of new resources — the analysis in this paper raises questions about that path of least resistance.

It estimates that colleges and universities will require additional funding for operations of $2 billion per year just to reach the average of the other provinces in Canada.

It points to the need for substantial and continuing reinvestment in capital for postsecondary education in Ontario.

Looking at the use of tuition for university funding, it finds that even if one accepts the premise that student tuition should be linked to the student's benefit from postsecondary education, the current share of tuition in university funding – 45% — is already at the upper end of the estimated range of 35-45% for the appropriate share based on teaching costs and the division of benefits between students and society generally.

It finds that the oft-repeated contention that subsidized tuition constitutes an income transfer from poor taxpayers to rich taxpayers to be factually incorrect. Indeed, the data suggest that on balance, subsidized tuition is a benefit that is enjoyed primarily by the children of middle-income families and is paid for, through the tax system, primarily by middle-income families.

It raises important questions about the equity and potential impact of the model that calls for high-tuition and high loans with income contingent repayment, which is actively under consideration by the Review. What concept of equity is served by a system that will result in graduates from poor families paying higher marginal tax rates than graduates from well-off families? What concept of equity is served by a system that replicates, in higher and more prolonged debt burdens, the inequities in family incomes before graduation and in the labour market after graduation? What purpose is served by imposing a penalty on all students in the form of higher tuition in order to avoid providing a subsidy to a small minority of students from wealthy families? And what is wrong with the income contingent repayment system we have now – the personal income tax system?

It highlights the implicit bias inherent in restricting international comparison to Australia, New Zealand, the United States and Great Britain (excluding Scotland), noting that alternative models based on low tuition are common in jurisdictions that are otherwise comparable to Canada. Scotland, Ireland and the Scandinavian countries all provide postsecondary education free of tuition to all students who meet the qualifications necessary to attend.

Choosing to focus on Australia, New Zealand and Great Britain as the source of models for change may serve the path of least resistance in postsecondary education finance, but it does not serve the interests of students or their families, and it is not in the public interest.

APPENDIX A – College and University Tuition

Table A1

Average College Tuition Fees in Canada

	1990-91	Rank	1999-0	Rank	2003-4	Rank
Nfld. & Lab.	484	2	1,452	4	1,452	3
PEI	1,118	10	2,000	7	3,250	10
NS	767	8	1,500	5	2,250	5
NB	500	3	2,400	10	2,400	6
PQ	–		–	1	–	1
Ont.	740	7	1,684	6	1,820	4
Man.	720	6	2,055	8	2,893	9
Sask.	574	4	2,130	9	2,840	8
Alta.	605	5	1,435	3	1,292	2
BC	1,061	9	1,340	2	2,479	7

Date: June 2003
Source: Council on Postsecondary Education

Table A2[74]

Average undergraduate tuition fees by province

	1990/91	Rank	1999/00	Rank	2003/04	Rank	2004/05	Rank
Canada	1,464		3,328		4,018		4,172	
Nfld. & Lab.	1,344	3	3,373	5	2,606	2	2,606	2
PEI	1,874	8	3,499	7	4,133	5	4,374	4
NS	1,941	10	4,262	10	5,556	10	5,984	10
NB	1,925	9	3,350	3	4,457	6	4,719	5
PQ	904	1	1,813	1	1,865	1	1,890	1
Ont.	1,680	6	4,084	9	4,911	9	4,960	9
Alta.	1,286	2	3,723	8	4,511	7	4,804	7
Man.	1,512	4	3,488	6	3,155	3	3,160	3
Sask.	1,545	5	3,367	4	4,644	8	4,894	8
BC	1,808	7	2,568	2	4,098	4	4,735	6

[74] Statistics Canada, "Tuition and Living Accommodation Costs for Full-time Students at Canadian Degree Granting Institutions", Statistics Canada Daily, 2 September 2004.

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The Ontario Coalition for Postsecondary Education includes the following organizations:

Canadian Federation of Students
http://www.cfsontario.ca/main.shtml

Canadian Union of Public Employees
http://www.cupe.on.ca/

College Student Alliance
http://www.csaontario.org/index.php

Ontario Confederation of University Faculty Associations
http://www.ocufa.on.ca/

Ontario Public Service Employees Union
http://www.opseu.org/

Ontario Undergraduate Student Alliance
http://www.ousa.on.ca/home.html

United Steelworkers of America
http://www.uswa.ca/