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Towards a New Compact for University Education in Ontario

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Towards a New Compact for University Education in Ontario

Abstract

Over the past decade, a number of different industrialized democracies have critically examined the structure and performance of their postsecondary education systems. By and large, the focus of this attention has been on the capacity of the state to support the needs and aspirations of the traditional publicly funded research-intensive university. In the received model, the public research university receives significant levels of funding from the state to support its research and teaching activities, but is subject to some level of state oversight and control so as to render the activities of the institution congruent with the public interest. The level of state intervention in the affairs of the public research university (and its precise form) varies of course from jurisdiction to jurisdiction, but typically involves some regulation of programs (priority may be placed on education and research programs that are geared to the local economy), tuition fees (typically set at below market rates), student financial assistance, and admissions (preferential treatment for in-state versus out-of-state or out-of-country students). In contrast, privately funded research universities (to the extent that they are permitted to operate in jurisdictions supporting public university education) are not subject to the same degree of oversight, but also do not receive the same degree of public funding.

Disciplines

Education

Comments

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Towards a New Compact in University Education in Ontario

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Over the past decade, a number of different industrialized democracies have critically examined the structure and performance of their post-secondary education systems. By and large, the focus of this attention has been on the capacity of the state to support the needs and aspirations of the traditional publicly funded research-intensive university. In the received model, the public research university receives significant levels of funding from the state to support its research and teaching activities, but is subject to some level of state oversight and control so as to render the activities of the institution congruent with the public interest. The level of state intervention in the affairs of the public research university (and its precise form) varies of course from jurisdiction to jurisdiction, but typically involves some regulation of programs (priority may be placed on education and research programs that are geared to the local economy), tuition fees (typically set at below market rates), student financial assistance, and admissions (preferential treatment for in-state versus out-of-state or out-of-country students). In contrast, privately funded research universities (to the extent that they are permitted to operate in jurisdictions supporting public university education) are not subject to the same degree of oversight, but also do not receive the same degree of public funding.¹

Concerns over the capacity of the publicly funded research university to respond to social needs emanates from a number of different sources. First, given the significant private benefits that are conferred on university graduates (in terms of both their increased social status and enhanced earning power), there is concern over the ability of the publicly funded university system to accommodate the burgeoning interest of students (and their families) in obtaining higher education. In a setting

where publicly funded universities enjoy a statutory monopoly on the provision of university education, and assuming that the quality of existing programs is to be held constant, any expansion in university enrollment necessarily requires either an increase in the level of state support for the system and/or relaxation of some of the tuition constraints set by government so that students end up bearing more of the costs of their education relative to the benefits received. Second, concern over capacity constraints in the public university system may also lead the state to consider the scope for entry by private institutions, which in turn raises questions of the appropriate scope for governmental financial support and regulation. Third, another concern is the growing competitive threat posed by elite private universities (particularly in the United States) for the very best students and faculty. To the extent that publicly funded research universities lack the resources or flexibility to attract and retain outstanding faculty and students, the quality of their institutional performance will suffer accordingly. Not surprisingly, the intensity of the threat posed by well-funded private universities to the publicly funded university has spawned a debate over the suitability of relaxing certain constraints that govern the affairs of the public university system.

In much of our scholarly or government advisory work on public policy issues in the past, we have emphasized the importance of the appropriate choice of instrument in vindicating widely-shared public policy goals. In the context of post-secondary education, it is at least as important to be clear on the goals or ends of post-secondary education and then to evaluate whether a superior choice of instrument or means is available than policies presently exhibit to more fully vindicate these goals or ends. Thus, we first examine the desired ends of higher education. We then discuss the various rationales for government intervention. Next we proceed to explore in greater depth the various criticisms and problems of the present instruments governing publicly funded research-intensive universities throughout the industrialized democracies. We then focus specifically on problems facing the Ontario post-secondary sector. Finally, we propose modifications to the current Ontario model designed to increase the level of public and private revenue for public universities which in our view would enhance international standards of excellence in teaching and research while enhancing student equality of opportunity – modifications that in our view will provide a better fit of goals and instruments (ends and means).

1. The Ends of Post-Secondary Education and the Rationales for Government Intervention

There are two quite different but complementary enterprises that motivate the existence of post-secondary institutions.² The first is a teaching or educational mandate. As with primary and secondary education, this educational mandate can be understood as having two motivations. The first motivation is that of instilling in students the skills and knowledge that are required to engage in a specific profession or vocation. University professional programs – medicine, dentistry, pharmacy, nursing, law, management, and engineering – fall squarely into this ‘skills’ portion of the educational mandate. These programs confer substantial private benefits on students in the form of increased human capital. Riddell, for instance, has found most estimates place ‘average real rates of return to post-secondary education at 6–9% for men and 8–10% for women, although there are substantial differences across fields of study.’³ The second aim of the teaching mandate is to enable students to mature into effective citizens – fully capable participants in a culturally rich, diverse, democratic society. The fulfillment of this aim is largely the domain of undergraduate arts programmes and advanced liberal arts graduate programmes, although to some extent all programs contribute to this end. The second enterprise that motivates the existence of post-secondary institutions is the pursuit and amplification of knowledge through rigorous scholarly research. Such research can be conducted at either a basic or applied level (or, typically, at both levels), and confers significant benefits on humankind in the form of new understandings of the human condition and the physical environment.⁴ In the research-intensive university, neither of these activities can be said to take precedence over the other. Its teaching and research missions fortify and complement one another, and account for its distinctive strengths and longevity.

Given this time-honoured role of the research-intensive university, what is the rationale for government intervention in this area? There are three main rationales that to varying degrees support public involvement in post-secondary education. First, the positive externalities associated with post-secondary education, emanating from the civic virtue and citizenship values that are nurtured in students, ground a case for public subsidization. So, too, do the positive externalities associated with various types of research activities. Second, there may be a weak

paternalism role for government insofar as students may suffer from informational deficiencies when determining which program of study to pursue at which institution. Third, given the human-capital market limitations that constrain private capital available to students, there is a strong case for government intervention based on equality of opportunity goals.

Positive Externalities

Markets fail to reach efficient outcomes when decision-makers do not experience the full consequences – that is, bear all the costs and reap all the benefits – of their actions. Therefore, a case for government subsidization in the market for post-secondary education is made out to the extent that a significant portion of the benefits of post-secondary education – an enhanced civic culture, valuable research breakthroughs, and increased community cohesion – accrue to the public good and not to individual decision-makers alone (i.e. potential students). It makes intuitive economic sense to argue that the government should subsidize the cost of post-secondary education to the extent that society at large reaps the benefits, and because they are likely to be sub-optimally supplied. Concomitantly, individual students should pay the costs of post-secondary education to the extent that they individually reap the private benefits of their post-secondary education. If such a system operated in a world of perfect information and rationality, a socially optimal level of post-secondary education would be ‘produced’ and ‘consumed’ in the marketplace.⁶

Although drawing this dichotomy in the benefits of post-secondary education is overly simplistic and fraught with measurement difficulties, it has utility as a framing idea. Consider the fact that typically post-secondary education that increases a student’s future income⁷ will increase societal wealth and, derivatively, government tax revenue, thereby providing concrete benefits to society.⁸ In this way, even the most skills-oriented program is likely to generate social benefits. However, the intangible positive externalities – the creation of a robust civic culture and increased community cohesion – associated with post-secondary education in the arts and professions are probably at least as valuable in the long run as these indirect fiscal dividends.⁹ In any event, using the public/private benefit dichotomy we have a *prima facie* case for government intervention in post-secondary education to the extent that mixed private and public funding is required to match the costs of

post-secondary education with those garnering the benefits flowing there from.

Another related rationale for public intervention in relation to post-secondary education concerns the university's research activities. Because basic (and even applied) research has the character of a public good (its benefits are appropriable by all), it will be under-supplied by the market; as a consequence, there is a role for government in subsidizing the production of research. Absent this supplementary funding, it is highly unlikely that private parties will dedicate a socially optimal amount of their own resources to research if they will not be able to reap the full range of benefits.¹⁰ In the last decade or so, considerable attention has been devoted to the role played by research-intensive universities in spawning industrial innovation. In light of this recognition, governments in a number of jurisdictions have increased the level of public funding keyed to both basic and applied research.¹¹ Riddell contends that the social benefits of post-secondary education are substantial and may, in fact, approximate the private returns (7–10%).¹²

Paternalism

Participation in post-secondary education, unlike participation in primary and secondary education, is not mandatory but optional. Accordingly, one can assume that each individual is making a rational choice to acquire a set of skills or form of learning that will be of significant personal value to them upon graduation. In these terms, government should be understandably wary of exercising a paternalistic role in shaping choices in relation to post-secondary education, because the choice of one's vocation is central to one's mode of life and thus to one's very sense of self-fulfillment. Moreover, given that nearly all potential post-secondary students will have already completed twelve years of formal education before making these choices, they should be regarded as being capable of making rational and informed decisions regarding the appropriate future course of their education.

There may be some modest scope for government intervention grounded on paternalism rationales in the form of a government-mandated disclosure system that would seek to attenuate information asymmetries existing between students and post-secondary institutions, although it is not clear that students themselves are incapable of recognizing the existence of these asymmetries and securing privately produced information (in the form of rankings, university evaluations) that

would assist them in making informed choices. Government-mandated disclosure would require institutions receiving public funds to publish information respecting the quality of the entering class, the quality and character of the academic program (course offerings, class sizes, faculty/student ratios), student completion rates, faculty research activity, and career placement patterns for graduates.

Equality of Opportunity

Although post-secondary education should not be considered a right available to all citizens irrespective of individual merit, true equality of opportunity among equally meritorious citizens (however one defines meritorious in this context) is a benefit of considerable importance. Professional schools play a pivotal 'gatekeeper' role in determining access to the corridors of power within a democratic system.¹³ The representation of various communities in positions of power and in the professions must be of concern. Thus, we should take seriously the broader social consequences of admissions policies in such institutions. However, given the current competitive landscape, and the role of various legal restrictions on discriminatory admissions practices, most universities are committed to recruiting the strongest possible student body, and thus the admissions decision is typically merit driven. The difficulty, however, arises in relation to the capacity of the admitted student to afford the prescribed tuition levels, particularly when limitations in human capital markets constrain the capacity of meritorious students to borrow to finance their education against the collateral of their human capital. Consequently, there is a need for government intervention to compensate for these failures and to ensure equality of opportunity for all students.

2. Modes of Government Intervention: Problems in the Present System

As indicated earlier, there is a significant distinction between the private and public university models in terms of the level of institutional flexibility and overall resource support enjoyed by each. However, even within the public university model, there is considerable variation across jurisdictions in the precise way in which funding is transferred to institutions by the state (number of levels of government involved, performance- or non-performance-based funding, tied or untied pro-

gram funding, degree of tuition pricing flexibility). Of course, there is also considerable variance across jurisdictions in the actual magnitude of state support that is provided to public universities. Yet despite this variance in the character and level of state support, the demands that have been placed on the public university have forced re-examination of the central tenets of government intervention in this area. In the following discussion, we briefly highlight some of the defects in state support in order to consider the desirability and design challenges of an alternative model.

Increased Demand for Higher Education

One of the most significant challenges facing the received system of publicly delivered university education emanates from the growing level of student interest in obtaining a university education. Over the last two decades, there has been a steady increase in the demand for university education, at both the undergraduate and graduate levels. This trend reflects, of course, underlying population trends (i.e., the rise in the number of children in the 'echo-boom' cohort), but also a secular increase in the demand for higher education programs among the cohort. Further fuelling the demand for higher education in developed countries is the rapidly surging population of students from developing countries who are interested in securing a university education abroad (particularly in OECD countries). In tandem, these demands have placed excessive strain on existing public systems, particularly where enrolment increases require enhanced funding support from sponsoring governments in order for universities to expand programs and facilities.

To the extent that governments have not been able to support program expansion through enhanced public funding, universities have reacted in a number of different ways. Some have simply refused to increase their enrolment base, which means that otherwise qualified students may be deprived of the benefits of higher education. Alternatively, public universities may agree to enroll additional students (as a result of pressure from sponsoring governments), but their decision to do so has come at the cost of reduced program quality, as universities have increased student-faculty ratios or reduced program offerings. Other universities have sought to accommodate enrollment increases by enlisting additional external financial support for the university from private benefaction, industry, or private foundations. In some

cases, public institutions have sought and obtained increased governmental support for tuition increases, but typically these are still severely constrained, and often seek to differentiate funding support on the basis of student residency (in or out of state) or the character of program study. In the former case, the striking disparities in the level of fees charged by institutions depending on the jurisdiction of the participating student may raise vexing distributional questions when, for instance, the least advantaged students from developing countries are required to pay a substantial tuition premium relative to much more privileged domestic students in developed countries. A further problem with differential student fees relates to the discriminatory impact that this fee structure has on freedom of movement within nations when deployed by lower-level governments.

Regressive Subsidization

Another challenge facing the current system of publicly funded universities relates to the highly regressive character of the funding formulas typically used to allocate funds to recipient universities. Because public universities are typically funded out of consolidated revenues (on a per student basis), and because children of higher socio-economic groups participate disproportionately in higher education, the system of flat based funding constitutes a regressive transfer from poorer to more affluent families.¹⁴ This pattern of public support that perpetuates, rather than attenuates, intergenerational advantages has long been the subject of criticism by commentators from several different political perspectives. Because of this regressive transfer, Nicholas Barr, among others, is highly critical of using general tax revenues to finance higher education. 'The taxes of poor families contribute to the consumption by the rich of a university education which helps to keep them rich.'¹⁵ Chapman and Greenaway argue that 'not only is it the case that graduates receive high returns on average to investment in university there is also no doubt that university students are more likely to come from more privileged backgrounds.'¹⁶ The authors argue that the combination of these factors makes a system that does not charge (or minimally charges) students for their post-secondary educations 'unquestionably regressive.'¹⁷ That is, taxpayers, who do not receive as many benefits from post-secondary education as graduates, are required to finance the majority of others' educations.

Quality

Quite apart from the distributional concerns that are associated with existing systems of public delivery of university education, another set of challenges relates to the quality of programs that public universities can offer, particularly in relation to elite private institutions. At one level, the problem is one of the overall level of resources. Overall expenditure levels at elite private institutions are significantly higher than comparable levels at public universities, particularly when expressed on a per student basis. This funding advantage reflects the much greater regulatory latitude enjoyed by private institutions in securing tuition fees from students, which are typically only constrained by the market. This tuition revenue advantage is further buttressed by the large accumulated endowments (which generate significant income) and discretionary public research subsidies received by many elite private institutions. In conjunction, the higher levels of revenue enjoyed by elite private institutions confer a significant advantage on these institutions in recruiting and retaining outstanding faculty in an increasingly competitive international labour market, in mounting innovative teaching programs, and in supporting complex and novel research activities.¹⁸ The failure to allow public institutions to secure the funds necessary to create outstanding programs is especially regrettable in light of the large capital investments that states have previously made in these institutions.

Inflexibility

At another level, however, the principal challenge for publicly funded universities increasingly relates to the foregone efficiencies that could be realized from less-stringent regulation of their conduct. Tuition price caps and uniform public subsidies that do not differentiate on the basis of institutional or program performance (or only crudely track it) limit the incentive and the capacity of institutions to invest in the development of innovative programs that are responsive to student preferences.¹⁹ This lack of differentiation means that students are deprived of the fullest possible range of programs in their home jurisdictions. It also means that even if there is some realm for meaningful choice in selecting among different publicly funded programs, students will not have access to important price information that, in conjunction with other

forms of data, serves as a useful guide to institutional quality. In conjunction, the demand and supply side distortions introduced by tuition restrictions and non-differentiated state funding formulas are likely to result in significant efficiency losses.

Attrition

A final challenge confronting publicly funded universities relates to the lower levels of student program completion relative to private institutions. The seminal study is by Friedman and Friedman, which compared student attrition rates at representative public and private institutions in the United States, and found that whereas the attrition rate at UCLA (publicly funded) was 50%, it was only 5% at Dartmouth (privately funded).²⁰ Canadian evidence supports the linkage of lower tuition fees with higher dropout rates.²¹ The Smith Commission found that 42% of students entering Canadian universities in 1985 failed to obtain a degree within five years, and that the attrition rate in graduate programs was lower, but still highly significant, at about one-third.²² The Smith Commission concluded that such statistics are 'a symptom of inadequate quality in the organization and delivery of [post-secondary] education.'²³ Another explanation may be that tuition fees at publicly subsidized institutions historically have been so low that they do not impress adequately on students the seriousness of the forgone benefits associated with the non-completion of their post-secondary education and the magnitude of the opportunity costs of forgoing workforce participation for several years.

3. Post-secondary Education in Ontario

All provincial governments in Canada, including Ontario's, are extensively involved in the provision and financing of post-secondary education. Post-secondary education provides a variety of social benefits such as equality of opportunity for economic success, increased information and analysis of political decisions, and increased economic growth through innovation and research. It also provides significant private benefits to individuals, not the least of which is higher incomes, particularly in the case of professional degrees. The mix of public and private benefits points to a mixed role for governments and markets.

Post-secondary education (in universities and colleges) in Ontario is primarily publicly funded. Canadian investment in post-secondary edu-

cation presents a mixed picture. Canadian expenditure per student is the second highest, after the United States, among the G-7 countries, and is substantially above the Australian and OECD average. As a proportion of Gross Domestic Product, Canada places second behind the US in the OECD, at 2.5% as compared to 2.7%.²⁴ However, the composition of the expenditure in the US and Canada differs markedly, with Canada spending a much lower fraction of GDP on *university* education and a much larger proportion on non-university post-secondary education.²⁴ At the community-college level, Canada's expenditure per student exceeds that of the US and all other G-7 countries.

Within Canada, the fraction of provincial GDP devoted to post-secondary education in Ontario is lower than in all other provinces, and substantially below the national average.²⁶ Further, spending by the Ontario government on university operating grants fell dramatically between 1988 and 2001, as a percentage of the provincial budget (a 33% decrease).²⁷ This decline is in sharp contrast to spending on health, which has risen over the period from approximately 32% of the provincial budget in 1986/7 to 39% by 2001/2.²⁸ Spending priorities have obviously shifted from education to health care over this period. This shift in spending has obvious implications for inter-generational equity (the lion's share of health care funding is received by older citizens), as well as long-term productive capacity of society.

Strikingly, Ontario has been at the bottom of all provinces in terms of spending on universities per capita for the last eight years – per capita spending on post-secondary education in 2003, adjusted for inflation, was 20 per cent below its 1989 level.²⁹ In spending on universities per student, Ontario has been tenth and last of all provinces for the past three years and ninth for the five years before that.³⁰ By 2003, Ontario was last among all provinces in university spending per student, per capita, or by any other measure.³¹ Tuition, on the other hand, rose over the period from \$2,200 to \$4,700, an increase of 117%, before being capped by the provincial government.³² Ontario student fees account for an increasingly high percentage of university operating revenues, and are the second highest in the country behind Nova Scotia's, and are reflected in sharply rising student debt loads.³³ However, Ontario university tuition is comparable to Australian fees and significantly lower than those of public universities in the United States.³⁴ Interestingly, Ontario college fees are among the lowest in Canada.³⁵

While Ontario's funding of post-secondary education has declined relative to other provinces, its position in relation to public universities

in many American states is even more unsettling. Provincial funding per full-time student in Ontario is now only half of per-student funding of public institutions in California and North Carolina, and 60% of that in Florida and Michigan. Compared to 12 American peer states, including eight in the Great Lakes Region, the provincial government provides only two-thirds of the funding that state governments provide to their public institutions. Between 1995/6 and 2000/1, Illinois, Michigan, Indiana, Minnesota, New York, Ohio, Pennsylvania, and Wisconsin increased their state funding by between 20% and 35% while Ontario's spending actually diminished by about 3%. [Ed: But see Rosenstone, pp. 57–59, for another perspective.] As well, the federal government provides grant funding that amounts, on a per-student basis, to less than half of the funding provided by the US government to its public institutions. This gap was not closed by increased Canadian tuition revenues. In 2001, on average, Ontario's universities charged only 82% of what their public American peer group charged, further exacerbating the revenue differential. The gap in funding raises the danger of an excellence and accessibility gap.

Has the funding in Ontario translated into accessible, high-quality education and innovative research? For the country as a whole, 54% of the Canadian adult population has completed some form of post-secondary education. This proportion is double the OECD average of 26% and higher than that in the US, where 37% of the population has completed post-secondary education.³⁶ Canada has a much higher percentage of students who complete college, as opposed to university, programs than either the US or other OECD countries. In terms of students who complete university, Canada is above the OECD average (20% versus the OECD average of 15%) and similar to Japan and Britain, though substantially below the US, where 28% have graduated from university, and further below the US in terms of percentage of students who complete post-graduate degrees. However, 34% of Canadians have non-university post-secondary education, triple the OECD average and more than twice that of any G-7 country.³⁷ In 2001, Ontario had the highest proportion of its population with a university degree of all provinces (24% versus the national average of 21%) and was slightly below the national average of 34% in terms of individuals with a non-university post-secondary education.³⁸

However, the reduced public funding and rising tuition levels in Ontario are raising concerns about accessibility to post-secondary education in the province and, in particular, to university education. Even

before the decline in funding in the 1990s, there was a growing disparity in university education between rich and poor. Between 1986 and 1994, participation in university education increased for 18-to-24-year-olds of all socio-economic backgrounds. However, participation was lowest and increased least for those from the lowest socio-economic families. Individuals from middle socio-economic families participated at a higher rate than those from lower socio-economic families, and their rate increased the most prior to 1994. Individuals from the highest socio-economic status had the highest level of participation in university education over the period. These relative rates of participation continued in the latter part of the 1990s, yet the pattern of change was different. Individuals from middle- and high-income families were still more likely to go to university than individuals from low-income families, but their participation rates declined between 1994 and 1997. The participation rate for individuals from low-income families, on the other hand, increased over this period.³⁹ Looking at post-secondary education as a whole, students from lower-income families had about the same rate of college participation as students from higher socio-economic families. College, therefore, plays a greater role than universities in aiding these individuals.⁴⁰

The restraints on increased funding also raise concerns that the quality of Ontario's post-secondary education is not being maintained. The student-faculty ratio provides one measure of the quality of post-secondary education in terms of teaching. This ratio in Ontario universities is dramatically above the average for the other nine provinces, and international comparisons are equally dismal.⁴¹ Further, in the coming decade, Ontario will need to hire 11,700 faculty to deal with predicted retirements and enrolment increases and to keep student-faculty ratios from deteriorating further.⁴²

However, there is intense competition internationally for the best academics. While there may not be an overall brain drain from Canada to the US, certain groups are leaving the country at a disproportionate rate, including university professors, engineers, and scientists. Ontario universities require the funding to attract and retain outstanding researchers and teachers.⁴³

The reduced funding raises concern not only about the loss of faculty but also about the deterioration of facilities. Ontario universities are facing a very high level of deferred maintenance costs over the coming years. While Ontario has invested in some capital funding in recent years, the existing university facilities are aging, in need of repair, and

badly lacking in space for faculty and students. The Council of Ontario Universities estimated that in 2002 deferred maintenance amounted to \$1.3 billion or \$1.56 billion when adaptation and renewal renovations are included. Over \$100 million per year is required merely to maintain the status quo.⁴⁴

One question that arises is whether Ontario (and Canada as a whole) is misallocating resources by spending so much on non-university post-secondary programs and having such a large number of graduates from those institutions. Some commentators argue that this reflects a lack of ambition on the part of Ontarians that needs to be remedied in order for the province to prosper.⁴⁵ An alternative explanation is that the funding of non-university programs reflects demand in the labour market and allows diversity of learning.

The economic effect in terms of private returns to the individual is substantial for all types of education. University programs, and in particular post-graduate degrees such as those in medicine and veterinary medicine and PhDs, have the largest impact on individual earnings. College programs and trade schools have a lower impact than universities on the earnings of those who complete high school, although they substantially increase the incomes of those who did not finish high school. In both cases, the impact of post-secondary education on earnings is greater for women than for men. As well, the increased returns have been found to arise because education makes individuals more productive (not because they merely signal existing differences in people). These results suggest that universities do play a central role in economic returns for Ontarians and provide a larger return to the individual than a non-university post-secondary program. However, colleges and trade schools also play a pivotal role in increasing the economic opportunities of and returns to Ontarians, including those who dropped out of high school.⁴⁶

Top Canadian universities perform reasonably well with respect to the volume of scholarly publications they produce, but lag substantially behind the top US universities in terms of the recognition that their research garners from scholars. It is fair to say that the quantity of research emerging from Canadian universities is comparable, proportionately, to the quantity produced by US universities, but that the quality of research in Canada, which is what really matters, falls substantially behind the output found in top US institutions.⁴⁷ This gap can be attributed to proportionately lower levels of provincial financial support for Canadian universities than is provided by US states to their

public institutions, to proportionately lower levels of federal research funding in Canada, to poor allocation of research funding, and to systematically lower salary levels in Canada that hinder the ability of Canadian universities to hire and retain the best and the brightest.

The policy environment for post-secondary education in Ontario over the past two decades has been highly unstable. Apart from declining levels of public funding, the system has endured the salary roll-backs associated with the Rae government's Social Contract, the draconian budget cuts associated with the Harris government's Common Sense Revolution, the subsequent partial liberalization of tuition pricing policy, and then recently the McGuinty government's complete freeze on tuition increases. These policy discontinuities have severely compromised the ability of universities to engage in serious forward-planning, including the ability to make salary commitments to hire and retain faculty and invest in infrastructure. A new and more stable compact between government and the post-secondary sector is sorely needed.

4. Towards a New Compact for University Education in Ontario

The economic, social, and political benefits of post-secondary education point to the need to foster a strong, broad-based educational system. There are a number of reforms that should be made to improve the post-secondary education system in Ontario. For example, the government should improve the information available to students on employment and earnings associated with different programs so that students can make better decisions about which programs to pursue. It should also require post-secondary institutions to provide more informative grading to aid both employers and students in making employment and other decisions. Further, the government should improve accessibility and opportunities for students by expanding co-op programs and improving the integration of colleges and universities.⁴⁸

However, the greatest challenges facing post-secondary education in Ontario relate to the funding of institutions, the quality of teaching and research, and the accessibility of post-secondary education. The government can have the greatest impact on the financing, quality, and accessibility of post-secondary education by reforming its funding and tuition policies to promote excellence and diversity among programs. Not all institutions or programs should be exactly the same and, as Cameron notes, 'there is much to be said for increased diversity [in

research intensity].⁴⁹ The current system aiming for similar programs at all universities hobbles our universities' health as engines of innovation, creativity and enlightenment. Promoting institutions and programs with a variety of goals can aid in tailoring the post-secondary education system to the needs of Ontarians. Some institutions should focus on teaching, some on research, some on a combination of the two, and some on vocational training. Moreover, there should be incentives to promote excellence in particular programs rather than forcing or encouraging all institutions to deliver similar programs. Finally, because education holds the key to equal economic and social opportunities, any reforms must ensure that individuals are not hindered from obtaining post-secondary education because of their socio-economic background.

Specifically, the province should undertake a four-part plan to promote diversity, quality, and accessibility in post-secondary education. First, the amount of public money that is spent on post-secondary education should be substantially increased so that on a public expenditure per student basis Ontario is the leading province not the last province. Second, the amount of increased public funding for each program should be tied to performance – that is, programs that provide better quality should receive additional money. Third, tuition policy should be deregulated to permit different fees for programs of different quality, subject to the maintenance of effective financial aid programs and policies administered by universities. Fourth, in order to ensure that the cornerstone of a society in which each citizen is able to realize his or her full potential – accessibility – is maintained, the province should institute an income-contingent loan program and target an enhanced grant and loan program at increasing participation of individuals from lower income backgrounds in post-secondary learning, particularly university education.

Public Money and Performance Funding

Ontario invests substantial funds in post-secondary education. This money should be leveraged to ensure it is used to promote excellence in teaching and research and a diversity of programs that will benefit Ontarians. This leveraging can occur through performance funding.⁵⁰

In Ontario, performance-based funding currently plays a very limited role. For 2000–1, the Ministry of Training, Colleges and Universities distributed \$16.5 million (relative to grants to universities of approxi-

mately \$1.7 billion)⁵¹ on the basis of three performance-based measures: graduation rates, graduate employment after six months, and graduate employment after two years. Alberta and other U.S. states have also used crude indicators, such as graduation rates and employment rates, in implementing similar performance-based funding schemes.⁵² These indicators do not assess the quality of the research taking place at an institution, nor do they adequately reflect the quality of its graduates or the jobs they take. This performance funding represents only a modest beginning, comprising less than 1% of the \$1.7 billion distributed to Ontario universities in the form of operating grants.

The majority of the Ontario government's funding for the university system has been based on a flawed funding mechanism. Since the 1960s, funding has been based on a weighted average of the number of students in various programs. The weights are determined by the relative cost of educating students in various programs.⁵³ Provincial funding for the post-secondary sector is distributed essentially on the basis of student enrolment, or full-time equivalent (FTE) enrolment, with program weights then applied to enrolment numbers to yield Basic Income Units (BIUs).⁵⁴ Enrolment numbers therefore drive university funding in Ontario without reference to quality – the strongest and the weakest programs get largely the same financing. A key concern with this funding mechanism is that it does not adequately take into account both teaching and research. The government does increase the BIU weight for students in more research-intensive graduate programs. However, within each type of program, the funding mechanism does not account for differences in the quantity or quality of research and therefore for the costs of a greater volume of research or higher-quality research.⁵⁵ To be sure, in recent years both the federal and provincial governments have launched a number of initiatives to enhance research-based funding for Ontario universities.⁵⁶ The federal government, in particular, has taken significant steps to bolster leading research, such as establishing Canada Research Chairs to fund outstanding scholars.⁵⁷

Still, the provincial funding mechanism does not distinguish between high- and low-quality educational programs. Ontario universities are relatively homogeneous in large part because the formula provides the same funding for all programs and does not allow differences in tuition fees to reflect variances in quality – with the recent exception of professional programs. Ontario institutions and programs vary less in terms of quality and specialization than do institutions and programs in many

US states or in Britain. At the present time, Ontario lacks research-intensive universities with the reputation of top US state-funded universities, such as the University of California, Berkeley, or the University of Michigan.⁵⁸

We recognize the challenges in designing appropriate performance-based funding systems as pointed out in several papers in this volume – performance criteria that key on academic inputs, not outputs, or preferably outcomes (which are admittedly difficult to measure or evaluate directly), and perverse incentives or gaming behaviour that inappropriate performance proxies can engender. However, asking governments simply to write larger blank cheques on an across-the-board basis to the post-secondary sector is politically untenable. In a setting of intense fiscal pressure, governments must, by necessity, demonstrate that any new public investment, is strategic, and can yield demonstrable improvements to the quality of publicly supported services. Therefore, to respond to the need for differentiated performance-based investment, but without an administratively cumbersome bureaucratic structure that will subvert sound academic planning and performance, we recommend, in skeletal form, a four-tiered performance-based system that would be structured as follows.

At the undergraduate level, additional public funding should be made available for programs and institutions prepared to commit over time to restoring tenure-stream faculty-student ratios to their 1990 level (e.g., 17 to 1, not 27 to 1), given evidence that class size seems to be highly correlated with the student undergraduate academic experience. This funding should be significantly weighted by quality of the student entering cohort to provide incentives for independent program improvement. At the post-graduate level, additional multi-year public funding should be made available to create and reinforce a very small number of internationally competitive post-graduate programs in most of the major disciplines to enable the hiring and retention of internationally recognized faculty, to attract and support top graduate students domestically and internationally, and to finance necessary enhancements in physical infrastructure. This funding would be allocated by a specialized provincial granting agency (like the federal granting agencies) in peer-reviewed competitions with well-defined evaluating criteria and subject to periodic *ex post* peer review. Third, project-specific research support would continue to be allocated by the federal granting agencies in peer-reviewed periodic competitions. Fourth, public support for infrastructure enhancements might primarily take

the form of matching grants for donor-supported projects to enhance incentives for universities to place a high premium on alumni satisfaction and to cultivate and exploit their alumni and donor networks.

If performance-based funding were awarded to individual programs instead of to entire institutions, top programs could be produced across the province, although some institutions may always have a concentration of excellent programs. Universities that cannot compete against a large institution like the University of Toronto would not be left out because they could focus their resources on those areas in which they have a comparative advantage. Indeed, Ontario's universities would be encouraged to identify their strengths and improve programs that they know are competitive provincially, nationally, or internationally.

In other words, most universities, rather than pursuing many mediocre programs, would have incentives to create a few internationally recognized, excellent ones (somewhat analogous to, but more ambitious than, the 'Centres of Excellence' that the province has promoted in the recent past). This specialization introduces competition among universities for enhanced funding and, perhaps most importantly, improves the overall efficacy of Ontario's university system by eliminating wasteful duplication and making strong programs even stronger. As a province, Ontario will have better programs and scholarship. Talent can be attracted from other provinces and countries, and the education of top graduate and professional students can be enriched. However, an important feature of this funding regime is that no institution actually loses financing that it is currently receiving – that is, no university is punished or deprived of funding for failing to meet certain standards. Enhanced funding is used to reward excellence and to create incentives to excel in the future.

It is important to recognize that colleges are also a key component of the post-secondary education system in the province. They provide a wide range of students with the skills to compete for rewarding work. They also play a particularly important role in providing education to students from lower socio-economic backgrounds, as well as to those who have dropped out of high school. The importance of colleges raises the need for Ontario to provide sufficient public funding, yet there is insufficient evidence to determine whether the financing of colleges versus universities is out of balance. There are steps the province can take to improve access to and choice in college education. First, Ontario should enter into a Labour Market Development Agreement with the federal government, enabling the province to better aid in tailoring

college programs to the needs of Ontarians.⁵⁹ Second, as with universities, additional funding for colleges should be performance-based to develop and reward excellence in college programs. Third, the province should take an active role in ensuring the provision of information to students, such as the employment and income profiles of graduates from each university and college program, to enable them to make informed choices. Finally, the province should take steps to promote the integration of colleges and universities to provide greater access to post-secondary education, especially in areas where there are no universities, and greater movement between post-secondary programs as students assess their abilities and interests.⁶⁰ To date, there has been only limited collaboration between universities and colleges.

Tuition, Choice, and Accessibility

Government funding of post-secondary education reflects the social benefits derived from a strong post-secondary system, as well as the information and funding problems facing students. The reality is that under any scenario there are insufficient public funds to close the excellence gap between Ontario universities and top international public institutions. As noted, post-secondary education produces substantial private returns. Full government funding of post-secondary education results in all Ontarians bearing the costs of educating individuals who stand to obtain very large personal returns. Because such subsidies are financed through taxes, they either reduce the amount of public money available to finance other programs, or they necessitate higher taxes. As a result of this mix of the private and social effects of education, both the provincial government and the individuals who stand to gain should invest in post-secondary education. In 2001, student fees accounted for 26.3% of Ontario universities' revenue, among the highest in Canada. Government funds accounted for 47.8% of revenues, the lowest share in Canada.⁶¹

When individuals must pay part of the cost of their education, they will be more selective about their programs, and thus institutions would have greater incentives to pay attention to students' interests. These incentives would be even sharper if programs were able to set different fees. Programs of higher quality could charge higher tuition, although they would have to demonstrate the justification for the higher cost to students.

However, tuition payments by individuals raise concern about a key

tenet of the education system in Ontario – accessibility. Education should be equally available to all qualified individuals, regardless of their family or personal background – that is, their socio-economic status. While individuals tend to obtain higher incomes as a result of post-secondary education, financial institutions are in general reticent to lend money for this type of investment in human capital because human capital cannot be collateralized like other assets. As a result, without specific arrangements to promote accessibility, raising tuition fees will reduce the opportunity of less well-off individuals to benefit from a post-secondary education. Further, even where funds are available to aid such students, they may hesitate to apply to universities because of the ‘sticker shock’ from the high tuition levels.

Rising tuition fees in Canada have increased the debt level of students. For example, by 1995, 46% of bachelor’s graduates borrowed for their education, with the mean amounts of the loans rising sharply from around \$6,000 in 1982 to \$13,600 in 1995.⁶² The average government-student-loan debt of students who went to university for four years and finished their program in 2002 was \$21,500.⁶³ The federal and provincial governments help with loans through the Canada Student Loan Program and the Ontario Student Assistance Program. These loans are similar to mortgages in that they must be repaid following graduation, with interest. As well, students’ access to loans is limited because not everyone qualifies for them, as they are means-tested on the basis of family income. Such means testing presumes unencumbered access of individuals to family resources. However, those in charge of the distribution of household finances to household members may not have the prospective student’s view of the value of education.⁶⁴ In addition, a large number of students default on their loans,⁶⁵ partly because there are no serious disincentives to prevent them from doing so.⁶⁶ The high costs of these defaults are absorbed by the government. For example, the cost to the federal government of collecting at-risk student loans is estimated at between 19 and 28 cents per dollar.⁶⁷ Furthermore, since the government guarantees the loan to the university or college by paying the student’s fees up front, universities and colleges put too little effort into debt recovery or into screening students adequately to determine their prospects for successful completion of programs. There is a wide variation of institutional performance on repayment.

More importantly, under the current system, some students may be reluctant to borrow out of fear of not meeting future repayment obligations. This concern arises because these loans for education are in-

sensitive to the borrower's changing financial circumstances. These prospective students will not borrow and therefore will not attend university or college.⁶⁸ The fear of not being able to pay back the loan will likely have a disproportionate effect on the disadvantaged. This impact of the current loan programs therefore has important consequences for the accessibility of post-secondary education.

A better approach to student financing involves income-contingent loans (ICLs). An ICL involves students contracting with the government to repay deferred fees in proportion to their future income. Students pay up front only as much as they can, with the rest deferred until they graduate and are working. The government supplies the university or college with the fees that students have deferred. Students eventually repay their deferred fees through the income-tax system, in proportion to their earnings. The introduction of such regimes in other countries is often accompanied by deregulated tuition fees and direct subsidies for low-income students.

The main attraction of ICLs is that they can be designed to avoid the problems associated with Ontario's current system of traditional loans. First, there is no concern with intra-family sharing so long as the scheme is universal. No students would be denied access through the imposition of means-testing arrangements that could exclude some whose parents or partners are unwilling to help.⁶⁹ Second, the default issue for the government is largely addressed by deploying the tax system to collect the debt, since it is extremely difficult for the vast majority of graduates to avoid repayment.⁷⁰

Some students will not pay back their deferred fees in full because ICLs are designed to forgive the fees of students whose lifetime incomes are below a certain threshold. Those students may be able to pay back a portion of their fees, which is an improvement over the complete defaults occurring under the current system. Students who earn incomes below a certain threshold will not have to make any contribution through the tax system in that year, though they will when their career prospects improve. In other words, ICLs mitigate the risks that students face when they invest in higher education.

Since 1989, Australia, New Zealand, and Britain have introduced ICLs for post-secondary education. These countries had in the past offered essentially free post-secondary education. The Australia and New Zealand systems have loan repayments dependent on an individual's income and reduce the costs of the program by having the payments collected through the tax system. In each case, there is a

minimum threshold below which the loan does not have to be repaid, with a progressive rate of collection, depending on the individual's income. In both cases, institutions are now permitted to set their own fees.

In Australia, accessibility appears to have been maintained. The socio-economic make-up of the higher education student body was about the same in the late 1990s as it was before these loans were introduced.⁷¹ This can be explained by a number of factors. First, ICLs will not deter students in the same way that up-front loans can – by shocking lower-income students with immediate, large debt. As well, post-secondary enrolments in Australia have increased by some 50% as a result of the increases in tuition and increased post-secondary spending by the Australian government. Finally, the recent reforms of 2003 emphasize the importance of improving the performance of indigenous peoples and disadvantaged minorities through scholarships and other equity-based measures.

Overall, income-contingent loans appear to have been a successful innovation in post-secondary funding in Australia and New Zealand. Their use of the national income-taxation infrastructure stands out as a crucial feature of a well-designed ICL program.⁷² Britain is moving in a similar direction after introducing a limited form of ICL in 1997. A review of higher education in 2003 is pointing towards an expanded ICL program with universities setting their own tuition levels, subject to a cap, and students making ICL repayments after graduation through the income tax system.

The Australian, New Zealand and U.K. reforms provide a clear direction for Ontario.⁷³ No students, regardless of family income, should be required to pay tuition up front, although they may if they choose. Loans for post-secondary education should be repayable after graduation on an income-contingent basis, that is, they should depend on a student's future income, and the most efficient mechanism by which they can be collected is through the income tax system. With such arrangements in place, the regulation of tuition fees can be substantially loosened, permitting universities and colleges to more effectively supplement their public subsidy with contributions from students. Since these contributions are income-contingent, they will be made in proportion to the earnings advantage that individual students enjoy as a result of their education.

An ICL program would address the risk inherent in human capital investments, because those whose post-graduation earnings are below average are not faced with high debt loads, as would be the case under

a conventional student loan program. Those whose earnings are below average may repay less under ICLs, but those who achieve above-average earnings will likely repay more than under the current system.⁷⁴ Other advantages of ICLs include a scheduling of payments that is more closely aligned with the evolution of the individual's ability to pay, reduced administrative costs, and lower default rates.

Further, when a student defers his or her tuition fees, the province should supply the university or college with the deferred amount. These payments will enable post-secondary institutions to operate free of uncertainty with respect to yearly tuition revenues. Once the student has graduated and is working to pay off the ICL, the provincial government will assess contributions to be paid through the income tax system, thereby recouping its original loan. In order to enhance institutional incentives to screen students for prospects of successful program completion, the college or university should bear some part of the risk of default, such as through reduced public funding based on default rates.

In order to maximize the benefits of diversity of institutions and increase choice in post-secondary education in Ontario, when the province has introduced an ICL program it should deregulate tuition fees. Deregulating tuition fees would encourage universities and colleges to expand enrolment to meet the demand for their programs and enable outstanding programs to differentiate themselves and aspire to even higher levels of international excellence. It would also provide colleges and universities with funding they need because of the recent reductions in public funding. This added funding would aid in improving the quality of higher education in Ontario.

Deregulating tuition, even with ICLs, raises concerns about participation by individuals from poorer socio-economic backgrounds. If education is to have the benefits it potentially could have in terms of reducing inequality and opening up opportunities for the less well-off, higher education needs to be a viable option for all Ontarians. The province, therefore, should supplement an ICL program with a grant program to increase the participation in post-secondary education and, in particular, university education by individuals from less-privileged socio-economic groups. The federal government has taken some steps in this regard through the Millennium Scholarships Program, as has Ontario through the Ontario Student Opportunities Trust Fund.⁷⁵ These programs have led to an increase in participation by lower-income individuals in the latter part of the 1990s.⁷⁶ However, more needs to be done to increase the participation rate of these individuals. The prov-

ince should increase the funding of grants and monitor this participation rate with a view to increasing it significantly over time, perhaps towards a specific targeted level.

Deregulating tuition, combined with ICLs and increased grants, would allow institutions to differentiate themselves and to foster outstanding programs. However, the province should not attempt to micromanage post-secondary admissions and program offerings.⁷⁷ Evidence from Britain indicates that micromanagement by the state decreases university independence and results in lower standards.⁷⁸ Institutions should make the decisions about which programs to develop and how to meet the needs of students. Unlike the province, these institutions have the information to make the creative and innovative decisions necessary to foster excellence. The public interest in post-secondary education in a system centred around institutional diversity can be protected in two ways. First, as noted above, there will continue to be public funding of universities, which will allow the province to maintain incentives for institutions to pursue the public interest. Second, a diverse, and vocal, set of stakeholders, including the public, have input into the decisions of post-secondary institutions through the governance regimes of individual universities and colleges. There has been no scarcity of scrutiny and debate in these fora in the past over the ways in which excellence and accessibility can be promoted and it is unlikely that there will be a shortage in the future. This form of civic engagement in the decisions of institutions helps allay concerns that they will use public funding or increased tuition revenue in ways that do not promote the public interest. To aid both these avenues of monitoring, the province should require every university and college governing council to demonstrate that they have a credible access program in place. Each governing council should be required to make a public report to the government every three years on the effectiveness of its access program. Such reporting would ensure that the province and the public have the information necessary to assess progress on accessibility.

5. Conclusion

Ontario needs a new relationship between government and students to ensure high-quality, accessible post-secondary education. To this end, spending on post-secondary education in Ontario should be, on average, the highest in Canada on a per student basis. In order for Ontario to achieve the highest levels of public support per student in Canada (not

the lowest), the recent report of the Panel on the Role of Government in Ontario⁷⁹ roughly estimated, this would entail additional public expenditures of \$1.3 billion per year, phased in over several years. This number needs to be put in perspective. The total provincial expenditure budget as of 2004 is about \$80 billion. Of this, about \$30 billion is spent on health care and only \$4 billion on post-secondary education. An additional infusion of public funding of \$1.3 billion, if appropriately structured, along with a further infusion of revenues from deregulated tuition fees, have the potential for a transformatory impact on the post-secondary sector, promoting institutional specialization in internationally competitive programs, enhancing the student learning experience at both undergraduate and post-graduate levels, and enhancing student accessibility to higher-quality programs through income-contingent loans and grants to meritorious students from disadvantaged backgrounds.

These reforms represent a new partnership between government and students and will promote both excellence and accessibility in post-secondary education in Ontario.

Notes

* Faculty of Law, University of Toronto. This paper draws on work undertaken for the Ontario Role of Government Panel, with which both authors were associated, and on our forthcoming book, *Rethinking the Welfare State: Government by Voucher* (London: Routledge, 2005). Andrew Green and Roy Hrab made important contributions to the development of the analysis of the Panel on the Role of Government. We also wish to acknowledge the useful comments of Ian Clark and Frank Milne on an earlier version of this chapter delivered at the conference.

- 1 The boundary between public and private universities should not, however, be drawn too starkly. Many elite private institutions receive significant levels of state support in the form of competitively allocated research grants and student-based financial aid assistance, which mutes the difference between these two modes of provision.
- 2 For a general discussion, see Douglas Auld, *Expanding Horizons: Privatizing Universities* (Toronto: University of Toronto Press, 1996), chap. 1.
- 3 W. Craig Riddell, 'The Role of Government in Post-Secondary Education in Ontario,' Report to the Panel on the Role of Government in Ontario (2003), 49. Available online at <http://www.law-lib.utoronto.ca/investing/reports/rp29.pdf>. Riddell notes that these private returns have remained

high despite considerable increases in the number of educated workers over the last several decades. Riddell further notes that the impact of education on earnings is causal, that is, workers are more productive as a result of education rather than education being simply a means of signaling worker quality.

- 4 Somewhat more broadly, there is a literature showing that, particularly in a human capital economy, university research contributes significantly to societal wealth. See Anna-Lee Saxenian, *Regional Advantage: Culture and Competition in Silicon Valley and Route 128* (Cambridge, MA: Harvard University Press, 1994). See also the very thoughtful contributions made by David Dyzenhaus and Andrew Green in this volume.
- 5 By the term 'extent' it is suggested that the state, which is the ultimate beneficiary of the public benefits, should be a proportion of the costs of higher education relative the overall benefits of higher education. In this way, the rates of return for both the private and the public expenditures on post-secondary education would be equalized, without privileging either.
- 6 The fact that the benefits to society and to the individual are largely intangible and probably impossible to measure accurately does not undermine the theoretical cogency of this argument. A system that at least attempted to do this would probably reach a more efficient outcome than our system does at present.
- 7 Some have argued that university education does not actually cause one's income to be higher. The screening hypothesis argues that post-secondary education may just be a signal of some other attributes to which employers assign value. See Nicholas Barr, *The Economics of the Welfare State*, 3rd ed. (Stanford, CA: Stanford University Press, 1998), 324.
- 8 For a further discussion of this idea, see Barr, *ibid.*, 325.
- 9 Even more than at the primary and secondary levels, the positions of Martha Nussbaum, *Cultivating Humanity: A Classical Defence of Reform in Liberal Education* (Cambridge University Press, 1998), Amy Gutmann, *Democratic Education* (Princeton, NJ: Princeton University Press, 1987), and Allan Bloom, *The Closing of the American Mind* (New York: Touchstone Books, 1988) are important. That is, it is at the university level that they are most concerned with promoting a vision of liberal education as formative of a certain character and way of experiencing the world, not merely as imparting marketable skills.
- 10 In actual fact, even with government subsidization investment in research will probably be deficient because research does not have guaranteed payoffs and most investors are risk averse. That is, a guaranteed return is to some extent preferred to a higher expected, but more variable return. Note that investment in applied research will probably be less deficient than investment in pure research because of the greater prospect of appropriating the benefits therefrom via patents.

- 11 See, for instance, Robert J. Barro, 'Human Capital and Growth,' *American Economic Review* 91:2 (2001), 12–17 and Robert J. Barro and Eaverier sala-i-Martin, *Economic Growth* (New York: McGraw-Hill, 1995).
- 12 Riddell (see note 3), 24.
- 13 Ronald Dworkin, 'DeFunis v. Sweatt,' in Marshall Cohen, Thomas Nagel, and Thomas Scanlon, eds, *Equality and Preferential Treatment* (Princeton, NJ: Princeton University Press, 1977), 63.
- 14 In the US, private universities often pursue 'need-blind' admissions policies and then provide varying degrees of student assistance to those who are in financial need. The net result is that education is means-tested at private American universities. Another way to describe this policy, however, is to say that private American schools engage in a system of price discrimination that is designed to extract the maximum amount of money from each student. Given that private universities in the US are non-profit institutions interested in educating the strongest students possible, from an equity standpoint this regime of price discrimination is not necessarily repugnant, but at worst benign and perhaps even desirable. It serves as a way for students from wealthier families to cross-subsidize students with a lower ability to pay, while ensuring that only the most able applicants are granted admission. Many private universities supplement the federally sponsored loan program with internal income-contingent repayment plans (ICRPs) for loans that they grant to students in need of financial aid. The price discrimination regimes combined with ICRPs make access to education relatively equitable at private universities – despite the high tuition fees – for students confronting affordability problems. In terms of accessibility, then, private universities are arguably well ahead of their public counterparts.
- 15 Barr (see note 7), 347.
- 16 Bruce Chapman and David Greenaway, 'Learning to Live With Loans? Policy Transfer and the Funding of Higher Education,' Paper for the Internationalism and Policy Transfer Conference, Tulane University (2003), 8. See also O. Mehmet, *Who Benefits from the Ontario University System: A Benefit-Cost Analysis by Income Groups* (Toronto: Ontario Economic Council, 1978), 45: 'The principal net gainers from the university system are the middle and upper-income groups at the expense of lower-income groups. In this sense, the university system is a large public expenditure program in which the relatively poor groups tend to subsidize the relatively rich.'
- 17 Chapman and Greenaway, *ibid.*, 8.
- 18 In extreme, some public institutions confront a combination of caps on faculty salaries, mandatory salary disclosure, and tuition-fee restrictions, making it increasingly difficult for these institutions to attract and retain the most sought-after professors. For instance, in 1980 in the US the average gap in salary between full professors at public and private univer-

- sities was \$1,300. By 1998, this gap had widened to \$21,700. 'United States: The Gap Widens,' *The Economist*, 22 April 2000.
- 19 This lack of flexibility is perhaps most evident in relation to the relatively poor response of public universities to the growing needs of mature and part-time students. Whereas only 27% of US college students were twenty-five or older in 1970, by 1991 this segment of the student body had risen to constitute 45% of students. Entrepreneurial private institutions in the United States that cater to mature and part-time students through an array of online correspondence and other materials have begun to fill the void left by slowly moving public and well-established private institutions. New opportunities will arise as technology becomes more reliable, more interactive, and more ubiquitous. However, it is not clear that public institutions have been nearly as responsive to these needs.
 - 20 Milton Friedman and Rose Friedman, *Free to Choose* (New York: Harcourt Brace Jovanovich, 1980), 176–7.
 - 21 An alternate explanation may be that high tuition rates dissuade high-risk students from attending universities with high tuition. Instead high-risk students prefer to attend where they can make a lower-valued investment in their post-secondary education (and therefore have less to lose in the case of abandonment).
 - 22 Commission of Inquiry on Canadian University Education, *Report* (Ottawa: AUCC, 1991), 105.
 - 23 *Ibid.*, 106.
 - 24 Government of Ontario Post-Secondary Review (Rae Review), 'Discussion Paper' (2004), 25.
 - 25 Canadian post-secondary education expenditure per student is only 70–80% of the US level. Furthermore, if post-secondary education expenditure is divided into university and non-university components, Canada's university expenditure per student is only 60% of the US level. Riddell (note 3), 27.
 - 26 Ontario's spending is about 84% of the Canadian average, although this comparison is biased downward somewhat due to transfer/equalization payments from the federal government that allow for increases in educational funding in poorer provinces by taking some GDP away from richer provinces. Riddell, 88.
 - 27 Council of Ontario Universities, *Ontario Universities: 2000 Resource Document* (2000), table 1.5, online at http://www.cou.on.ca/_bin/briefsReports/onLine/2000resourceDocument.cfm.
 - 28 G. White, 'Change in the Ontario State 1952 – 2002,' Report to the Panel on the Role of Government in Ontario (2003).
 - 29 University of Toronto, 'The Choice for a Generation: Investing in Higher Education and Ontario's Future,' *University of Toronto Submission to the Rae Review* (November 2004), 4.

- 30 Council of Ontario Universities, *2002 Resource Document* (2002), at http://www.cou.on.ca/_bin/briefsReports/onLine/resource2002.cfm.
- 31 R. Birgeneau, President, University of Toronto, 'Open Letter to All Ontarians,' 19 Sept. 2003, at www.utoronto.ca/president/190903.htm.
- 32 Council of Ontario Universities (note 27).
- 33 Council of Ontario Universities (note 27); Government of Ontario (note 24), 24.
- 34 Government of Ontario, 24.
- 35 Ibid.
- 36 Riddell, 33.
- 37 Ibid. However, Canada's definition of post-secondary education is more generous than the American definition because it includes those with trade certificates. However, Canada has a higher percentage of individuals with post-secondary education even when this definitional issue is taken into account.
- 38 Ibid., 36.
- 39 M. Corak, G. Lipps, and J. Zhao, 'Family Income and Participation in Post-Secondary Education,' *Statistics Canada Research Paper, Cat. no. 11F0019MIE - 210* (October 2003).
- 40 Keith Banting, 'Responding to Social Risk in Ontario: Are We There Yet?' Report to the Panel on the Role of Government in Ontario (2003). Between 1986 and 1994, the percentage of 18–21 year olds attending university increased for individuals from low socio-economic status (SES) backgrounds from 13.7% to 18.3%, for individuals from middle SES backgrounds from 14.5% to 25.3%, and for individuals from high SES backgrounds from 32.9% to 40.3%.
- 41 University of Toronto (note 29), 12. This state of affairs is the result of a long term deterioration in Ontario.
- 42 Council of Ontario Universities, *Biennial Report 2000–2002* (May 2003), at <http://www.cou.on.ca/content/objects/Biennial20002002Report.pdf>.
- 43 D. Cameron, 'The Challenge of Change: Canadian Universities in the 21st Century,' *Canadian Public Administration* 45:2 (2002), 145.
- 44 Council of Ontario Universities, *University Education in Ontario: Shared Goals and Building Blocks* (September 2003), at <http://www.cou.on.ca/content/objects/Shared Goals 7 w1.pdf>.
- 45 R. Martin and J. Milway, 'Unleashing Higher Learning,' *Globe and Mail*, 30 Aug. 2003, A15.
- 46 Riddell, 47.
- 47 J. Chant and W. Gibson, 'Quantity or Quality? Research at Canadian Universities,' in D. Laidler, ed., *Renovating the Ivory Tower: Canadian Universities and the Knowledge Economy* (Toronto: C.D. Howe Institute, 2002).
- 48 See Riddell, 50, for a description of these potential reforms.
- 49 Cameron (note 43), 171.

- 50 For a recent comparative review of the role of performance-based funding in higher education in eleven OECD countries, see Ben Jongbloed and Hans Vossensteyn, 'Keeping Up Performances: An International Survey of Performance-Based Funding in Higher Education' (2001) *J. of Higher Education Policy Management* 127.
- 51 Council of Ontario Universities (note 27).
- 52 Council of Ontario Universities, *A Background Report Prepared for the Working Group on Performance Funding: Lessons from Other Jurisdictions* (March 2001), at http://www.cou.on.ca/content/objects/Performance_Funding_Lessons.pdf.
- 53 This 'Basic Income Unit' system was introduced in 1967–8. A major modification in 1987–8 severed the direct link between funding and student enrolment by introducing a 'corridor' within which changes in student numbers do not result in changes in funding. Panel on the Role of Government, *Staff Report: Creating a Human Capital Society for Ontario* (March 2004), 64.
- 54 Every year, the Ministry of Training, Colleges and Universities produces 'The Ontario Operating Funds Distribution Manual,' which fully details the funding formula and regulatory policy. Panel on the Role of Government, *Staff Report*, 64.
- 55 Riddell 62.
- 56 'At the federal level these include the Canada Foundation for Innovation and indirect funding for research. At the provincial level these include the Ontario Research and Development Challenge Fund, the Ontario Investment Trust, and the Premier's Research Excellence Awards.' Riddell, 62.
- 57 Cameron (note 43).
- 58 Riddell, 62.
- 59 For a more extensive discussion of Labour Market Development Agreements, see Panel on the Role of Government, *Staff Report: Creating a Human Capital Society for Ontario* (March 2004), 77; alternatively, H. Lazar, *Shifting Roles: Active Labour Market Policy in Canada under the Labour Market Development Agreement* (2002), online at www.cprn.org.
- 60 Riddell, 77.
- 61 Statistics Canada, 'University Finance,' *The Daily*, 11 June 2003.
- 62 R. Finnie, 'Student Loans: Is It Getting Harder? Borrowing, Burdens and Repayment' (Kingston, ON: School of Policy Studies, Queen's University, 2000), 4.
- 63 Government of Ontario (note 24), 8. Government student debt has increased by 25% over the past five years for four-year university students, as compared to only 6% for two-year college students.
- 64 Chapman and Greenaway (note 16), 9.
- 65 Finnie finds that 40–50% of Fine Arts and Humanities graduates in 1995 reported repayment problems. Finnie (note 62), 11. In the US, Harrison

- notes that in some US colleges the default rate is as high as 50%. M. Harrison, 'Default in Guaranteed Student Loan Programs,' *Journal of Student Financial Aid* 25 (1995).
- 66 Edwin G. West, *Ending the Squeeze on Universities: Canada in a World Perspective* (Ottawa: Carlton University, 1993), at www.ncl.ac.uk/egwest/pdfs/ending%20the%20squeeze.pdf. According to the Rae Review Discussion Paper there has been a decline in the likelihood of student default, although no explanation is provided for this improvement. Currently, 'National data shows 30% of college and 24% of university graduates report difficulty in repaying their loans.' See Government of Ontario (note 24), 24, 26.
- 67 West, *ibid.*
- 68 For analysis of this issue, see B. Chapman, 'Conceptual Issues and the Australian Experience with Income Contingent Charging for Higher Education,' *Economic Journal* 107 (1997), 1178.
- 69 Chapman and Greenaway, 9.
- 70 A significant concern relates to former students emigrating, thereby detaching themselves from their home country's taxation system. This relatively minor loss is to be weighed against the larger benefits of ICLs and the greater tuition revenue that they facilitate.
- 71 B. Chapman and C. Ryan, 'Income Contingent Financing of Student Higher Education Charges: Assessing the Australian Innovation,' *Welsh Journal of Education* 11 (2002), 64.
- 72 New Zealand has higher administrative costs than Australia as it has a more complicated system relating to interest on the debt.
- 73 The federal government attempted to put in place an income-contingent loan program in 1994. However, the program was not well conceived and was abandoned when it ran up against significant opposition from the provinces, students, and universities. Cameron (note 43).
- 74 Riddell, 70.
- 75 Banting, *supra* note 40.
- 76 Corak et al. (note 39), note that the lower increase in participation in the early 1990s by individuals from low income families was likely the result of increases in tuition without corresponding increases in loans and grants, which did not increase until the latter part of the 1990s.
- 77 See 'Pay or Decay,' *Economist*, 24 Jan. 2004, 11; 'Who Pays to Study?' *Economist*, 24 Jan. 2004, 23.
- 78 *Ibid.*
- 79 See Report of the Panel on the Role of Government in Ontario, *Investing in People: Creating a Human Capital Society for Ontario* (February 2004), 70.