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An Income-Contingent Financing Program for Ontario

BENJAMIN ALARIE AND DAVID DUFF*

In a report released earlier this year entitled *On the Edge: Securing a Sustainable Future for Higher Education*,[1] the OECD identified a number of challenges facing public colleges and universities internationally. These challenges include rapid growth in enrollment and research activity, declining state funding, unsustainably low levels of infrastructure investment, and greater competition among institutions.[2] Post-secondary education in Ontario is not immune from these concerns.[3] Provincial operating grants per student have declined by 25% in real terms over the past decade. Over the same period, enrollment has grown significantly. As a result, the government's share of university operating costs has decreased from 70 to 50%. In order to make up the difference, student contributions have had to nearly double to 45% of university operating costs.[4] From 1989–90 to 2003–4, tuition fees for undergraduate students in Ontario rose dramatically, increasing from approximately $2,000 to almost $5,000 (in 2003 dollars).[5] Tuition increases have been even larger in professional programs like dentistry, medicine, and law.[6]

Although the positive externalities associated with higher education favour substantial government support,[7] sound arguments also favour student contributions to the costs of post-secondary education – based both on the private benefits obtained[8] and the regressive impact of general subsidies for higher education.[9] At the same time, the central role that higher education performs as a vehicle for social mobility and the general reluctance of private lenders to finance individual investments in higher education suggest that governments also have an important role to play in the area of student assistance – ensuring that higher education is accessible to all students on the basis of merit,

irrespective of financial ability.[10] Given how tuition fees have increased over the last decade in Ontario, the need for a well-designed student assistance program is more important than ever.

Among many proposals for a restructured student aid system,[11] one of the most promising is to replace existing 'mortgage-style' student loans with a financing arrangement involving repayment obligations that depend on the student's income after graduation.[12] To the extent that this 'income-contingent' approach reduces the risk to borrowers with respect to their investments in higher education, it will likely lessen the reluctance that students exhibit with respect to such borrowing. Moreover, where funding covers both the direct costs of higher education (tuition and ancillary fees, books and supplies) as well as living expenses, income-contingent financing programs may enhance accessibility by making higher education effectively free at the point of purchase – offsetting the 'sticker shock' associated with increased tuition fees as well as living costs which generally exceed the direct costs of higher education. Finally, collection through the income tax should reduce the incidence of nonpayment and dramatically lessen the costs of administering student financial aid.

This article proposes an income-contingent financing program (ICFP) for Ontario[13] to replace the current system of mortgage-style loans, automatic debt remission, and interest and debt relief available under the Ontario Student Assistance Program (OSAP). Part 1 reviews the current system of government-provided student aid in Ontario, providing an essential foundation for our subsequent proposal for an ICFP. Part 2 examines the experience with ICFPs in Australia, New Zealand, Sweden, and the UK, in order to derive lessons relevant to the design of an ICFP for Ontario. Part 3 considers the essential features of an ICFP, canvassing the competing arguments and making specific recommendations informed by our review of the current system in Ontario and the international experience with ICFPs. Part 4 concludes.

1. Student Financial Aid in Ontario

In order to finance investments in post-secondary education, students rely on a number of sources, including personal income and assets, parental and/or spousal contributions, private borrowing, institutional assistance, tax credits, and government-provided loans and grants.[14] In Canada, federal and provincial governments spent over $2 billion on student aid in 2000–1,[15] with expenditures divided roughly equally

between direct grants and interest subsidies on student loans.[16] In Ontario, provincial government spending on student aid was $234 million in 2002–3, most of which was devoted to a grant program designed to reduce debt loads after graduation.[17]

The combination of federal and provincial grant and loan programs in Ontario and other provinces makes the current system of government-provided student aid seem dauntingly complex.[18] Indeed, the Ontario Government's guide for student assistance in Ontario describes a variety of grant and loan programs, including grants and loans for full-time students, grants and loans for part-time students, bursaries and grants for students with disabilities, federal and provincial grants for students with dependants and child-care costs, as well as other types of bursaries and grants.[19] For most post-secondary students in Ontario, however, financial assistance depends on three of these programs: an integrated Canada-Ontario student loan for full-time students, a federal bursary provided by the Canada Millennium Scholarship Foundation, and Ontario Student Opportunity Grants that reduce debt loads after graduation. In addition, the federal and provincial governments operate interest-relief and debt-reduction programs for low-income graduates unable to make regular payments on their loans.

The following sections review the key features of government-provided student assistance in Ontario, considering the administration of grants and student loans, eligibility for student aid, the amount of assistance that is made available to eligible students, the reduction of student debt through the Ontario Student Opportunity Grant program, the repayment of student loans, interest-relief and debt-reduction programs for graduates who are unable to make regular loan payments, and procedures for dealing with graduates who default on their loans or declare personal bankruptcy.

A. Administration

Administrative responsibility for student assistance in Ontario is shared between two bodies: the Ontario Student Assistance Program (OSAP), a branch of the Ontario Ministry of Training, Colleges and Universities; and the National Student Loan Service Centre (NSLSC), a private service provider operating under contract with the federal Department of Human Resources and Skills Development. While OSAP administers student assistance programs for the federal and provincial governments, processing applications, assessing eligibility and assistance, and

providing for the release of funds, the NSLSC processes loan documents, arranges for funds to be deposited in students' bank accounts, and administers loan repayments as well as interest-relief and debt-reduction programs.[20] Funds for grants and loans are provided directly by the federal and provincial governments.[21]

In order to obtain financial assistance, a student must first submit an application to OSAP,[22] which assesses eligibility and need based on the information provided by the student, subject to verification and audit,[23] and determines the amount and composition of financial assistance. For students studying in Canada, grant cheques and loan certificates are distributed through each institution's financial aid office after students have registered.[24] Loan certificates are submitted to the NSLSC, which requires students to complete a loan agreement and arranges for funds to be deposited in students' bank accounts. Under the Canada-Ontario Integrated Student Loan system, the federal government provides 60% of the funds for each student loan while the provincial government pays 40%.[25] Where a student qualifies for a bursary from the Canada Millennium Scholarship Foundation, the amount of this federal grant is deducted from the Ontario portion of the integrated loan.

After graduation, students who have received student loans are required to 'consolidate' these loans and set up a repayment schedule with the NSLSC, which administers both the repayment of loans as well as interest-relief and debt-reduction programs offered by the federal and provincial governments. When a loan is in arrears for a lengthy period, however, the NSLSC relinquishes its role to the federal and provincial governments, at which point the file is referred to a collection agency.[26]

B. *Eligibility*

To apply for student assistance in Ontario, a student must satisfy four initial conditions.[27] First, the student must be a Canadian citizen, a permanent resident (i.e., landed immigrant), or a protected person under the *Immigration and Refugee Act*. Second, the student must be a resident of Ontario, meaning that the student has lived in the province for at least 12 consecutive months immediately before applying without attending a post-secondary institution on a full-time basis. Third, the student must be enrolled in, or qualified to enroll in, an approved program at an approved post-secondary institution.[28] Fourth, except for part-time students who are eligible for federal loans and specific

types of federal and provincial grants, the student must be enrolled in a program lasting at least 12 weeks, and must take at least 60% of a full course load.[29]

Even if all four of these conditions are satisfied, however, students may nevertheless be denied financial assistance if they (i) fail to meet the academic requirements to continue in their program of study; (ii) have defaulted on a previous student loan; (iii) are under investigation for breaching the terms and conditions under which assistance is received; (iv) have loan overpayments for two or more academic years; (v) have received other government assistance for post-secondary studies; or (vi) have provided income information to OSAP that differs significantly from income reported to the Canada Revenue Agency.[30] In addition to these restrictions, financial assistance for each program is limited to the normal duration of the program plus one year, and aggregate financial assistance is capped at 340 weeks of study (10 academic years), increased to 400 weeks for doctoral students and 520 weeks for students with disabilities.[31]

C. *Available Assistance*

For students who are eligible for government-provided financial assistance, the amount of assistance is generally determined by an assessment of financial need, subject to a maximum amount for each week of study.[32] Need is assessed according to a four-step procedure, involving (i) a determination of the student's category; (ii) an assessment of student costs; (iii) a calculation of available resources; and (iv) the subtraction of available resources from assessed costs. Maximum amounts depend on the student's category and academic program.

In order to assess student costs, students are first grouped into six categories: (i) single dependents living at home; (ii) single dependents living away from home; (iii) single independents living at home; (iv) single independents living away from home; (v) students who are married or in a common-law or same-sex relationship; and (vi) single parents.[33] Students living at home are assumed to have lower costs than students living away from home, while married students and students with children or other dependents are assumed to have higher costs than single students. Dependent and married students are assumed to obtain financial support from parents and spouses, while independent students are assumed to receive no such support. In Ontario, students are considered independent of their parents if they are married or in a

common-law or same-sex relationship, are divorced or widowed, have one or more dependents, have been in the workforce for two or more years, or have been out of secondary school for at least four years.

Student costs include direct costs of post-secondary education (tuition and ancillary fees, books and supplies) as well as living expenses (including travel expenses and child-care expenses where applicable). For tuition and ancillary fees, assessed costs are capped at $2,250 per term ($2,675 for co-op programs), which corresponds to regulated fees for most undergraduate programs.[34] For books and supplies, assessed costs are limited to $3,000 for each study period. Monthly living allowances are $391 for single students living at home, $937 for single students living away from home, $1,212 for single parents, $1,799 for married students, and an additional $500 for each dependent.[35] In addition to these amounts, students who are living away from home may add to their assessed costs up to $1,200 for two trips home per year, while students with children may add amounts for child-care expenses.[36] Surprisingly, given significant differences in housing costs in different locations, there is no adjustment for these variations in expected living costs.

Available resources are calculated by taking into account the student's personal income (including scholarships) and assets, parental income for dependent students, and spousal income and assets for students who are married or living in a common-law or same-sex relationship. Contributions from pre-study income depend on amounts earned and living expenses, but are in the range of $1,600 to $2,200 for students living at home and $25 to $600 for students living away from home.[37] Expected study-period income is also included to the extent that it exceeds $50 per week of study, as is scholarship income over $3,500.[38] Savings and assets are also added to available resources, subject to exceptions for personal vehicles and registered retirement savings plans (RRSPs).[39]

Expected parental contributions are determined in the following manner.[40] No contribution is required if combined parental income is below an after-tax minimum of $30,000 for a two-person family (plus $5,000 for each additional family member). For parents with a combined after-tax income between $30,000 and $40,000, expected contributions are $100 plus 5% of after-tax income exceeding $30,000. Parents with a combined after-tax income exceeding $40,000 are expected to contribute 45% of the first $3,000 of after-tax income above the threshold, 60% of the next $3,000, and 75% of all income above this amount.

For students who are married or living in a common-law or same-sex relationship, partners are deemed to make contributions based on their assets and income. Asset contributions are determined according to the same rules that apply for the student's own assets. The partner's contribution on the basis of income comes from the following formula: [(Ontario minimum wage) × (average number of weekly work hours) × (4.3) – (the partner's monthly taxes)] × (number of months in the study period).[41] Where the student's partner is also a student, no income contribution is deemed.

Although assessed need is calculated by subtracting available resources from assessed costs, available assistance is limited to maximum amounts for each week of study. For single students with no dependents, this maximum is $275/week ($9,350/year) for full-time students enrolled in a publicly funded Canadian college or university or an approved private post-secondary institution, and $165/week ($5,610/year) for students enrolled in an approved post-secondary institution outside Canada, an approved private post-secondary institution or private degree-granting institution in Ontario on a probationary status, or an approved hair-styling school in Ontario.[42] For students who are married, living in a common-law or same sex relationship, or who are sole-support parents, the maximum available assistance is $500/week ($17,000 per year) for full-time students enrolled in a publicly funded Canadian college or university or an approved private post-secondary institution, and $165/week ($5,610/year) for students enrolled in an approved post-secondary institution outside Canada, an approved private postsecondary institution or private degree-granting institution in Ontario on a probationary status, or an approved hairstyling school in Ontario.[43] These limits have not been increased since 1994.

For students with the highest assessed need, up to $3,000 of the maximum annual amount is available in the form of a bursary provided by the Canada Millennium Scholarship Foundation. Other grants are available for financially needy students, disabled students, and students with dependents and child-care expenses.[44] Aside from these grants, student loans represent the remainder of a student's financial assistance package.

D. Debt Remission

In addition to grants that students may receive during the course of their studies, Ontario also provides grants after graduation, designed to

reduce the amount of debt that students accumulate from each year of study. Under the Ontario Student Opportunity Grants (OSOG) program, each graduate is automatically eligible for a grant that reduces the outstanding amount of their Canada-Ontario Integrated Student Loan to $7,000 for each two-term year of an academic program or $10,500 for each three-term year of an academic program. In order to qualify for the grant, a student must have negotiated an integrated loan in an academic year, received a loan that exceeds $7,000 for a two-term academic year (or $10,500 for a three-term academic year), enrolled in a full-time program for two terms, and completed the academic year. Although described as a grant program, OSOG is more accurately characterized as a loan forgiveness or debt remission program, since grants are not paid to the student directly but reduce the amount of student loans.

E. Repayment

No interest is payable on student loans while students are enrolled in full-time studies.[45] When students complete their studies or cease studying full-time, however, interest on student loans begins to accrue. Six months later, students must begin to repay their loans.

Canada-Ontario Integrated Student Loans are mortgage-type loans. As such, payments depend on the applicable interest rate, the balance outstanding, and the repayment or amortization period. The standard repayment period is 10 years, although students may negotiate shorter or longer amortization periods when they make repayment arrangements.[46] Students have a choice of paying interest at a floating rate of prime plus 2.5% or a fixed rate of prime plus 5%,[47] and have the option to switch from floating to a fixed rate at any point during the repayment period. Repayment terms are negotiated with the NSLSC, which students must contact after graduation in order to set up a repayment schedule.

F. Interest Relief and Debt Reduction

Depending on the circumstances, students experiencing difficulties making payments on student loans may make use of three different types of relief. First, students may ask the NSLSC to extend the repayment period for up to 15 years, thereby lowering monthly payments.[48] Second, students who are unemployed or have low incomes may apply for

interest-relief for six-month periods, up to a maximum of 30 months (54 months if the student has also increased the loan repayment period to 15 years and has completed studies within the past five years).[49] Finally, students who have been out of school for five years and have obtained interest relief for 30 months or more may be eligible for 'Debt Reduction in Repayment' should monthly loan payments exceed an 'affordable payment' based on family size and gross family income.[50] Under this combined federal and provincial program, students may receive a one-time debt reduction of up to $10,000 or 50 per cent of their outstanding loan balance (whichever is lower) and two subsequent debt reductions of up to $5,000 each.[51]

G. Default and Bankruptcy

Students are considered to have defaulted when they miss payments for three consecutive months.[52] In this circumstance, the NSLSC ceases to administer the loan and the federal and provincial governments may report the student's default to a credit bureau and refer the file to a collection agency. Where collection is unsuccessful, governments may also direct the Canada Revenue Agency to withhold the student's income tax refund and apply the proceeds against the amount owing.[53] Borrowers who are in default are barred from obtaining further student aid (including Ontario Student Opportunity Grants) and are denied in-school interest-free status on loans until accrued interest is paid and six consecutive monthly payments are made.[54]

Bankruptcy is a more serious process than default, in which a debtor seeks to clear existing obligations to creditors because of an inability to pay. Under federal legislation introduced in 1998, student loans survive declarations of personal bankruptcy that are made within ten years of graduation. Borrowers who declare personal bankruptcy may nevertheless apply for interest-relief and debt reduction programs.

2. Income-Contingent Financing Programs Internationally

Several developed countries have introduced and implemented ICFPs in the past 20 years. The most prominent of these programs were those introduced in Australia, New Zealand, Sweden, and the UK. The following sections briefly review the design features of each these ICFPs and canvass the available evidence relating to the experience each country has had as a result with accessibility to higher education.

A. Australia

Leading up to the mid-1970s, Australian post-secondary institutions had charged tuition fees roughly comparable to those prevailing at Ontario universities.[55] In 1974, in what eventually proved to be a failed initiative to improve minority group participation in post-secondary education,[56] tuition fees were eliminated entirely. The no-tuition policy was partly abandoned in 1987 when the Commonwealth government introduced an administration charge of A$250 per student per year to help defray the costs of higher education (albeit in a minor and mostly symbolic way).[57] In January 1989, the Labor Party reintroduced substantial tuition fees in conjunction with the launching of the 'Higher Education Contributions Scheme' (HECS), the first national ICFP for post-secondary education.[58] Since being introduced, the parameters of HECS have been amended several times, most notably in 1997, and further changes have been announced and are on the way for 2005.

In 1989, tuition fees were set at a flat rate of A$1,800 per student per year, regardless of the course of study or institution attended.[59] These tuition fees were indexed for inflation and could be repaid in two ways. The first was to pay up front at a significant discount, which was initially set at 15% and later increased to 25%.[60] The second way was to defer all payments until after graduation, at which point repayments were income-contingent. Loan funds were available for tuition fees, but not for living expenses. The balance owing was indexed for inflation, so the nominal amount to be repaid would increase from year to year, but no real interest accrued. Provision was made for repayments to be collected at rates varying from 1 to 3% of income through the income tax system, administered by the Australian Tax Office. No repayments were required of those earning less than A$22,000 annually (in 1989 dollars).[61] Evidence suggests that since 1989 the collection costs (not including other administration costs) have amounted to just 1% of the annual HECS collections.[62] Payments are collected until a student's debt is completely repaid, but there is no set schedule that must be met. If a student dies before repaying completely, the debt is forgiven. All students have the option to make voluntary early repayments that attract a 15% bonus.

Reforms to HECS taking effect in 1997 increased prescribed tuition fees, which varied by course of study but not by institution. Three tuition bands replaced the original flat tuition rate. These same three bands continue to apply, though the rates charged have increased. For

2004 tuition fees are: (i) Band 1: A$3,768 (Arts, Humanities, Social Studies and Behavioural Sciences, Education, Visual and Performing Arts, Nursing, Justice and Legal Studies); (ii) Band 2: A$5,367 (Mathematics, Computing, other Health Sciences, Agriculture, Architecture, Sciences, Engineering, Administration, Business and Economics); and (iii) Band 3: A$6,283 (Law, Medicine, Medical Science, Dentistry, Dental Services and Veterinary Science).[63] The 1997 reforms allowed institutions to enroll students who would not be counted for the purposes of the provision of Commonwealth institutional grants and who would also not qualify for participation in HECS. These students pay a tuition fee set independently by the institution and are limited to 25% of enrollees. The set of 1997 reforms have been justifiably criticized on the basis that they retained central planning, in that prices continue to be set by the Commonwealth government, and on the additional grounds that the reforms in effect allow less-able students from relatively wealthier families preferential (unsubsidized) access to elite institutions.[64]

Despite the 'study now, pay later (if you can)' innovation of HECS for undergraduates, from 1989 to 2001 graduate students had to pay tuition fees up front. In January 2001, however, the Australian government announced a program inspired by HECS to assist graduate students – the Postgraduate Education Loan Scheme (PELS). PELS operates similarly to HECS, with loans being made available in respect of all tuition fees (but not living expenses), and income-contingent repayment through the income tax system on essentially the same terms as HECS.

Beginning in January 2005, HECS and PELS are being repackaged with some changes under the auspices of what is being called the 'Higher Education Loan Programme' (HELP). HELP is composed of three separate initiatives, HECS-HELP (the new name for HECS), FEE-HELP (the new name for PELS), and OS-HELP (an overseas studies assistance initiative). Although the general scheme has not changed dramatically, one interesting development is that upfront payments of tuition will no longer need to be all-or-nothing. So long as upfront payments exceed the minimum threshold of A$500, partial upfront payments will be accepted and students credited with a 20% prepayment bonus (down from the 25% bonus that current upfront payments attract). On the back end, voluntary early repayments will attract a 10% bonus as of January 2005 (down from the current more generous 15% bonus).

For 2005–6, no HECS repayments are required of those whose 'HELP Repayment Income' (HRI) is below A$36,185. HRI is defined by the

Australian Taxation Office as 'Taxable income plus any net rental losses, total reportable fringe benefits amounts and exempt foreign employment income.'[65] For those with incomes ranging from A$36,185 to A$67,200, the repayment rates range progressively from 4 to 7.5%. For those whose HRI exceeds A$67,200, the repayment rate is 8%. As was true of the original design, it remains the case that the amount owing is indexed to inflation and the real rate of interest charged is zero.

Given HECS's novelty and the fact that 15 years have elapsed since the Commonwealth of Australia introduced the scheme, it should come as no surprise that the intense interest of observers has led to several studies evaluating the country's experience with the program. In a 2003 paper, Bruce Chapman argues that there are four main lessons that can be drawn. First, he argues that HECS has proved to be surprisingly inexpensive to implement and administer. Current figures suggest that total administration costs (not just collection costs) amount to 2–3% of the amount collected per year. Second, HECS successfully collects a considerable amount of revenue – approximately 20% of higher education expenditures. Third, the program has not led to any discernable change in the composition of the student body. More specifically, there is no evidence that choices regarding post-secondary education have been impaired for socio-economically disadvantaged students. Lastly, enrollment in higher education has grown by about 50% since 1989 (though this growth cannot be attributed solely to the influence of HECS, since enrollment grew dramatically over the course of the 1990s in most developed countries). The one major caveat to the conclusion that the Australian experience has been a positive one that should be emulated elsewhere is that the administrative success of a system like HECS inevitably turns on the efficiency of a jurisdiction's tax system.[66]

In a recent study aimed at more directly investigating and assessing the accessibility impacts of HECS, Chapman and co-author Chris Ryan conclude that '[T]he socioeconomic composition of the higher education student body changed somewhat between 1988 and 1993 in Australia, with the main change being the relative increase in participation by individuals in the middle of the wealth distribution... In the period after the [1997] modifications to HECS, there [were] apparently no differences between the proportionate increases in the participation of all socioeconomic groups. Further, while there was a slight across-the-board decrease in the intentions of secondary students concerning university participation, in the next year enrolment intentions rebounded to their previous level for all socioeconomic groups.'[67]

Chapman and Ryan sum up their findings by remarking that 'the introduction of income-contingent charging systems for higher education has the potential to protect the access of the disadvantaged.'[68] The accessibility findings are consistent with Chapman's earlier work, as well as with studies by others examining the Australian experience with HECS. In a 1999 study sponsored by the Australian Department of Education, Training, and Youth Affairs, Les Andrews concluded that '[w]hile students from low SES backgrounds are under-represented in higher education institutions this is a long term concern which has not worsened following the introduction and changes to HECS over the past decade.'[69] Consistently with the other studies, Hans Vossensteyn and Eric Canton found in 2001 that the socio-economic characteristics of the Australian post-secondary student population did not change in representativeness following the reintroduction of tuition fees in 1989 or with the 1997 reforms.[70]

B. New Zealand

Prior to 1990, New Zealand students paid only nominal fees for post-secondary education.[71] That year, tuition fees of NZ$1,250 per year per student were introduced for all courses of study and at all institutions. Two years later, New Zealand followed Australia's 1989 lead by introducing an ICFP of its own – the 'Student Loan Scheme' (SLS). The SLS provides income-contingent loans for tuition fees charged by public post-secondary institutions. Contemporaneously with the introduction of the SLS in 1992, tuition fees were deregulated, which resulted in considerable increases in tuition fees for most programs. Despite these increases, and consistent with the experience in other developed countries, the 1990s witnessed a dramatic surge in enrollment. By 2002, the tuition fees charged for undergraduate arts programs ranged from NZ$2,950 to NZ$3,880; the fees for law ranged from NZ$3,480 to NZ$3,850; and for medicine, from NZ$9,180 to NZ$9,646.[72] In response to political pressure associated with these increases, the government initiated a 'voluntary' fee-stabilization program in 2001, whereby institutions agreed not to increase tuition fees in exchange for an offsetting increase in government funding.[73] The fee-stabilization program ended in 2003, and the government announced a new 'fee maxima' initiative. This program, now implemented, established a hard cap for undergraduate tuition fees, but allows increases of up to 5% annually provided a program's fees are below the published maxima.[74]

In addition to tuition fees, SLS funds are available to full-time students for course-related costs (such as books) ranging up to NZ$1,000 per year, and for living expenses at a rate of NZ$150 per week. Though not strictly part of the SLS, the 'Student Allowances Scheme' (SAS) operates in parallel with the SLS and provides income-tested grants to students to assist in meeting living expenses. The SAS grants available depend on parental income, and can range up to NZ$164.16 weekly for students who are over 25, studying full time away from home, and whose parents have low incomes.[75]

SLS collections are managed through the income tax system by Inland Revenue. The income threshold below which no repayments are required is currently NZ$16,172.[76] The rate of repayment on income beyond the income threshold is 10%. The SLS indebtedness of non-residents is repaid on a 15-year mortgage-style schedule of predetermined repayments of principal and interest that applies regardless of income.

Interest on all outstanding SLS balances begins accruing as soon as funds are drawn, and is calculated daily. The interest rate on SLS loans has remained at 7% since 1999, which reflects a real interest rate ranging from 3.1 to 6.2% (the 'base interest rate') and an allowance for inflation ranging from 0.8 to 3.9% (the 'interest adjustment rate').[77] Although not the case when the SLS was introduced, a change of government in 2000 and political pressure led to the introduction of a series of complicated interest abatement measures.[78] Students studying full-time or those studying part-time having income below a certain threshold are eligible for complete interest abatement. Those no longer studying are eligible for 'base interest write-offs' (i.e. no real interest will accrue) if income does not exceed the repayment threshold. Provision is also made for what is termed a 'base interest reduction,' which limits the amount of real interest charged on a loan to a maximum of 50% of the income-contingent repayment obligation for that year.[79] Bruce Chapman and David Greenaway have reported that the Inland Revenue's costs of administering the SLS at one point reached nearly triple that of HECS in Australia, which in retrospect was largely the result of a rocky start in administering the complicated interest abatement provisions.[80] The recently published 2004 figures demonstrate that the net administration costs of the SLS now amount to 3% of collections; in this respect New Zealand's administrative experience with the SLS is now essentially the same as Australia's with HECS.[81]

With the important exception of the complicated and costly interest

rate abatement measures, the SLS has generally been regarded as a success by commentators in administrative (if not always in political) terms.[82] Notwithstanding this administrative success, some genuine representation issues remain, particularly with regard to the participation of Maori and Pasifika Peoples in post-secondary education. However, there are encouraging signs that these groups are increasing their use of the SLS in both absolute and relative terms.[83] Between 1992 and 1999, Maori and Pasifika Peoples increased their participation rates in New Zealand post-secondary education by 24% and 28%, respectively.[84]

C. *Sweden*

Swedish universities do not charge tuition fees, although there are nominal student union fees at most universities that range from SEK 150–400 ($27–$70).[85] The Swedish National Board of Student Aid administers the country's student financial aid program, which is intended to assist students in meeting their living expenses while they are studying (further loan funds are also available for certain non-tuition academic costs).[86] The first 35% of a student's funding, SEK 593 per week (about $103), is the basic amount of support and is paid as a grant to all who qualify for funding. A higher grant representing 82% of the total amount, SEK 1,414 per week (about $245), is available for those who demonstrate greater need. The means-testing takes into account only the income of the student (i.e., not that of the student's parents or spouse).[87] Provided a student maintains an adequate level of academic performance (student performance is reported by universities directly to the National Board), he or she remains eligible for the loan and grant program for up to six years.

Until 2001 student loans were repayable on an income-contingent basis at the rate of 4% of earnings, provided an individual's income exceeded a minimum threshold.[88] Since 2001, however, student loans have been repayable on a fixed schedule determined by regulation, depending on various factors including the student's age; for most students the repayment term is 25 years. It is not entirely clear what precipitated the abandonment of the ICFP, though at least one commentator has suggested that it may be related to the high rate of emigration of Swedish post-secondary graduates.[89] The available evidence suggests that approximately 15% of graduates leave the country.[90] The repayment schedule is not a conventional annuity; rather repayments trend upward and are greater towards the end of the schedule. Interest

accrues immediately upon loan funds being received, and is calculated at a rate equivalent to the government's average cost of borrowing for the previous three years. Any balance outstanding upon a student's death or upon an individual reaching his or her 68th birthday is forgiven.

It appears that despite the considerable measures in place to ensure the financial accessibility of Swedish post-secondary education – there being no tuition fees and generous support for living expenses – the student population is drawn disproportionately from higher socio-economic groups. According to a report prepared last year by the Swedish National Agency for Higher Education, 'There is a relatively high degree of social skew in the recruitment of students to higher education. The probability that an individual from a well-off white collar family will go on to higher education is six to seven times greater than that an individual from a working class background will do so.'[91] That socio-economic factors play a significant role in higher education participation in Sweden is surprising, since there are no tuition fees and basic grants exceeding $100 per week are paid for a student's living expenses (even for students from affluent families). As with the Australian experience in abandoning tuition fees from 1974 to 1987, it appears that affordability is not generally a binding constraint on the participation of students from less-affluent socio-economic backgrounds in higher education in Sweden.

D. United Kingdom

Following the Dearing Report,[92] released in July 1997, the funding of higher education in the UK has changed considerably, in the main consistently with the report's 93 recommendations for improving the provision of higher education.[93] Among the most dramatic changes was the introduction of a means-tested tuition fee of £1,000 (now standing at £1,150) for students in all programs and at all institutions. For the current academic year, if a student's parents' residual income amounts to less than £21,475, tuition fees are waived entirely; if parental income exceeds £31,973, full fees are assessed.[94] Another important change following the Dearing Report was the introduction of an ICFP. Student loans are intended to cover those tuition fees not forgiven as a result of means-testing, plus provide some contribution towards living expenses. The maximum loan amount available for students for 2004–5 is £4,095 for students living away from home, £5,050 for students living in Lon-

don away from home, and £3,240 for students living at home. Outstanding balances increase in nominal terms to keep pace with inflation, but no real interest rate is charged. The rate of repayment is 9% of all income in excess of £10,000 per year. A Higher Education Grant was introduced for students beginning their studies in 2004. The grant is worth up to £1,000, depending upon parental income. For students with family income of £15,200 or lower, the maximum grant is awarded. Partial grants are available for students whose family income ranges from £15,200 to £21,185. With students whose family income exceeds £21,185, no Higher Education Grant will be awarded.[95]

Beginning in 2006, students will be able to defer the payment of their tuition fees directly by taking a 'fees loan' ranging up to the full tuition. Tuition fees are also being deregulated such that institutions will be free to charge any rate for tuition, subject to a hard cap of £3,000.[96] Outstanding balances will continue to be adjusted for inflation and will accrue no real interest charges.[97] Students from low-income families will be entitled to grants of up to £2,700, in addition to loan funding. Universities charging the maximum tuition fees of £3,000 will need to ensure that students from low-income families are provided with bursaries of at least £300 per year, so that when these bursaries are combined with the grants, tuition fees will be completely covered. It has been announced recently that the threshold annual income for repayment of income-contingent loans will be increasing from £10,000 to £15,000 beginning in 2006.

Although the UK's ICFP has been around only since 1998, several studies have already attempted to discern its impact on accessibility to post-secondary education. The preliminary results are somewhat discouraging. In recent empirical work, a group of researchers from the London School of Economics investigated the impact of the introduction of tuition fees and other responses to the Dearing Report on the socio-economic characteristics of students participating in UK post-secondary education.[98] They examined the trend in the likelihood a university student was from a poor neighbourhood and the role of family background.[99] The results showed, encouragingly, that children from all socio-economic backgrounds were considerably more likely to be enrolled in higher education in 2001 as compared to 1994, despite the introduction of tuition fees.[100] However, the increase in participation over the period for students from more privileged backgrounds exceeded the increases realized by poorer students. The authors argue that the relative affordability of post-secondary education likely has

only a small *direct* effect on participation and that 'much of the impact from social class on university attendance actually occurs well before entry,' although they acknowledge the possibility that students from poorer backgrounds might anticipate poor accessibility of higher education and therefore exert themselves on their studies less intensely.[101]

Sveinbjörn Blöndal, Simon Field, and Nathalie Girouard found that '[i]n the United Kingdom, the replacement of grants by loans and the introduction of tuition fees has left the social class mix of entrants to universities unchanged, and the proportion of ethnic minority entrants and women slightly higher than before.'[102] According to a 2001 report by the UK Department for Education and Employment, students from more- and less-affluent backgrounds have taken on loans at approximately the same rate. The Department for Education and Employment found that a consistent proportion of students, regardless of position on the socio-economic spectrum, reported worries about taking on study-related debt. The upshot, if these conclusions are accurate, is that debt aversion does not particularly disadvantage those from less-affluent families. The same study concluded also that some ethnic minority students are more reluctant to take out loans than average; however, this does not appear to result in lower rates of participation in post-secondary education in the UK for these ethnic groups.[103]

The experience of the UK in accessibility terms is consistent with findings from Australia, New Zealand, and Sweden, where higher tuition fees coupled with ICFPs led to nearly no discernable impact on the socio-economic composition of the student body. One promising result common to both the New Zealand and the UK experience is that ICFPs appear to be associated with greater participation in higher education by certain ethnic minorities.

3. Designing an Income-Contingent Financing Program for Ontario

There is a strong case that post-secondary education should be free at the point of use in order to maximize accessibility.[104] But equity arguments similar to those supporting the idea that higher education should be free at point of use imply that it should not be free afterwards.[105] An income-contingent financing program (ICFP) provides an attractive way to facilitate the achievement of both goals. The essential feature of an ICFP is that payments are not fixed, as they are with mortgage-style loans, but vary according to an individual's post-study income.[106] For

this reason, ICFPs lower the risk of student borrowing, making it more likely that students will invest in higher education.[107] More importantly, as Nicholas Barr explains, by making payments contingent on post-studying incomes, ICFPs effectively charge participating students for their post-secondary education according to the future income benefits that they receive from this education as well as their ability to pay after graduation.[108] As a result, he observes, an ICFP functions much like an income tax on graduates, with the important difference that payments are 'switched off' when the graduate repays the full amount of the balance outstanding.[109]

As a type of income tax, the design of an ICFP necessarily involves many of the same questions that must be addressed for income taxes more generally: Whose income is subject to the tax? What amounts are properly included in computing income and what, if any, amounts may be deducted? What percentage or percentages of income should have to be paid as tax? And below what income level, if any, should no tax be payable? In tax policy terms, these questions concern the tax unit, the tax base, the tax rate or rates, and the exemption or threshold. As a student assistance program, however, an ICFP must also address many of the same questions that are involved in a mortgage-style student loan program: Who is eligible for financial assistance? What level of assistance is available? At what rate should interest accrue on balances outstanding? How long should payment obligations last? And what, if any, interest relief or debt reduction assistance should be available? A further issue, which is common to both income tax and student assistance aspects of an ICFP concerns the administration and collection of payments. The following sections discuss the essential elements of an ICFP, considering student assistance aspects, income tax aspects, and the administration and collection of payments.[110]

A. *Student Assistance Design Considerations*

The lynchpin among the student assistance design considerations is determining how subsidies should be delivered through an ICFP (if at all). To the extent that any student financial aid program is subsidized, funds will need to be rationed in some way because demand for funding will exceed supply. The current design of OSAP embodies a number of subsidies, including interest rate subsidies while students are studying, debt remission measures through OSOG, and interest and debt relief provisions for those with low earnings in the post-study period. In

the case of OSAP, the resulting rationing has led to inadequate borrowing limits and troubling deemed parental and spousal contributions (which are regularly not actually received).[111] This has in turn led to impaired accessibility for students whose needs exceed the borrowing limits or whose parents or spouses do not contribute the amount deemed.

There is thus a trade-off between providing subsidies through an ICFP – even if these subsidies are intended to enhance the accessibility of education for those who pass the test for the subsidized (but rationed) financing – and providing unsubsidized (or, in any event, much less subsidized) funding to all students to the extent they demand it. While incorporating the use of subsidies into the design of an ICFP may make it more politically saleable, it also introduces rationing and access complications.[112] One way to address this rationing problem is to design an unsubsidized ICFP which contains few constraints on borrowing up front, and explicitly target subsidies to those who are most in need through separate initiatives. Even if this approach proves not to be administratively convenient when it comes time to implement Ontario's ICFP, this separation may prove conceptually helpful at the design stage.

1. Eligibility

The current system of student aid in Ontario requires students to satisfy various residency and program requirements in order to be considered eligible to receive student financial aid in Ontario through OSAP.[113] It also limits financial assistance for each program to the normal duration of a program plus one year and aggregate financial assistance to 10 academic years or longer for doctoral students and students with disabilities. For the most part, we see no reason why these eligibility criteria would not also be appropriate to serve as the gatekeepers to the ICFP program envisioned here.

That said, a shift from mortgage-style loans to income-contingent financing might require some rethinking of maximum limits if (as we recommend below) annual limits are relaxed and students are able to fully finance the direct and indirect (living) costs associated with higher education. Although a market interest rate discourages students from obtaining greater financing than they actually need for their education, those who accumulate substantial ICFP balances might be unable to repay these amounts from post-study earnings. While this result might be considered acceptable, on the basis that assistance will be directed to those who need it most, it might also put the ICFP at financial risk –

requiring substantial subsidies from general tax revenues. For this reason, it might be necessary to consider a shorter eligibility period, such as the six-year limit in Sweden.[114] Alternatively, the system might adopt a maximum dollar amount that might vary according to the student's age and/or academic program – diminishing as the student's age increases and increasing for academic programs with higher prospects of future income.[115] Whichever approach is adopted, the existence of maximum limits on income-contingent financing suggests a continuing need for other forms of student assistance such as grants and bursaries that are targeted to students with unmet needs.

2. Available Assistance

One of the most important issues in the design of an ICFP concerns the amount of funding that should be made available to students. The interests of maximizing accessibility suggest that a brief answer is that the amount of funding available should be that which meets a student's requirements while he or she is studying, effectively making higher education free at point of purchase.[116] Three issues arise in determining a student's requirements: (i) eligible expenditures, (ii) available resources, and (iii) maximum annual amounts.

Under the current system of student aid in Ontario, eligible expenses include tuition fees, ancillary fees, books, supplies, and living expenses. Tuition and ancillary fees are capped at an amount which corresponds to regulated fees for most undergraduate programs,[117] books and supplies are capped at $3,000 per year, and living expenses are based on six student categories which account for different living arrangements and family responsibilities. For the most part, we see no need to change these rules under an ICFP. To the extent that the introduction of an ICFP is accompanied by a deregulation of tuition fees, however, eligible costs should include actual tuition fees without any limits.[118] Finally, we would favour an additional adjustment to eligible living expenses to reflect differences in the actual cost of living in different regions – as is the case in the UK, where students living in London are assumed to have higher living costs than other students.

With regard to available resources, current rules for student assistance take into account the student's personal income (including scholarships) and assets, parental income for dependent students, and spousal income and assets for students who are married or living in a common-law or same-sex relationship. This means-testing is made necessary by the interest-rate subsidy in current student loans, since students with-

out financial need would otherwise borrow at below-market rates. Under an ICFP with a market rate of interest, by contrast, students have no economic incentive to obtain more financing than they actually need.[119] In principle, therefore, it should be possible to do away with all means testing, allowing students to finance all direct and indirect (living) expenses associated with higher education, irrespective of their income or assets, or those of their parents or spouses. Given the substantial administrative costs associated with means testing, this would be a significant advantage of an ICFP with market interest rates.

In practice, however, a market interest rate based on the government's costs of borrowing is likely to be lower than the rate at which many students could borrow, suggesting that some attention to available resources is advisable. For two reasons, however, contributions based on parental income and spousal income and assets should be abandoned: first, studies strongly indicate that presumed contributions are often not made, leaving students in poverty and causing significant barriers to access; second, even where these contributions are made, they are often made only under conditions (e.g., with respect to program selection) that undermine personal autonomy.[120] As well, requiring contributions from personal assets is probably not worth the administrative effort, since many students have little in the way of personal assets, those who do are unlikely to seek assistance at market rates, and information on personal assets is not readily verifiable from tax returns. As a result, assessments of available resources should be limited to personal income, including scholarship income. For this purpose, we see no need to depart from current rules requiring specific contributions from pre-study earnings, study-period earnings, and scholarships.

A final issue concerns the existence of a maximum annual limit on allowable assistance, which is currently set at $9,350 for full-time students in Ontario – an amount that was last increased in 1994. If this cap was appropriate in 1994, it is certainly inadequate today, given increases in living expenses and tuition fees in particular.[121] More generally, one might question the need for any annual limit beyond actual assessed expenses less assessed resources.[122] To the extent that some such cap is considered necessary, however, it should be substantially increased to reflect current reality.

3. Interest Rates

Subsidized interest rates are the most common subsidy incorporated into the design of ICFPs internationally[123] and, like most untargeted

subsidies, are generally undesirable.[124] The current practice whereby students pay no interest until they have completed their studies diminishes the incentives students have to borrow only what they need. This explains in large part the tight rationing and deeming of parental and spousal contributions under the current student assistance regime. If a fundamental goal of a student financial aid program is promoting accessibility, then tight rationing must be relaxed. An obvious way to lessen rationing is to reduce subsidies. Consequently, there is a strong case for unsubsidized interest rates. Interest rate subsidies can result from the delayed onset of interest obligations – for example, only after a student finishes his or her studies – or from a below-market interest rate being imposed on outstanding balances. Both types of subsidies should be resisted in the design of an ICFP for Ontario.[125]

Delving a little deeper into what an unsubsidized rate of interest would mean in the context of an ICFP demonstrates that the inquiry cannot end with an assertion in favour of an unsubsidized rate. One option would be to attempt to determine the riskiness of the average student borrower and charge a single rate of interest in an attempt to reflect the average risk. This 'average riskiness' approach appears to be the one currently taken in Ontario. Students have the option of repaying their OSAP loans at a variable rate of interest at prime plus 2.5% or at a fixed rate of interest plus 5%. However, not all student borrowers present the same risks to government lenders. Students in professional programs, such as medicine, dentistry, and law, have much better earnings prospects and will be more likely to repay financial assistance than student borrowers in, say, the fine arts.[126] Even students studying in the same programs at different institutions in many instances have vastly different repayment prospects. The three tuition bands in the Australian system are based in part on the polite myth that all institutions provide programs that are of equal value to students.[127] If one accepts the proposition that student repayment prospects will vary from program and program, then a natural question arises whether these differences should be accounted for through varying interest rates (or, for example, whether such differences should be reflected only through varying tuition fees).[128] An advantage of risk-rating is that programs would have an incentive to improve their students' income prospects after graduation. The competitive pressure to improve upon incomes would ensure that programs set on providing graduates with the skills and abilities demanded by the labour market would be rewarded with more attractive borrowing terms for students.[129] Because students study-

ing at private institutions would not be cross-subsidized by students elsewhere, risk-rating programs would also facilitate freer entry of private institutions into post-secondary education, as there would be little reason to restrict entry by private institutions. In addition, allowing students to access funds up front would allow students to finance a privately provided education more easily than is currently the case, which would have the added benefit of facilitating access to innovative private institutions. Risk-rating by program might therefore promote a post-secondary system that is more competitive, invigorated, and more responsive to the demands of labour markets.[130]

Risk-rating programs is not without potential problems. All the arguments that suggest that interest rates should vary by program would also suggest that especially talented or motivated students should be entitled to borrow at lower interest rates (since they should not be forced to cross-subsidize less-talented or less-motivated students).[131] More perniciously, the same arguments would suggest that students who are subject to discrimination in labour markets (e.g. females, handicapped individuals, members of ethnic minorities, and, taken to an extreme, those shorter or less attractive than average, or the morbidly obese)[132] should pay higher rates of interest. Even if distinctions in interest rates on the basis of ethnicity, gender, or these other grounds were prohibited, if programs were risk-rated on the basis of labour market experience post-graduation, then programs would have an incentive to admit students expected to have the best *ex post* earnings prospects – those who are least disadvantaged (or, equivalently, the most advantaged). Another potential problem is that programs would have an incentive to encourage graduates to pursue careers yielding private benefits at the expense of careers in the public interest. Students would then be tempted to use a program's risk-rating as a proxy or signal of the program's quality. Anticipating this behaviour on the part of students, employers could be expected to use the program's risk-rating as a signal of student quality.[133] This implicit understanding about which programs attracted the best students (and thus attracted the most employer attention) would then be self-reinforcing. The best students would be the ones being admitted to the 'best' programs, which would lead inexorably to a situation of 'have' and 'have-not' programs, which might be inconsistent with the aspirations of public post-secondary education.

The foregoing suggests that while in theory the optimal approach would be to charge each student a tailored risk-adjusted interest rate,

based on personal characteristics or on the basis of the experience of previous graduates from a particular program (or a combination thereof), this is probably not desirable due to the undesirable incentives it would engender at the program level and for the pernicious discriminatory impacts such risk-rating would have for females and for those from disadvantaged ethnic groups (and others). While any number of calculations might support the selection of one real interest rate or another to reflect the average riskiness of student borrowers, the current rate for student loans offers a clue. Since the current prime rate is 4.25%,[134] the variable rate option is 6.75% (2.5% greater than the prime rate). Because the latest CPI figures suggest that inflation is running at approximately 2.3%,[135] the current real rate of interest on student loans is about 4.45%. This suggests that an interest rate representing the 'average risk' of students through an ICFP, with its many advantages on the administration and collections front,[136] would perhaps be a slightly lower real interest rate of 4%.

4. Length of Payment Term

Aside from subsidized interest rates, another common way of delivering subsidies through an ICFP is by forgiving the amount outstanding at a certain date (e.g., 25 years following the commencement of the repayment period, or upon the borrower reaching a certain age, such as the standard retirement age). While the basic parameters for ICFP payments should be designed to recover most ICFP balances within a reasonable period of time (e.g., 25 years or the graduate's working life),[137] there is no reason why payment obligations should cease at this time if individuals have balances outstanding. On the contrary, since an ICFP bases the level of periodic payments on an individual's ability to pay, no individual will be subjected to undue hardship as a result of having to satisfy payment obligations, as is often the case with large mortgage-style student loans that are repayable over relatively short terms such as 10 years. Those with very large ICFP obligations will never be called upon to make larger payments than they can afford to pay, in accordance with the conventional formula. As a result, artificially limiting the payment term would tend to benefit those who remain capable of paying toward the accumulated cost of their education plus a reasonable rate of interest. It also creates perverse incentives to minimize income, particularly around the designated time when payment obligations cease.

With reasonable parameters for income-contingent payments, most participants will discharge their ISFP balance during their lifetimes. For

those who do not, however, because they die young, their lifetime earnings are low, or their balance is large, it must then be determined whether ICFP obligations cease at death or convert into conventional debts that attach to the deceased's estate. In our view, the logic of an ICFP favours the former approach: to the extent that an ICFP 'taxes' participants based on their ability to pay and the benefits that they receive from higher education in the form of increased lifetime earnings, these principles are satisfied by income-contingent payments during the individual's lifetime but not after death. Nor does death create the same opportunities for strategic behaviour as one might expect with a repayment term limited to 25 years or the age of retirement, since few individuals can be expected to pursue this option to avoid income-contingent payments.

5. Interest Relief and Debt Reduction

Under an ICFP, payment obligations vary with income and are designed to be affordable given an individual's ability to pay. For this reason, additional interest relief and debt reduction programs, as exist in the current student aid system in Ontario, would seem to be unnecessary in an ICFP.[138] For individuals who would discharge their ICFP balances during their lifetimes, these measures simply shorten the payment period. For individuals who would leave an unpaid ICFP balance at death, they provide this relief earlier. If periodic payments are contingent on the individual's income, however, it is not clear why either of these responses is warranted.[139] On the contrary, the same reasons that favour a market interest rate and repayment until the amount outstanding is satisfied or the participant dies also militate in favour of precluding the possibility of interest relief and debt reduction.

B. Income Tax Design Considerations

Under an ICFP, the payments to discharge outstanding balances are contingent on post-study income. As a result, these payments function much like a temporary income tax that ceases when outstanding balances are repaid. This section considers the manner in which this tax should be designed, considering the choice of the tax unit, the defini-tion of the tax base, and the specification of rates and a non-taxable threshold.

1. Tax Unit

The choice of a tax unit determines whose income is subject to the tax. With an individual tax unit, income tax applies to the income of each

individual. A spousal or family tax unit, by contrast, aggregates the income of spouses or families (however defined) before computing the amount of tax payable. While the US federal income tax aggregates the income of married couples, and the French income tax applies to aggregate family income,[140] federal and provincial income taxes in Canada apply to each individual's income.[141] Tax-delivered benefits like the federal Goods and Services Tax Credit and the Canada Child Tax Benefit, however, are based on aggregate spousal income and phased out as this combined income increases. Similarly, interest relief and debt reduction programs under the current financial aid system depend on the combined income of the borrower and the borrower's spouse, common-law partner, or same-sex partner. Which approach should be adopted under an ICFP?

Although a spousal unit makes considerable sense if the purpose of a program is to deliver benefits on the basis of need, the logic of an ICFP suggests that repayment should be contingent on the individual student's post-study income rather than the combined income of this individual and his or her spouse. If a key justification for an ICFP is that it taxes participants according to their ability to pay and the income benefits that they receive from higher education, it makes sense to tax the individual who obtained financial assistance to pursue this education rather than the spouse with whom this person resides. Nor should the income-contingent character of the repayment be regarded as a benefit that should only be available to persons in need, but as a basic term for repayment that generally affects only the duration of this repayment rather than the aggregate amount of the payment. Further concerns with a spousal unit are the economic barriers that it could create for long-term relationships with heavily indebted graduates, and the disincentive that it would create for graduates to engage in less-remunerative activities like public service or child rearing. Finally, integration with the existing income tax (discussed below) would be greatly facilitated if the ICFP were to adopt the same unit as the federal and provincial income taxes.

2. Tax Base

The tax base of an income tax may be defined as the amount to which the rate or rates of tax are applied in order to determine the amount of tax payable. More specifically, the tax base includes 'all of the rules respecting the measurement of income, including exemptions and deductions, as well as inclusions.'[142] Although the concept of income may seem straightforward, it is defined by a multitude of provisions in

contemporary income tax statutes and is a subject of recurring policy analysis.[143]

As a general rule, tax policy analysis favours a broad or comprehensive definition of income on the basis that this provides the best measure of each taxpayer's relative ability to pay.[144] In Canada, however, federal and provincial income taxes, most of which employ the same tax base,[145] are based on a 'source concept' of income which includes only certain kinds of receipts – excluding, for example, lottery winnings, gifts and inheritances, and other windfalls.[146] Other tax rules encourage specific kinds of behaviour through exemptions and deductions – exempting, for example, half of all capital gains, half of the gain on most employee stock options, and the first $500,000 of lifetime gains on the sale of a private corporation or a family farm; and allowing individuals to deduct contributions to registered pension plans (RPPs) and registered retirement savings plans (RRSPs). Under bilateral tax treaties, moreover, Canada may also exempt certain kinds of income that are earned in other countries. What definition of income should an ICFP employ?

As with the choice of a tax unit, integration with the existing income tax may favour a definition of income for ICFP purposes that corresponds with the definition used in the federal and provincial income taxes. Since this definition captures most forms of earned income, moreover, it is arguably consistent with the aim of an ICFP to tax participants according to the future incomes they derive from their higher education. If repayments are to depend on each individual's ability to pay, however, the standard definition of taxable income may be deficient. In Australia, for example, the concept of income for the ICFP adds to the tax concept of taxable income 'net rental losses, total reportable fringe benefits amounts and exempt foreign employment income.'[147] Likewise in Canada, an ICFP could use an adjusted concept of income that would add specific amounts to taxable income. A possible model for this purpose might be the adjusted income tax base employed for the federal Alternative Minimum Tax. Precisely which amounts should be added requires more detailed consideration than we can provide here.

3. Rates and Threshold

A final issue in the design of an ICFP repayment regime concerns the rate or rates at which payments should be assessed and the income threshold, if any, below which no amount should be payable. These questions are intimately connected, since a threshold effectively defines

an initial rate bracket for which the contribution rate is zero. The choice of a threshold also affects the rates at which payments must be calculated if expected ICFP balances are to be discharged within a reasonable period of time.[148] For the purpose of this discussion, we assume that the threshold and rates should be designed to recover most ICFP balances within a period of 30 years.

Beginning with the question of a non-taxable threshold, two principles might apply. First, one might argue that payments should be required when participants earn more than average incomes earned by individuals who have not attended post-secondary education. While this approach corresponds with one interpretation of the benefits from higher education, it ignores the consumption benefits that students enjoy from studies, most often perhaps from programs that yield lower economic returns after graduation. Alternatively, as with an income tax more generally, it is arguable that a threshold should be established to exempt a minimum amount of income that is necessary for basic subsistence. In Canada, non-refundable personal credits currently exempt the first $8,012 of taxable income at the federal level and $8,043 in Ontario.[149] These levels, however, have been widely criticized as unrealistically low, and might reasonably be increased to the $10,000 to $15,000 range. For the purpose of this discussion, we assume a threshold of $12,500.

Above this threshold, payments could be computed at a single flat rate or at progressive rates that increase as income levels increase. The arguments for a single flat rate emphasize potentially adverse incentive effects if progressive payments are added to already progressive income tax rates. For the most part, however, empirical studies question the extent to which progressive income taxes affect labour supply.[150] In the case of an ICFP, moreover, progressive rates have a greater impact on the pattern of payments over time than on aggregate payments – imposing lower burdens on recent graduates with lower incomes and higher burdens as earnings increase over time. Progressive rates also reflect the insurance aspect of an ICFP – requiring lower proportionate contributions from graduates with relatively low incomes and higher proportionate contributions from graduates with relatively higher incomes. For the purpose of this discussion, we assume a 5% contribution rate on income from $12,500 to $27,500, and a 10% contribution rate on income above $27,500.

Assuming a base income equal to the average earnings of an Ontario university graduate in 2003 of $42,100,[151] a real interest rate on ICFP

balances of 4% per year, and real income growth of 2% per year, the hypothetical threshold and rates that we have imagined define various payment schedules based on the ICFP balance at graduation. With a balance of $20,000, for example, which approximates the average student debt of graduates with bachelor's degrees in 2003,[152] payments would cease before the end of ten years. Increasing the ICFP balance to $60,000 (roughly three times the average university graduate student debt in 2003) would increase the payment period to approximately 30 years. Consider the same system applied to a representative Ontario college graduate in 2003, who earned $29,400 in the year following graduation[153] and carried student debt of $13,100.[154] If all the other assumptions remain the same, this representative graduate will take just over 13 years to satisfy his or her ICFP obligations. If instead the student had a balance of $30,000 on graduation, the corresponding time to discharge the ICFP balance would be just under 30 years.

These calculations suggest that an ICFP is feasible with the rates and brackets that we have assumed and a real interest rate of 4%, and that even relatively large balances of $60,000 for university graduates or $30,000 for college graduates would be discharged over the course of a graduate's career. Moreover, while graduates who carry the largest ICFP obligations at graduation and earn below-average incomes during their careers might never discharge their ICFP balances, this does not suggest that the ICFP idea is a failed one, but rather that the ICFP is working as intended. Indeed, the key advantage of an ICFP is to only require payments when individuals can afford to pay them.

C. *Collection and Administration Considerations*

The practical advantages of having an ICFP administered as part of the income tax system are enormous. First, since payments function as a form of income tax, it makes sense to rely on the well-established legal rules and administrative processes that already exist for collecting general income taxes. Second, given these legal rules and administrative processes, collection through the income tax is much more difficult to avoid or evade than collection through a separate administrative agency – particularly where employees are subject to tax withholding at source, as in Canada. Third, withholding at source allows for rapid adjustments to ICFP payments as an individual's circumstances change. Finally, administration through the regular income tax promises dramatic reductions in the costs of collecting ICFP payments. In Australia and

New Zealand, where payments are collected through the income tax, administrative costs are only 2 to 3% of amounts collected.

In Canada, income taxes are levied by federal and provincial governments, although the federal government alone (through the Canada Revenue Agency) collects personal income taxes in all provinces but Quebec, under tax collection agreements with each province.[155] Under these tax collection agreements, provincial income tax must be levied on the same income tax base as the federal income tax, meaning that the provincial definition of taxable income must correspond to the federal definition. As a result, while payments under a provincial ICFP could be collected by the federal government, the concept of income for this purpose would have to follow the federal definition. Given the substantial administrative advantages to collection through the income tax, this limitation would seem to be a reasonable price to pay.

More seriously, however, subsection 92(2) of the *Constitution Act, 1867* limits provincial taxing authority to direct taxation within the province, and (consistent with this constitutional limitation) section 2601 of the federal *Income Tax Regulations* limit provincial income taxes to individuals who are resident in the province on December 31. As a result, while payments under a provincial ICFP could be collected with provincial income tax on participants residing in Ontario on December 31 of each year, they could not be collected from participants residing in other provinces. Nor could they be collected from participants who have emigrated from Canada. Although payments from these participants might be collected through a separate administrative agency, high levels of mobility within Canada suggest that this solution would preclude many of the advantages associated with collection through the income tax. For this reason alone, therefore, it would be best to coordinate the introduction of a provincial ICFP with the federal government in order to ensure that payments could be collected from participants who are residents in other provinces.[156] Collection from participants who leave Canada would be more difficult, but could be accomplished by requiring emigrants to file Canadian tax returns until they discharge their ICFP balances, or by converting ICFP balances into mortgage-style loans upon emigration.

4. Conclusion

Post-secondary education in Ontario is at a crossroads. In the discussion paper of the post-secondary review, Bob Rae aptly remarks that

higher education in the province is 'on the edge of the choice between steady decline and great improvement.'[157] One of the ingredients necessary for a thriving post-secondary system is for institutions to have access to adequate funding – preferably both private and public. There are strong arguments supporting the idea that the most attractive way of drawing on both private and public sources of funding is through a well-designed ICFP. This article has attempted to outline the features that such an ICFP should take based on the design features already embodied in Ontario's student financial aid programs and the experience of other jurisdictions – Australia, New Zealand, Sweden, and the UK.

The good news is that a well-designed ICFP is feasible for Ontario. Moreover, the experience of Australia, Sweden, and the UK predicts that an ICFP will probably have insignificant impacts on accessibility for low socio-economic students, and potentially positive impacts on accessibility for those from disadvantaged ethnic groups, as has been the experience in New Zealand and the UK. In addition, many of the administrative features of an ICFP are already embodied in the current OSAP arrangements. For example, the federal and provincial governments are already the lenders for student loans, meaning that an ICFP will not supplant private lending that is merely guaranteed by government (as would have been the case earlier in OSAP's history). The current system also contains various interest relief and debt reduction provisions that an ICFP would simply replace by explicitly income-contingent repayment at affordable levels.

The ability of Ontario's public post-secondary education system to overcome the various challenges recently identified by the OECD would improve dramatically with the introduction of a well-designed ICFP. Ontario students would benefit from dramatically enhanced access to post-secondary education, and the province's system of higher education would be well poised to play the leading role it has previously assumed in Canada, guiding the country's public colleges and universities towards great improvement and a new era of productivity, excellence, and international competitiveness.

Notes

* Faculty of Law, University of Toronto. We are indebted to Lauren Cappell for research assistance.

1 Organization for Economic Cooperation and Development (OECD), *On the Edge: Securing a Sustainable Future for Higher Education* (2004).

2 Ibid., 11–12.
3 See, for example, Ronald J. Daniels and Michael J. Trebilcock, 'Towards a New Compact in University Education in Ontario' (November 24, 2004).
4 See Council of Ontario Universities (COU), A Vision for Excellence: COU Response to the Postsecondary Review Discussion Paper (October 29, 2004), 4.
5 Sean Junor and Alex Usher, *The Price of Knowledge 2004: Access and Student Finance in Canada,* (Montreal: Canada Millennium Scholarship Foundation, 2004), 118.
6 Ibid., 120–1 (documenting real increases of 300% or more).
7 These societal benefits are both economic and intangible, including increased tax revenues and economic growth as well as broader cultural advantages resulting from a more educated citizenry. See Nicholas Barr, *The Economics of the Welfare State,* 3d ed. (Oxford: Oxford University Press, 1998), 325–7.
8 These private benefits are twofold, including the consumption value of education itself and the private economic returns associated with post-secondary education. For studies documenting substantial private returns to higher education in terms of reduced unemployment and higher incomes, see David A.A. Stager, *Focus on Fees: Alternative Policies for University Tuition Fees* (Toronto: Council of Ontario Universities, 1989); Harry M. Kitchen and Douglas Auld, *Financing Education and Training in Canada* (Toronto: Canadian Tax Foundation, 1995), 88–92; David A.A. Stager, 'Returns to Investment in Ontario University Education, 1960–1990, and Implications for Tuition Fee Policy' (1996), 36:2 *Can. J. Higher Education* 1; François Vaillancourt and Sandrine Bourdeau-Primeau, 'The Returns to University Education in Canada, 1990 and 1995,' in David Laidler, ed., *Renovating the Ivory Tower: Canadian Universities and the Knowledge Economy* (Toronto: C.D. Howe Institute, 2002); Kelly Ann Rathje and J.C. Herbert Emery, 'Returns to University Education in Canada Using New Estimates of Program Costs' in Laidler, *supra;* Sveinbjorn Blondal, Simon Field, and Nathalie Girouard, 'Investment in Human Capital through Upper-Secondary and Tertiary Education' (2002), 34 *O.E.C.D. Econ. Stud.* 41; and W. Craig Riddell, *The Role of Government in Post-Secondary Education in Ontario,* paper prepared for the Panel on the Role of Government in Ontario (15 October 2003), 42–8.
9 Since students attending post-secondary educational institutions are disproportionately drawn from affluent backgrounds and more likely to receive higher incomes after graduation, general subsidies for higher education are apt to benefit a more affluent group than the taxpaying public from which the revenues for these subsidies are obtained. This effect is offset to the extent that the overall incidence of taxes is progressive. For evidence on the socio-economic background of persons attending post-secondary educational institutions in Canada, see Sean Junor and

Alex Usher, *The Price of Knowledge 2004: Access and Student Finance in Canada* (Montreal: Canada Millennium Scholarship Foundation, 2004), 53–6 (documenting a positive relationship between parental income and participation in higher education). For evidence on the overall incidence of taxes in Ontario, see Ontario Fair Tax Commission, *Fair Taxation in a Changing World* (Toronto: University of Toronto Press, 1993), 182 (reporting that the incidence of all taxes in Ontario is largely proportional over all income groups, while federal taxes are moderately progressive over the first six income deciles, roughly proportional over the next three deciles, and slightly progressive for the last decile).

10 On different rationales for student assistance, some favouring loans and others grants, see Ross Finnie, 'Student Financial Aid: The Whys, Whens, and Hows of Loans and Grants,' in this volume. On the demand and supply side market failures that impede efficient borrowing for higher education, see Nicholas Barr, *The Welfare State as Piggy Bank: Information, Risk, Uncertainty, and the Role of the State* (Oxford: Oxford University Press, 2001), 175–8.

11 See, e.g., Ross Finnie, Alex Usher, and Hans Vossensteyn, 'Meeting the Need: A New Architecture for Canada's Student Financial Aid System' (February 2004); and H. Lorne Carmichael, 'How Best to Fund Post-secondary Education: A Graduate Tax?' (February 2004).

12 For a detailed explanation of this approach by a leading contemporary advocate, see Barr, *The Welfare State as Piggy Bank*, 179–90. For an early proposal to finance professional student tuition fees on this basis, see Milton Friedman and Simon Kuznets, *Income from Independent Professional Practice* (National Bureau of Economic Research, 1945). For another early proposal to extend this approach to all students, see Milton Friedman, 'The Role of Government in Education,' in Robert A. Solo, ed., *Economics and the Public Interest* (New Brunswick, NJ: Rutgers University Press, 1955).

13 Various terms are used to describe ICFPs, such an 'income-contingent loans' or 'income-contingent debt repayment.' We prefer to steer clear of terms such as 'loans' and 'debt' for the simple reason that the program we envision will provide for the automatic suspension of repayment (with the prospect of eventual forgiveness) for those without adequate income to repay.

14 For a detailed survey of these various sources, see Junor and Usher, *The Price of Knowledge 2004*, 181–272.

15 Ibid., 249. Of this amount, the federal government accounted for approximately 60%. Ibid., 252.

16 Alex Usher, *Who Gets What? The Distribution of Government Subsidies for Post-Secondary Education in Canada* (Toronto: Educational Policy Institute, 2004), 5, reporting that Canadian governments collectively spent $943 million on the cost of servicing student loans, and $1.07 billion on grants and debt remission programs. In recent years, aggregate expenditures on

loans have declined to approximately $700 million, as student borrowing has declined. Junor and Usher, *The Price of Knowledge 2004*, 253.

17 Canada Millennium Scholarship Foundation, 'Focus on: Ontario' (November 28, 2004), available at http://www.millenniumscholarships.ca/en/research/pok_on.htm#_ftn1.

18 Finnie, Usher, and Vossensteyn, *Meeting the Need*, 2. See also Junor and Usher, *The Price of Knowledge 2004*, 181. This complexity is increased by changes to federal and provincial student assistance programs over the last decade – moving from a system in which private financial institutions issued loans to one in which loans are issued directly by the federal and provincial governments. This part reviews only the current student assistance regime in Ontario.

19 Ontario Student Assistance Program (OSAP) and Canada Student Financial Assistance (CSFA), *Setting Out: Information about Financial Assistance for Postsecondary Students 2004–05* (Thunder Bay: Queen's Printer, 2004), available at http://www.canlearn.ca/nslsc/multimedia/pdf/CA_ON_guide0405.pdf.

20 Ibid., 5.

21 Direct financing by the federal and provincial governments has existed only since 2001. Before 1995, private financial institutions issued loans that were guaranteed by the federal and provincial governments. From 1995 to 2000, instead of acting as guarantor, the federal and provincial governments paid a 5% risk premium on the aggregate value of loans for which repayments commenced during the year. Finnie, Usher, and Vossensteyn, *Meeting the Need*, 5.

22 This application can be completed online at http://osap.gov.on.ca/eng/eng_osap_main.html.

23 OSAP and CSFA, *Setting Out*, 6. Among other kinds of information subject to verification, OSAP cross-references and verifies all income information with the Canada Revenue Agency. Ibid., 11.

24 For students studying outside Canada, documents are sent directly to the student.

25 Junor and Usher, *The Price of Knowledge 2004*, 195.

26 OSAP and CSFA, *Setting Out*, 34.

27 Ibid., 12 (full-time students) and 19 (part-time students).

28 According to the OSAP guide to financial assistance in Ontario: 'Most programs offered by Ontario public universities and colleges of applied arts and technology are approved for funding.' Ibid., 12.

29 This percentage is reduced to 40% for students with a permanent disability.

30 OSAP and CSFA, *Setting Out*, 13.

31 Junor and Usher, *The Price of Knowledge 2004*, 185.

32 For part-time students, financial assistance is based on family income rather than assessed need, and capped at a maximum amount for each academic year. OSAP and CSFA, *Setting Out*, 17–21.

33 Junor and Usher, *The Price of Knowledge 2004*, 187. Students are considered to be living in a common-law or same-sex relationship if they have lived together in a conjugal relationship for three years or as a couple are the natural or adoptive parents of a child.
34 Ontario allows graduate programs and selected undergraduate programs (e.g. medicine and law) to levy higher tuition fees. These 'additional cost recovery' programs are required to provide additional financial assistance to students who qualify for government-provided student aid, covering tuition and ancillary fees above the maximum amounts recognized for government-provided student aid. OSAP and CSFA, *Setting Out*, 11.
35 Junor and Usher, *The Price of Knowledge 2004*, 189.
36 Ibid., 188. For married students, child-care expenses are capped at $40/week per child for families with one or two children, and increased to $80/week for the first two children for families with three or more children. For sole-support parents, child-care expenses are capped at $83/week per child for families with one or two children, and increased to $166/week for the first two children for families with three or more children.
37 Ibid., 190.
38 Ibid.
39 Ibid. As a general rule, students need not include personal vehicles worth less than $5,000, nor $2,000 of RRSP savings for each year since the student graduated from secondary school.
40 Ibid., 191.
41 Ibid., 193.
42 OSAP and CSFA, *Setting Out*, 10.
43 Ibid.
44 See ibid., 26–8.
45 Students who obtain loans for part-time studies are required to pay interest while in school. Junor and Usher, *The Price of Knowledge 2004*, 184. For an excellent illustration of the value of the in-school interest subsidy, see ibid., 205.
46 Ibid., 212.
47 Ibid.
48 OSAP and CSFA, *Setting Out*, 34.
49 Junor and Usher, *The Price of Knowledge 2004*, 213. Details on the Ontario Interest Relief Program are available at http://osap.gov.on.ca/eng/not_secure/ir.htm.
50 See the description of Ontario Debt Reduction in Repayment, available at http://osap.gov.on.ca/eng/not_secure/DRR.htm. For the purpose of this calculation, income is broadly defined to include non-taxable amounts such as lottery winnings.
51 Junor and Usher, *The Price of Knowledge 2004*, 213.
52 Ibid., 214.
53 OSAP and CSFA, *Setting Out*, 35.

54 Junor and Usher, *The Price of Knowledge 2004*, 214.
55 Stager, *Focus on Fees*, 121.
56 See D.S. Anderson, R. Boven, P.J. Fensham, and J.P. Powell, 'Students in Australian Higher Education: A Study of Their Social Composition since the Abolition of Fees' (1980); D.S. Anderson and A.E. Vervoorn, 'Access to Privilege: Patterns of Participation in Australian Post-Secondary Education' (1983); and Committee on Higher Education Funding, 'Report of the Committee on Higher Education Funding' (Australian Government Publishing Service, 1998).
57 Stager, *Focus on Fees*, 121.
58 See Barr, *The Welfare State as Piggy Bank*, 208; Bruce Chapman, 'Conceptual Issues and the Australian Experience with Income Contingent Charges for Higher Education' (1997) 107 *Economic Journal* 738; and Commonwealth of Australia, *Learning for Life: Review of Higher Education Financing and Policy* (Canberra, 1998).
59 Stager, *Focus on Fees*, 121–2.
60 See Bruce Chapman and Chris Ryan, 'Income Contingent Financing of Student Charges for Higher Education: Assessing the Australian Innovation' (May 2002), Centre for Economic Policy Research, Australian National University, Discussion Paper no. 449, 6.
61 Kim Jackson, 'Parliamentary Library of Australia E-Brief: The Higher Education Contribution Scheme' (updated 12 August 2003), available at http://www.aph.gov.au/library/intguide/SP/HECS.htm.
62 Barr, *The Welfare State as Piggy Bank*, 209.
63 See 'Fact Sheet 5' from 'Our Universities: Backing Australia's Future' (March 2004), available at http://www.backingaustraliasfuture.gov.au/fact_sheets/5.htm.
64 Barr, *The Welfare State as Piggy Bank*, 208.
65 See Australian Taxation Office, 'Higher Education Contribution Scheme (HECS) repayment schedule and rates,' at http://www.ato.gov.au/.
66 Bruce Chapman and Chris Ryan, 'The Access Implications of Income Contingent Charges for Higher Education: Lessons from Australia' (April 2003), Centre for Economic Policy Research, Australian National University, Discussion Paper no. 463, 4.
67 Ibid., 28.
68 Ibid.
69 Les Andrews, *Does HECS Deter? Factors Affecting University Participation by Low SES Groups* (Canberra: Department of Education, Training and Youth Affairs, August 1999), 25.
70 See Hans Vossensteyn and Eric Canton, 'Tuition Fees and Accessibility: The Australian HECS,' in Sdu Uitgevers, ed., *Higher Education Reform: Getting the Incentives Right* (2001).
71 Norman Laroque, 'Who Should Pay? Tuition Fees and Tertiary Education Financing in New Zealand' (Educational Forum, 2003), 15.

72 Ibid., 16.
73 Ibid., 37.
74 See New Zealand Ministry of Education, Ministry of Social Development & Inland Revenue, *Student Loan Scheme: Annual Report* (October 2004), 13–14.
75 See New Zealand Ministry of Social Development, 'How Much Will I Get,' available at http://www.studylink.govt.nz/financial-assistance/student-allowance/how-much-will-i-get.html.
76 *Student Loan Scheme: Annual Report*, 11.
77 Ibid., 56.
78 See Barr, *The Welfare State as Piggy Bank*, 212.
79 *Student Loan Scheme: Annual Report*, 58.
80 Bruce Chapman and David Greenaway, 'Learning to Live With Loans? Policy Transfer and the Funding of Higher Education' (2003), paper presented at the Internationalisation and Policy Transfer Conference, Tulane University, 11–12 April 2003; available at http://www.tulane.edu/~dnelson/PolTransConv/Chapman-Greenaway.pdf.
81 In 2004 the SLS had net administrative costs of NZ$15.9 million on collections of NZ$509.5 million. See *Student Loan Scheme: Annual Report*, 59–60.
82 Chapman and Greenaway, 'Learning to Live With Loans.' 14.
83 See *Student Loan Scheme: Annual Report*, 23–4.
84 New Zealand Ministry of Education, *Student Loan Scheme Report* (Wellington, 1999).
85 Swedish Institute, 'Fees and Costs' (accessed 21 Nov. 2004), available at http://www.sweden.se/templates/SISCommonPage____4962.asp.
86 The Swedish National Board of Student Aid's website is at http://www.csn.se. This description of the Swedish student financial aid program draws heavily from the contents of the website as of 21 November 2004.
87 See Barr, *The Welfare State as Piggy Bank*, 207–8.
88 Ibid.
89 See Panu Poutvaara, 'Educating Europe' (January 2004), CESifo Working Paper Series no. 1114, 4.
90 See K. Eklund, 'Jakten på den försvinnande skatten' (1998), SNS Förlag, Stockholm, cited by Poutvaara, ibid.
91 National Agency for Higher Education, *The Changing Face of Higher Education in Sweden* (May 2003), 21.
92 The Dearing Report was issued by the committee set up by the UK government in early 1996 and chaired by Sir Ron Dearing. See National Committee of Inquiry into Higher Education, *Dearing Report* (1997).
93 Though by no means were all the recommendations followed.
94 See Department for Education and Skills, 'Student Support FAQ' (accessed 21 Nov. 2004), available at http://www.dfes.gov.uk/studentsupport/faqs.shtml.

95 Ibid.
96 See Nicholas Barr, 'Higher Education Funding' (2004) 20(2) *Oxford Review of Economic Policy*, 279.
97 Ibid., 280.
98 Fernando Galindo-Ruedal, Oscar Marcenaro-Gutierrez, and Anna Vignoles, 'The Widening Socio-economic Gap in UK Higher Education' (June 2004), Centre for the Economics of Education, LSE, available at http://www.lse.ac.uk/collections/pressAndInformationOffice/PDF/HigherEducationPaperJuneAmended.pdf.
99 Ibid., 3.
100 Ibid., 18.
101 Ibid.
102 Sveinbjörn Blöndal, Simon Field and Nathalie Girouard, 'Investment in Human Capital through Upper-Secondary and Tertiary Education' (2001) *OECD Economic Studies* no. 34, 77; citing Universities and Colleges Admissions Service, *Statistical Bulletin on Widening Participation* (2000).
103 Ibid., citing UK Department of Education and Employment, *Social Class and Higher Education* (2001).
104 See Barr, 'Higher Education Funding,' 266.
105 See the discussion in the introduction to this paper.
106 The term 'post-study' is used rather than 'post-graduation' because students who attend college or university but do not graduate still have to make repayments on the amount borrowed.
107 Barr, *The Welfare State as Piggy Bank*, 184.
108 Ibid., 185–6.
109 Ibid., 219. In a sense, the 'graduate taxes' sometimes advocated as a way of financing post-secondary education are simply a special case of ICFP in which the income tax imposed on graduates does not end when one has already paid for one's education.
110 For useful references on the design of an ICFP, see Congressional Budget Office (CBO), *Issues in Designing a Federal Program of Income-Contingent Student Loans* (Washington: CBO, 1994); and Barr, *The Welfare State as Piggy Bank*, 188–90.
111 See Barr, *The Welfare State as Piggy Bank*, 205.
112 For a general discussion of these issues, see Ross Finnie, 'Student Financial Aid.'
113 See the discussion in part 1.A, above.
114 A six-year limit would probably allow almost all students who have not gone on to graduate or professional programs (who should be given additional time) sufficient opportunity to complete their studies, and would deter students from progressing unreasonably slowly.
115 See, e.g., CBO, *Issues in Designing a Federal Program*, 19.

116 See Barr, *The Welfare State as Piggy Bank*, 185, 188.

117 As explained in part 1, 'additional cost recovery' programs with deregulated tuition fees must provide additional financial assistance to students who qualify for government-provided student aid, covering tuition and ancillary fees above the maximum amounts recognized for government-provided student aid.

118 Under this proposal, the ICFP would assume the student assistance function that is currently farmed out to 'additional cost recovery' programs with deregulated fees. To the extent that governments assume this function through an ICFP, financial assistance obligations for 'additional cost recovery' programs could be dropped, allowing institutions to allocate higher fees as they wish. In exchange, of course, governments could reduce subsidies to these institutions in order to finance increased student assistance in the form of grants as well as the ICFP.

119 See Barr, *The Welfare State as Piggy Bank*, 189.

120 See ibid., 205–6 (adding that deemed parental and spousal contributions 'are likely to affect women more seriously than men, especially women from particular cultural and ethnic backgrounds, and thus have potential gender and ethnic effects that deter access'). See also Ross Finnie, 'Student Loans, Student Financial Aid and Post-secondary Education in Canada' (2002), 24 *Journal of Higher Education Policy and Management*, 165 (reporting on data suggesting that many students whose families have incomes above current loan cut-off levels are in fact receiving little or no parental support).

121 Finnie, Usher, and Vossensteyn, *Meeting the Need*, 8.

122 We have already suggested that an ICFP may require an aggregate maximum on allowable assistance.

123 For example, in Australia and the UK no real interest is charged on outstanding balances. New Zealand has an appropriate interest rate, but the various interest-rate abatement provisions mean that most students and many graduates are not charged interest. See part 2.

124 See Barr, *The Welfare State as Piggy Bank*, 189. The one type of untargeted subsidy that is unproblematic is a subsidy paid to reflect the positive externalities associated with a student's education. However, this subsidy is effectively achieved through direct subsidies to post-secondary institutions and tuition fees which do not reflect the full costs of the relevant academic program.

125 See Barr, 'Higher Education Funding,' 270–1 (arguing for an interest rate pegged to the government's cost of borrowing).

126 This is evidenced by the fact that each of the major Canadian banks has a student loan program aimed at professional students. CIBC, Royal Bank of Canada, Bank of Nova Scotia, TD CanadaTrust, National Bank of Canada, and Bank of Montreal all have special borrowing terms for

students in professional programs, with lines of credit maximums ranging up to $150,000 and interest rates at the bank's prime lending rate.

127 The term 'polite myth' to describe a similar phenomenon can be attributed to Nicholas Barr, 'Funding Higher Education: Policies for Access and Quality' (2002), House of Commons, Education and Skills Committee, Post-16 Student Support, Sixth Report of Session 2001–2, HC445 (TSO, 2002), 2; available at http://econ.lse.ac.uk/staff/nb/Barr_Selcom020424.pdf.

128 Economic theory suggests that students will assess programs based on the total private costs and benefits. Thus, if students know that a certain program leads to greater private benefits, they will be willing to pay more, all else the same. Decreasing the interest rate applicable to any financing would not change the maximum amount a student would be willing to pay to take a certain program, but would mean that the program could capture some of this excess willingness to pay by charging higher tuition.

129 But remember that interest rate savings might not be passed on to students, but might be captured by the program through higher tuition fees, leaving the overall cost of the program the same (or only slightly lower). To the extent that a lower risk-rating is used by students as a signal of program quality, programs might *more* than offset the interest rate savings through higher tuition rates to capitalize on the value of the associated signal.

130 Again, for the reasons above, only well-performing programs are apt to be better off financially; students might not be.

131 Indeed, whenever talented or motivated students are forced through participation in an ICFP, there will be at least a minor adverse selection problem, whereby high-performing students will avoid being on the wrong end of a program involving cross-subsidization. For a discussion of the problems associated with such cross-subsidization, see Marc Nerlove, 'Some Problems in the Use of Income-contingent Loans for the Finance of Higher Education' (1975) 83(1) *Journal of Political Economy*, 157.

132 See Barry Harper, 'Beauty, Stature, and the Labour Market: A British Cohort Study' (2000) 62 *Oxford Bulletin of Economics and Statistics* 771 (finding that higher earnings are positively correlated with attractiveness and height, but negatively correlated with obesity).

133 This is the 'screening hypothesis' of higher education, which has been developed in the economics literature. For an early treatment, see Kenneth Arrow, 'Higher Education as a Filter' (1973) 2(3) *Journal of Public Economics* 193. For empirical criticisms of the screening hypothesis, see Richard Layard and George Psacharopoulos, 'The Screening Hypothesis and Returns to Education' (1974) 82(5) *Journal of Political Economy* 985.

134 See, for example, TD CanadaTrust, 'Today's Rates: Prime Rate' (29 Nov. 2004), available at http://www.tdcanadatrust.com/Numbers/prime.jsp.

135 See Statistics Canada, 'Latest Release from the Consumer Price Index' (23 Nov. 2004), available at http://www.statcan.ca/english/Subjects/Cpi/cpi-en.htm.

136 Discussed below in part 3.B.3.

137 See the discussion in part 3.B.2.

138 For a contrary argument, see Barr, 'Higher Education Funding,' 274–5.

139 The only justification, as Barr seems to suggest, is that students may regard ICFP balances as real debts, and be unwilling to obtain financing unless these further measures are available. See ibid., 274 ('in practice, large nominal debts worry people. Thus, although there is a strong case against blanket interest subsidies, there are good arguments for targeted subsidies ... for people with low earnings or out of the labour force') .

140 See Louise Dulude, 'Taxation of the Spouses: A Comparison of Canadian, American, British, French and Swedish Law' (1985), 23 *Osgoode Hall Law Journal* 67.

141 Notwithstanding this choice of an individual unit, a number of adjustments recognize spousal and other family relationships. See the discussion in David G. Duff, *Canadian Income Tax Law* (Toronto: Emond-Montgomery, 2003), 18–29.

142 Peter W. Hogg, Joanne E. Magee, and Ted Cook, *Principles of Canadian Income Tax Law*, 3rd ed. (Toronto: Carswell, 1999), 145.

143 For a brief introduction to the concept of an income tax base and its basic definition in Canadian income tax law, see Duff, *Canadian Income Tax Law*, 35–59.

144 See, e.g., Henry C. Simons, *Personal Income Taxation: The Definition of Income as a Problem of Fiscal Policy* (Chicago: University of Chicago Press, 1938); and Canada, *Report of the Royal Commission on Taxation* (Carter Commission Report), vol. 3 (Ottawa: Queen's Printer, 1966). For other useful discussion, see Boris I. Bittker, 'A "Comprehensive Tax Base" as a Goal of Income Tax Reform' (1966–7), 80 *Harv. L. Rev.* 925; Richard A. Musgrave, 'In Defense of an Income Concept' (1967), 81 *Harv. L. Rev.* 44; Jonathan Pechman, 'Comprehensive Income Taxation: A Comment' (1967), 81 *Harv. L. Rev.* 63; Charles Galvin, 'More on Boris Bittker and the Comprehensive Tax Base: The Practicalities of Tax Reform and the ABA's CSTR' (1968), 81 *Harv. L. Rev.* 1016; Boris I. Bittker, 'Comprehensive Income Taxation: A Response' (1968), 81 *Harv. L. Rev.* 1032; and Victor Thuronyi, 'The Concept of Income' (1990), 46 *Tax L. Rev.* 45.

145 Under federal-provincial tax collection agreements, the federal government collects provincial income taxes on behalf of participating provinces provided that they adhere to the same income tax base as the federal income tax. All provinces but Quebec have signed on to these agreements for the collection of personal income tax.

146 See Duff, *Canadian Income Tax Law*, 36–49.

147 Australian Taxation Office, 'Higher Education Contribution Scheme (HECS) repayment schedule and rates.'

148 The higher the threshold, the higher the rates must be in order to ensure that ICFP balances are discharged within a reasonable period of time. In contrast, a lower threshold allows for ICFP balances to be paid down in a reasonable period of time with lower rates.

149 Federal and provincial income taxes provide numerous other non-refundable credits as well as some refundable credits, but these depend on specific relationships (e.g., spouses or common-law partners), characteristics (e.g., disability), or expenses (e.g., medical expenses).

150 For a useful summary of these studies, see Neil Brooks, 'Flattening the Claims of Flat Taxers' (1998), 21 *Dalhousie Law Journal*, 342–8.

151 See Usher and Junor, *The Price of Knowledge 2004*, 309.

152 Ibid., 282.

153 Ibid., 309.

154 Ibid., 282.

155 See the brief discussion of these agreements in Vern Krishna, *The Fundamentals of Canadian Income Tax* (Toronto: Carswell, 2004), 9–10.

156 The integration of provincial and federal student loans through the Canada-Ontario Integrated Student Loan Program is another good reason why a provincial ICFP should be coordinated with the federal government.

157 Bob Rae, 'Higher Expectations for Higher Education: Working Through the Possibilities' (2004), 2.