
Canada's Tuition and Education Tax Credits

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Report prepared for the Canada Millennium Scholarship Foundation

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Executive Summary

Valued at \$1.8 billion annually, tuition and education tax credits are one of the largest forms of government support available to post-secondary students in Canada. The tax credits, however, have a very low profile, are underused and, most importantly, may be doing very little to encourage young people to pursue higher education. If the tax credits are improving neither access to Canadian post-secondary institutions nor the affordability of studies at those institutions, could a more creative use be made of these funds to expand student enrolment? This study commissioned by the Canada Millennium Scholarship Foundation argues that it could.

The study, conducted by Dr. Christine Neill, an assistant professor of economics at Wilfrid Laurier University, looks at the two principal tax credits:

- The tuition fee tax credit, applicable to income tax paid federally and provincially.
- The education tax credit, available federally and in all provinces but Quebec, claimed for every month during which a student is enrolled in post-secondary studies and intended to defray such costs as books and living expenses.

The two credits are the most significant federal income support for post-secondary students. Their cost does not appear in budget estimates because they are foregone tax revenue, not direct spending. In 2006, they represented an investment of \$1.3 billion. Combined with similar provincial tax credits, the figure for all governments is around \$1.8 billion. In comparison, the need-based Canada Student Loans Program accounts for about \$800 million in spending annually. In addition, transfers to post-secondary institutions are a major spending item, totalling about \$2.6 billion in 2004.

Dr. Neill, who focused on Canadians in the 18-to-24-year-old age group and families with members in that cohort, also reviewed the pros and cons of alternative policies to provide more effective income support and attract more students to higher education.

In the case of both credits, taxes owed are reduced by a percentage of the value of each credit claimed, usually the tax rate for the lowest tax bracket. However, if the value of the credits is greater than the taxes owed, taxes are reduced to zero—but not beyond—so there is no refund.

The credits, however, are deferrable. Students can either benefit from a carry-forward provision that allows them to claim them in the future, at a time when their income has increased and they can derive a benefit, or they can transfer some of the value of their credits to their parent(s) or spouse.

In practice, many students must wait years, until they are earning a good income, to use the credits rather than using them during their studies, when financial pressures are often heaviest.

Those who do benefit from the credits during their studies are those with higher incomes. However, they are in the minority. Most post-secondary students (61 per cent of full-time university students and 64 per cent of full-time college students) have an income of less than \$10,000. There is no real advantage for them to claim the credits during their studies. Less than five per cent of youth earning less than \$10,000 pay any tax and, when they do, the average amount paid is a mere five dollars.

When income reaches \$20,000 annually, post-secondary students who use their credits realize tax savings of \$500 compared to non-students earning the same amount. However, less than eight per cent of university students and ten per cent of college students are in this earning category.

While those who pursue advanced education will earn higher incomes during their working lives, the study points out that they, too, will pay much more in taxes to the benefit of Canadian society. Before these post-graduate earnings commence, however, many will face major financial challenges.

Neill argues, therefore, “that a sensible time to make these payments would be during the time an individual spent at school.” Unfortunately, in the case of the tax credits, their non-refundability “means that students may not be able to use the credits when they most need them. Worse, it is precisely lower income students who are least able to make use of the credits on their own tax returns while they are pursuing their studies.”

The evidence suggests that the tax credits are ineffective in encouraging enrolment in higher education among those from backgrounds where income is modest.

In fact, students from higher income families are the main beneficiaries because the university enrolment rate for students from the highest income quartile is almost twice that of students from the lowest. The average tax credit claimed per young person in the top quartile is twice that of the average tax credit available per student in the bottom quartile.

A greater percentage of total “spending” on the tuition and education tax credits therefore ends up going to youth from higher income families, even though a student from a low-income family is eligible for the same credits as a student from a high-income family.

If tax credits are unlikely to increase enrolment or target financial support to those most in need, why are they used? The study suggests that their use may reflect concern that the federal government does not have primary responsibility for post-secondary education and so confines involvement to areas clearly within its jurisdiction, such as tax policy.

The federal government, however, also provides funds for post-secondary studies to provinces through the Canada Social Transfer and directly funds university research. It transfers money directly to students through both the Canada Student Loan Program and the Canada Millennium Scholarship Foundation’s bursary program. “The tax credits do

predate both of these programs—the first by a few years, the second by some decades—but there seems to be little reason why the credits could not have been rolled into one or the other of these schemes at their inception,” argues Dr. Neill.

The report finds that the effects of the credits are “at best neutral and at worst regressive” and that they are bad policy, at least in terms of encouraging post-secondary participation. It proposes alternative ways to use the money—with discussion of the pros and cons. These include:

- **Keeping the credits but making them refundable.** While not changing administrative costs, this would allow students with low incomes to receive benefits no more than 15 months after they were earned when they are most needed. At present, someone completing a four-year degree may wait more than four and a half years after paying tuition to get a tax refund.
- **Direct Grants.** Grants paid directly from governments are the largest source of funding for colleges and universities, currently accounting for 54 per cent of total expenditures. Increases in grants might enable an expansion of the post-secondary system and, consequently, the number of students.
- **Direct Grants to Students.** The money committed to the tax credits would be enough to give each post-secondary student a grant of approximately \$1,100 annually.
- **Expanding the Student Loan Program.** Adding the value of the credits (\$1.3 billion) to the \$800 million for the student loan program would expand it by 2.6 times, making it much more effective.

The study also looks at other options, including one from a separate Foundation study that says eliminating credits would allow systemic reform so that needed funds could be targeted to “low-income students.”

The study says that eliminating credits would create an opportunity to use these funds in less regressive ways and allow for some effective restructuring of Canada’s “complex web of student financial aid systems.”

I. Introduction

A government seeking to provide income support to individuals in a particular group has essentially two choices: it can either introduce a program to give funds directly to the individuals concerned, or it can allow the individual to pay lower taxes than otherwise. Canada's federal and provincial governments use both of these approaches in providing support to post-secondary students. The spending programs—which include student loans programs and the Canada Millennium Scholarship Foundation's bursaries—have garnered a high degree of public recognition.

There is much less public awareness of the value of tax credits available for educational expenses in Canada.¹ This is most likely because of the nature of tax credits themselves. Given that the credits are not a spending program, their total cost to the government is not included in estimates of total spending on post-secondary education. Few people in Canada would likely realize that the cost of the credits in terms of the loss in government tax revenue is more than twice the cost of the student loan program.² Because they are administered by the revenue department, which has no role in promoting post-secondary education, they are not broadly advertised outside of the annual tax package.

While several analysts of the post-secondary financing system have discussed the credits—most notably Collins and Davies (2005a,b), Usher (2004), Finnie, Usher and Vossensteyn (2004), and Junor and Usher (2002, 2004)—the credits were not the main focus of their analysis. Usher (2006) goes into more detail in examining how the credits have affected the net cost of university attendance in the past decade. In this paper, I explain in detail how the system of tax credits works and the implications for the direct costs of attending a post-secondary institution.

I argue that these tax credits are less effective than alternative policies both in terms of increasing post-secondary enrolments and providing income support to post-secondary students. The key reason for this is that the credits are not refundable, therefore they provide little additional income to most students during their studies. They are also less visible to students and, perhaps more importantly, prospective students than are tuition fees, so that students may not be aware of the full effect of these credits in reducing the cost of a post-secondary education. The money used to finance these programs could be put to better use elsewhere.

1. The CanLearn website, which estimates the costs of a university degree, does not include any information on the value of the tax credits. An examination of the financial planning websites of several Ontario universities turned up no mention of the Canadian tax credits. A search for the words "tax credit" on a larger university's website turned up a mention of the US HOPE and LIT tax credits in the top ten results, but none on the value of the Canadian credits. The tuition fee pages of the universities' websites made no mention of the cost of tuition net of tax credits. On pages where the credits were mentioned, no indication was given of their value. The Canadian Association of University Teachers does not mention the credits in their discussions of the cost of university from an individual perspective (CAUT, 2003), nor in relation to their analysis of overall government spending on universities (CAUT, 2001). Usher (2005), in lamenting that Canadians generally and low-income Canadians in particular over-estimate the costs of university, describes the direct cost of attendance as the raw tuition fee, without deducting the value of the credits. Other than in the tax package, there is simply no readily available source that explains to potential students the extent to which their education costs are reduced by these tax credits. Only in the past month, with the release of Usher (2006), has there been any publicity in the media relating to tuition net of tax credits.
2. The federal *Tax Expenditures Statement* puts the cost of the tuition and education tax credits at \$1.3 billion in 2005, compared with the cost of the student loan program at around \$0.8 billion, according to HRSDC. Note that tax expenditures are estimates of the increase in government revenue that would arise if these credits were abolished, assuming that there were no other changes in the tax system and that there would be no change in individuals' behaviour as a result. Although these are likely reasonable assumptions for the case of the entire system of tuition and education tax credits, the tax expenditure figures should be taken as approximations only.

2. Overview of Existing Tax Credits

Tax deductions and credits are an important part of Canada's tax system. They reduce the amount of tax taken out of an individual's gross income, either by excluding the item from taxable income (in the case of deductions) or by allowing taxes to be reduced by a certain percentage of some dollar amount spent (tax credits). Currently, deductions typically include any spending that was required in order to earn the income. The credits are more diverse, allowing a reduction in taxes for individuals who have a dependent spouse, have high medical expenses, or who made charitable donations, among others.

This paper focuses on the two key, universally available education tax credits³:

- The tuition fee tax credit: tuition fees paid to eligible post-secondary education institutions are eligible credits against income taxes paid federally and in all provinces; and
- The education tax credit: available federally and in all provinces but Quebec, this credit depends on the number of months a student has been studying in the tax year, and the intensity of their study (full-time or part-time).

The credits are non-refundable. The reduction in taxes owed due to each credit is their value times the credit rate, which is usually the tax rate for the lowest tax bracket. Should the value of the credits exceed the value of the individual's taxes for that year, then taxes are reduced to zero, but not beyond.

Unlike most other non-refundable tax credits, however, there are two ways that claimants of education and tuition tax credits can get around the non-refundability provision. It is important to understand

how these operate in assessing the economic and distributional consequences of the credits. They are:

- The carry-forward provision, which enables students to carry the credits forward to a future year if they cannot be used this year; and
- The transfer provision, which enables students to transfer the value of some of their credits to their parents or spouse.

These two provisions mean that the term “non-refundable” is something of a misnomer when applied to the tuition and education tax credits. They are more correctly described as “deferrable” tax credits, since the value of the credits will almost inevitably be refunded at some point.

Following is a brief description of each of these provisions. More details, including the history of the credits, are included in Appendix 1.

2.1 The tuition fee tax credit

Since 1961, post-secondary students have been able to claim a reduction in taxes for the tuition fees they pay. Currently, this takes the form of a tax credit—students can reduce their taxes by an amount equal to tuition fees plus compulsory ancillary fees multiplied by the tax credit rate. Universities and colleges issue statements each year to their students identifying the amounts they are eligible to claim under this credit. The value of the credit increases with tuition fees, so that students in programs with higher tuition fees receive a greater credit. The benefit in terms of tax dollars saved also increases with the tax credit rate.

3. The other main education-related tax credits are: the RESP tax credit, which has been analyzed elsewhere (Milligan, 2002); the student loan interest credit, which is better analyzed in the broader context of the student loan program; and the partial exemption of scholarship income, a relatively small program.

A student who pays fees of, say, \$5,000 and files a tax return in Ontario will then be able to claim a non-refundable tax credit of \$5,000 and reduce her federal income taxes by \$762.50 (\$5,000 multiplied by the federal tax credit rate for 2006 of 15.25 per cent) and her provincial income taxes by \$302.50 (\$5,000 multiplied by the provincial tax credit rate of 6.05 per cent). If the student's total federal tax bill were less than \$762.50, the student would use credits only up to the amount required to reduce her taxes to zero.⁴ Students with lower personal incomes are thus disadvantaged compared to higher income students by the fact that the credit is non-refundable. Currently, however, the transfer and carry-forward provisions in fact enable all students to make use of the full value of the credit in some way.

2.2 The education tax credit

The education tax credit, established in 1974, was described in the 1998 Budget as “one of the major ways the government provides assistance to post-secondary students. It helps with their non-tuition costs such as books and living expenses.” After the tax reforms of 1988, full-time students could claim \$60 per month. That amount increased rapidly during the mid-1990s and now stands at \$400 per month. Part-time students have been able to claim an education credit since 1999, and it is currently worth \$120 per month.

The education tax credit operates in a similar way to the tuition fee tax credit. For a student enrolled full-time for the eight months of the regular academic year, the federal tax credit would total \$3,200, reducing taxes paid by \$488 in 2006. As with the tuition credit, the education credit is non-refundable. Unlike the tuition credit, the equivalent provincial tax credits are not always of the same value — currently, Ontario has the highest monthly credit amount, while Quebec does not have an equivalent credit.⁵

The effect of the tuition and education credits on tax paid by a hypothetical student attending full-time and paying tuition fees of \$5,000 is outlined in Table 1. The table shows the total value of the non-refundable credits and their effect on students' after-tax income. The total credit value shows roughly how much more income the hypothetical student could earn, in comparison with a non-student, before beginning to pay income tax under the federal and provincial systems. The final column shows roughly how much better off a student would be in terms of after-tax income, in comparison with a non-student having comparable earned income. On average across Canada, a student enrolled full-time for eight months who pays a \$5,000 tuition fee would have an after-tax income \$1,950 higher than a non-student with a similar pre-tax income.⁶

The differences by province in the value of the credit available arise principally because of differences in the education amounts. The differences in total tax savings also reflect the differences in the tax credit rates shown in the table. These tax credit rates are typically equal to the lowest tax rate, except in Quebec. A non-refundable tax credit of \$1,000 in Ontario is worth \$60.50 in after-tax income, while a non-refundable tax credit of the same amount in Quebec is worth \$200.

The actual amounts paid in tuition fees differ considerably by province, however, so that the actual tax savings of a student studying in each province and filing a tax return in the same province will differ (see Table 2). The tax credits do in fact alter the relative net cost of a university education across provinces by an important amount. For instance, although tuition fees in British Columbia are \$90 less than those in Saskatchewan, students in Saskatchewan pay \$455 less after the credits are taken into account.

4. Suppose that without the tuition tax credit the student would have paid \$500 in federal taxes. In that case, she would be able to use \$3,333 of the tuition fee tax credit, rather than the full \$5,000.

5. Quebec does allow parents of post-secondary students and other dependants to claim additional tax credits (see the description in Appendix 1). This means that parents of a post-secondary student who earns no income in a given tax year would see their taxes reduced by \$712 — an amount larger than the tax savings related to education amounts in other provinces. However, the amount of this credit is reduced for every dollar earned by the dependent student.

6. However, out of this net income the student has paid the \$5,000 tuition fee, so effectively has a current disposable income around \$3,000 lower than that of the non-student.

Table 1 — The value of tuition and education tax credits, by province, 2006 tax year (assuming hypothetical tuition amount of \$5,000)

	Tuition Amount	Education Amount	Total Credit Value	Tax Credit Rate	Tax Saving	Total Tax Saving
Federal	\$5,000	\$3,720	\$8,720	15.25%	\$1,329.80	
NF	\$5,000	\$1,600	\$6,600	10.57%	\$697.62	\$2,027.42
PEI	\$5,000	\$1,600	\$6,600	9.80%	\$646.80	\$1,976.60
NS	\$5,000	\$1,600	\$6,600	8.79%	\$580.14	\$1,909.94
NB	\$5,000	\$3,200	\$8,200	9.68%	\$793.76	\$2,123.56
QC	\$5,000	\$0	\$5,000	20.00%	\$1,000.00	\$2,329.80
ON	\$5,000	\$3,608	\$8,608	6.05%	\$520.78	\$1,850.58
MB	\$5,000	\$3,200	\$8,200	10.90%	\$893.80	\$2,223.60
SK	\$5,000	\$3,200	\$8,200	11.00%	\$902.00	\$2,231.80
AB	\$5,000	\$3,672	\$8,672	10.00%	\$867.20	\$2,197.00
BC	\$5,000	\$1,600	\$6,600	6.05%	\$399.30	\$1,729.10

Note: Assumptions for this table are outlined in Appendix 2.

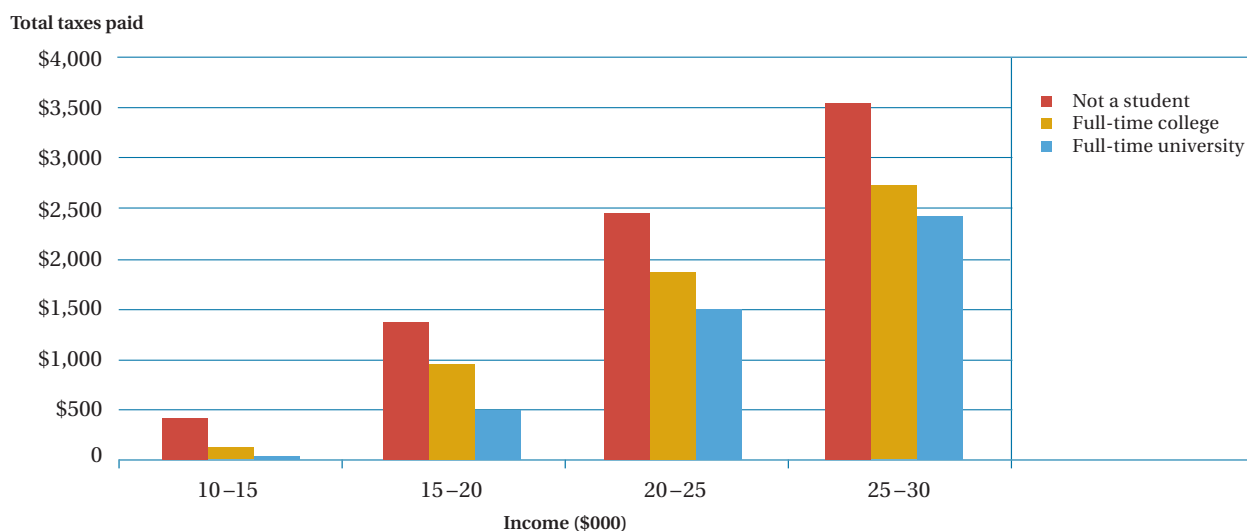
Table 2 — The value of tuition and education tax credits, by province, at 2006–07 provincial average undergraduate tuition fees

	Tuition Fee Plus Ancillaries	Federal Tuition and Education Credit	Provincial Tuition Credit Value	Total Tax Savings	Net Costs of University
NF	\$3,072	\$6,792	\$4,672	\$1,530	\$1,542
PEI	\$5,675	\$9,395	\$7,275	\$2,146	\$3,529
NS	\$7,143	\$10,863	\$8,743	\$2,425	\$4,718
NB	\$5,669	\$9,389	\$8,869	\$2,290	\$3,379
QC	\$2,540	\$6,260	\$1,916	\$1,338	\$1,202
ON	\$5,889	\$9,609	\$9,497	\$2,040	\$3,849
MB	\$3,796	\$7,516	\$6,996	\$1,909	\$1,887
SK	\$5,494	\$9,214	\$8,694	\$2,361	\$3,133
AB	\$5,395	\$9,115	\$9,067	\$2,297	\$3,098
BC	\$5,402	\$9,122	\$7,002	\$1,815	\$3,587

Note: This table takes provincial average undergraduate tuition fees plus compulsory ancillary fees from Statistics Canada's *Tuition and Living Accommodation Costs for Full-time Students at Canadian Degree-granting Institutions Survey* and calculates the average value of tax credits for a student studying and filing a tax return in the same province.

In 2006, the tax credits allow a student to earn \$8,720 more than a non-student before they must pay federal taxes. However, students also have less capacity to earn income than non-students. Because the credits are non-refundable, it is not uncommon for students to be unable to use these credits in the year in which they were earned. Indeed, if it were not for the transfer and carry-forward provisions, the non-refundable credits would primarily benefit students who had relatively high personal incomes during their post-secondary education.

Figure 1 illustrates this point. It shows the average taxes paid by 18 to 24 year-olds, depending on their post-secondary enrolment status. The biggest tax savings in dollar terms are for those with the highest incomes. The average tax paid by a full-time university student with total income of \$30,000 to \$35,000 is \$1,900 less than the tax paid by a non-student, a figure that is quite consistent with the expected tax savings described in Table 1. For students earning less than \$10,000, on the other hand, tax savings are essentially zero since less than five per cent of youth

Figure 1 — Average taxes paid by 18 to 24 year olds, by income and student status

Source: SLID, 2003, and personal files.

Table 3 — Distribution of personal income of 18 to 24 year olds, by income range and student status

	<\$10,000	\$10,000–\$15,000	\$15,000–\$20,000	\$20,000–\$25,000	\$25,000–\$30,000	≥\$30,000
Not a student	34.9	18.9	12.7	11.2	7.8	14.6
Full-time university	61.2	20.6	10.3	4.0	1.8	2.1
Full-time college	63.5	16.5	10.6	4.5	2.2	2.7

Source: SLID, 2003, and personal files.

Table 4 — Total value of tax savings and percentage of fees covered, by tuition fees and full-time/part-time status

	Full-time				Part-time			
	Fees = \$2,000		Fees = \$5,000		Fees = \$1,000		Fees = \$2,500	
	\$	% of Fees	\$	% of Fees	\$	% of Fees	\$	% of Fees
NF	\$1,253	63%	\$2,027	41%	\$480	48%	\$867	35%
PEI	\$1,225	61%	\$1,977	40%	\$468	47%	\$844	34%
NS	\$1,189	59%	\$1,910	38%	\$453	45%	\$814	33%
NB	\$1,376	69%	\$2,124	42%	\$513	51%	\$887	35%
QC	\$1,272	64%	\$2,330	47%	\$523	52%	\$1,052	42%
ON	\$1,212	61%	\$1,851	37%	\$449	45%	\$769	31%
MB	\$1,439	72%	\$2,224	44%	\$537	54%	\$929	37%
SK	\$1,444	72%	\$2,232	45%	\$539	54%	\$933	37%
AB	\$1,440	72%	\$2,197	44%	\$534	53%	\$912	36%
BC	\$1,090	55%	\$1,729	35%	\$413	41%	\$732	29%

Note: The dollar amounts are taxes that would otherwise be paid. That is, a full-time student paying \$2,000 in tuition fees in Newfoundland would pay \$1,253 less in taxes than in the absence of the credits. The net costs of one year of study would then be \$747. In effect, the tax credits would reduce the direct costs of studying by 63 per cent.

earning under \$10,000 pay any tax at all, and the average amount of tax paid by this group is about \$5. Around 61 per cent of full-time university students and 64 per cent of full-time college students have income of less than \$10,000 (Table 3). Tax savings of more than \$500 per year relative to non-students are only realized at incomes of more than \$20,000 in a given year—but less than eight per cent of full-time university students and ten per cent of full-time college students earn this amount.⁷

The discussion has focused on the tax savings of full-time university students. Table 4 shows the value of tax credits by province under different scenarios, which roughly correspond to full-time college, full-time university, part-time college and part-time university tuition fees.⁸ Part-time students typically pay a somewhat higher percentage of their total fees out of their own pockets, because the education amounts for part-time students are less than half those for full-time students. Because the education credits allow a fixed monthly amount to be saved on taxes, they also mean that college students typically save more relative to their tuition fees than university students.⁹

2.3 The transfer provisions

A very large percentage of full-time students are unlikely to be able to make full use of the tuition and education amounts in the year in which they were earned. About 60 per cent of students have incomes under \$10,000 and pay no tax, and another 20 per cent of students have incomes that are so low

they cannot make full use of the credits. Since the tax reforms of 1988, such students have been able to transfer at least a part of any unused tuition and education credits to a parent or spouse.¹⁰ When the amount that a student could transfer to his spouse or parents was increased from \$4,000 to \$5,000, the stated objective was “[t]o support parents or spouses who help underwrite the education of students” (Government of Canada, 1996 Budget). However, the transfer provisions are somewhat odd. A student may transfer a maximum amount of \$5,000, less any amount used. Thus, even those students who pay high tuition fees will be unable to transfer any amount if their income is also high enough to use at least \$5,000 of the credit. It is not clear what the motivation for this measure could be, other than to cap the costs of the transfer provisions. The students most affected are likely to be those with large available credits and moderate incomes—those who accumulate more than \$5,000 in credits in a given year, but who can use at least \$5,000 in credits to reduce their own taxes.

The student must agree to transfer the amount to their parents or spouse. There is technically, therefore, no element of compulsion. However, until the introduction of the carry-forward provisions in 1997, if neither the student’s nor a parent’s income was high enough to be able to make use of the entire value of the credit, those credits would go unused. Therefore, at that time the credits were particularly ineffective in providing financial support to students from low-income families. On the introduction of the carry-forward provisions, growth in transfers to parents or spouses slowed somewhat (see Figure 2).

7. More part-time students are likely to be able to take advantage of these credits in the year they were earned—26 per cent of part-time university students and 23 per cent of part-time college students earn more than \$20,000 per year.
8. Outside of Quebec, college fees in 2003–04 averaged \$2,300 (Manitoba COPSE) and undergraduate university fees plus ancillary fees were \$4,996 in 2006–07 according to Statistics Canada (<http://www.statcan.ca/Daily/English/060901/d060901a.htm>). Tuition fees are typically cut in half for students taking half of a regular course load, which I have assumed corresponds to part-time status.
9. This is particularly true in Quebec, where Cegeps have almost no tuition fees, but students can nonetheless claim federal education credits. Total tax savings are therefore greater than tuition fees paid.
10. Prior to that time, parents could claim a deduction for any dependent children who were full-time students and whose income was sufficiently low, as is currently the case in Quebec. In 1987, this deduction was worth \$1,450 for each child who was a full-time student with an income below \$2,770 in the year. Tuition and education deductions were not transferable, however.

2.4 The carry-forward provisions

Since 1997, students who cannot use the tax credits in the year they were earned have nevertheless been able to carry the value of these credits forward to future years.

Without the carry-forward provisions, the credits would benefit only students who earned relatively large amounts of their own income during their studies, or those who were able to transfer the credit to their parents. Relatively low-income students from relatively low-income families had less capacity to use the credits. Now that the carry-forward provisions are in place, all students benefit almost equally from the available tuition and education amounts. Students who carry forward their allowed credits are unable to apply an interest rate or index the amounts to inflation, so there remains a small penalty to students who have incomes too low to claim the amounts in the year in which they were earned.

The late 1990s, then, saw quite a substantial increase in the value of tax credits available to help students finance their post-secondary education. At the same time, federal grants to the provinces for post-secondary education were under considerable restraint, and tuition fees were rising fairly rapidly. Usher (2006) provides a good description of the extent to which these credit increases offset the effects of increasing tuition fees. Indeed, he shows that from 1995 to 2005 average tuition fees across Canada increased by 43.9 per cent, but only by 24.7 per cent after taking into account the effects of tax credits.

2.5 Other issues

In 2006, the federal government introduced a textbook tax credit that effectively increased the education amount by \$65 per full-time month and \$20 per part-time month.¹¹ A student enrolled for eight months full-time would see after-tax income increase by \$79.30 in 2006. The measure is estimated to add \$125 million to tuition- and education-related tax expenditures.

It should be noted that the value of the education and tuition tax credits in terms of after-tax income falls along with the tax credit rate, which is equivalent in most cases to the income tax rate for the lowest income tax bracket. In the 1998 tax year, the credit rate was 17 per cent at the federal level. In the 2006 tax year, this rate was 15.25 per cent at the federal level.

2.6 Other provincial tax credits

Two provinces—Saskatchewan and New Brunswick—have additional tax credit programs that benefit post-secondary students or graduates.¹²

Saskatchewan's post-secondary graduate tax credit has been running since 2000 and gives all post-secondary graduates working in Saskatchewan a one-time credit worth \$850 in after-tax dollars in 2006. It is equal in value to a non-refundable tax credit with a value of \$7,730, given Saskatchewan's tax credit rate of 11 per cent—approximately 90 per cent of the value of one year's worth of tuition and education tax credits for the average student in a Saskatchewan university. This provides a small

11. This is somewhat odd, given that the education credit's stated goals included assisting students in paying for non-tuition fee costs of education such as textbooks. This credit is being implemented as a simple increase in the monthly education amount. No receipt for actual textbook purchases is required.

12. More details on the history of the tax credits and individual provincial systems are included in Appendix 1.

boost to the after-tax income of recent graduates working in Saskatchewan.

New Brunswick plans to allow tax rebates for tuition fees for post-secondary education on top of the existing credits. The rebate is worth 50 per cent of tuition fees paid, to a lifetime maximum of \$10,000. Therefore, an individual would be eligible for the rebate on any tuition fees paid up to a total of \$20,000. Given the value of the existing credit and the new rebate, a New Brunswick college student who pays \$2,400 per year in tuition fees and later goes to work in the province would be eligible for tax savings of \$2,596 per year of study—that is, they would even-

tually receive tax credits worth more than the cost of tuition.¹³ However, the program has yet to make its first payments—forms that allow claims to be made for tuition fees paid in 2005 and 2006 are expected to be available only by early 2007.¹⁴

As with the general tuition and education tax credits, neither of these programs requires that the claimant have studied in the same province in which the tax credit is claimed. For example, the New Brunswick rebate is available to students who have studied in Ontario, and claimed the regular tuition and education amounts in Ontario, but after graduation have gone to work in New Brunswick.

13. The average college tuition fee for New Brunswick in 2005 was \$2,400. At the average university tuition fee of \$5,382, a student would be eligible for tax savings of \$4,639 per year, making the net cost of a university education for eligible individuals \$743 per year. Because of the lifetime cap, the dollar saving will not rise with higher tuition fees for a typical four-year university degree, so that the value of the credit in terms of savings relative to fees will fall over time, assuming fees continue rising.

14. Department of Finance, New Brunswick: http://www.gnb.ca/0024/tax/Tax_Cash_Back-e.asp

3. The Cost of the Tax Credits

Figure 2 estimates the cost of the tuition and education tax credits, or “tax expenditures,” to federal government revenue.¹⁵ Currently, these credits, along with the transfer and carry-forward provisions, cost \$1.3 billion in government revenue each year. That figure is of similar size to the age credit but somewhat smaller than the charitable donations credit. Junor and Usher (2004) estimate that the equivalent provincial tax expenditures amount to around \$500 million.

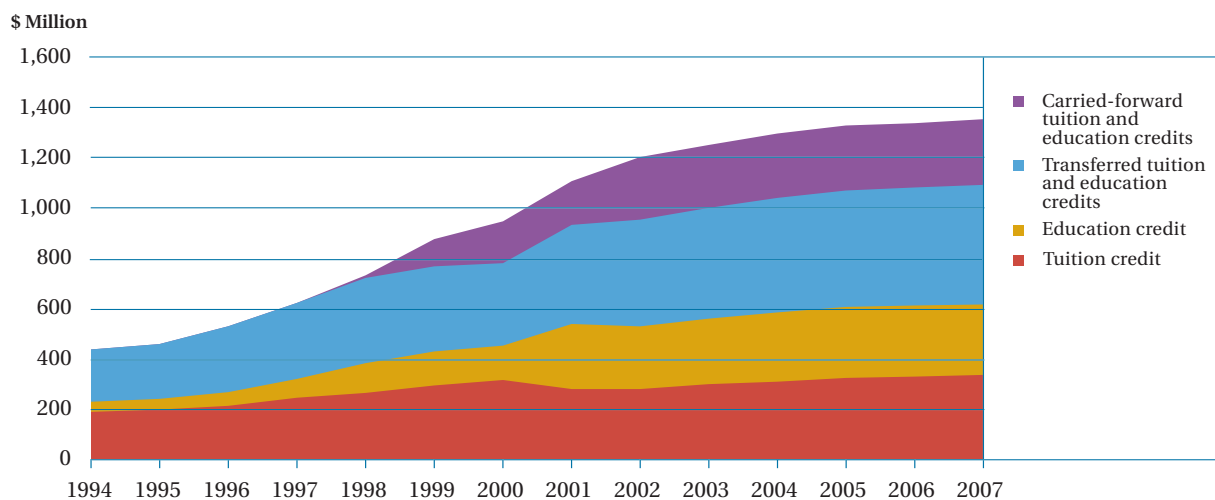
There are other education-related tax expenditures, most notably those associated with Registered Education Savings Plans (RESPs), costing \$135 million in 2004, the student loan interest exemption, costing \$63 million, and the exemption of scholarship income, costing \$23 million.¹⁶ These are, however,

relatively small compared with the tuition and education tax credits.

“Spending” on the tuition and education tax credits is very large in relation to other federal spending on the post-secondary education sector. This can be measured in relation to different benchmarks:

- The current expenditure cost to the federal government of running the Canada Student Loans Program (CSLP) is approximately \$0.8 billion annually, or just over half the cost of federal education-related tax expenditures.
- In 2004, federal government transfers to post-secondary institutions were around \$2.6 billion — the tax expenditures cost half this amount.

Figure 2 — Dollar value of federal tuition and education tax credits, 1994–2007



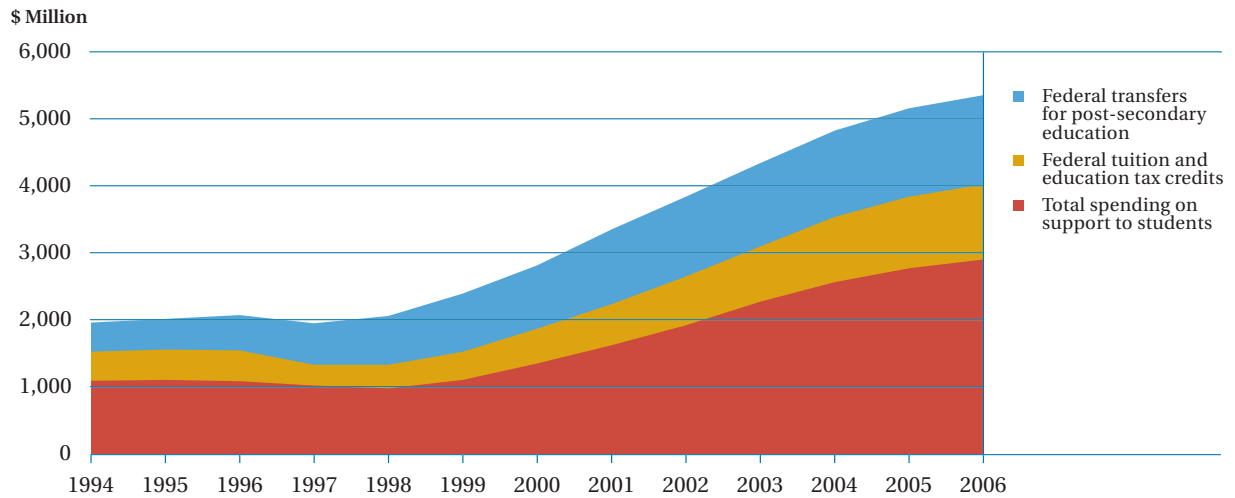
Source: Government of Canada *Tax Expenditures Statement*, various years.

Note: Figures for the tax years from 2003 are projections

15. See footnote 2 for a definition of tax expenditures. I focus in this section on federal tax expenditures because information on provincial tax expenditures is not easily available. However, given that the provincial tax credits largely mirror those at the federal level, the results would likely be very similar if provincial information were available.

16. The cost of this exemption will increase by an estimated \$45 million per year as a result of the 2006 Budget decision to exempt all scholarship income from taxation, not only the first \$3,000 (Budget Papers, 2006). Other budget decisions related to post-secondary education included the introduction of the textbook tax credit, mentioned in Section 2.5, costing \$125 million per year, and an expansion of the Canada Student Loan Program, estimated to cost \$20 million per year. Interestingly, the increased scholarship exemption will reduce the taxable income of current students, and make it less likely that they will be able to use the tuition and education tax credits during the course of their studies.

Figure 3 — Dollar value of federal education-related tax expenditures relative to other post-secondary spending, 1994–2006



Source: Government of Canada Tax Expenditures Statement, various years, and CANSIM series V156401 (student support expenditures) and V156393 (federal transfers). The federal transfers to post-secondary institutions include only transfers paid directly to institutions themselves — transfers to the provinces under the Canada Social Transfer are not included. The student support expenditures include federal, provincial and university-level “bursaries, scholarships and other types of financial assistance to students (loan forgiveness, interest relief, etc.) as well as refundable learning tax credits,” and federal government contributions to RESPs (Statistics Canada, 2006: 39). They do not include non-refundable tax credits, which are considered to be an integral part of the tax system rather than an alternative to an expenditure program.

- In 2001–02, there were around 636,000 full-time university students. On the assumption that there were around 420,000 full-time college students that year, total tax expenditures in the 2002 tax year were large enough that they could have provided a grant of \$1,100 to every full-time post-secondary student in Canada.¹⁷

Figure 3 shows the size of the tuition and education tax credits relative to federal transfers for post-secondary education and in relation to total spending on student support for the past decade.

17. Data on college enrolments are available only until 1999, at which time there were 408,000 full-time college students.

4. The Economic Effects of the Credits

The goal of the education and tax credits is unclear. The government has typically framed its arguments in terms of helping students to meet the financial costs of their education—that is, to provide additional income to students or their families. Another possible goal is to increase enrolments in post-secondary institutions by, in effect reducing the price. Unfortunately, the tax credits are bad policy on either of these grounds.

4.1 Distributional consequences

Government statements on the tuition and education tax credits focus mostly on the equity issue—that is, they state that the program is intended to provide financial relief to post-secondary students or their families. This does not jibe particularly well with the fact that the credits are non-refundable. In many cases, the credits will be used well after students incur the expenses that they are intended to help pay. Moreover, it is the students and families who are most likely in need of assistance (those with lower incomes) who are least likely to be able to make use of the credits at the time they are earned. Even without considering the issue of the timing of payments, however, it is not clear that such assistance is well targeted at individuals or families who are in need.

As with any policy of government tax credits or spending, a key question is “Who benefits?” Does the program tend to benefit people who are relatively disadvantaged or those who are relatively advantaged? In other words, is the program progressive or regressive?

While it is a simple matter to determine who is able to claim the tuition and education tax credits, it is not so simple to tell whether the benefits go more to the relatively advantaged or the relatively disadvantaged. This is partly due to data limitations—for instance, it is difficult to determine the family income of many students—and partly due to more fundamental conceptual difficulties.

The conceptual problems arise in large part because of the difficulty in deciding whether young adults should be considered to be independent of their parents.¹⁸ The issues are clearer at the primary and (to a lesser extent) the secondary school level: since parents are considered to be responsible for their minor children, including for their education, subsidies to education at these levels can be considered to benefit families with young children. The ambiguity in the status of young adults means that we should ideally look at questions of distribution in two different ways: first, as if all the benefits go to the individual student, and, secondly, as if all the benefits go to the student’s family as a whole.¹⁹

18. It is interesting to note that government policies are clearly of two minds on this issue. Under the student loan program, the decision on whether a student is dependent on their parents or independent is typically based on the number of years since completing high school, but with exceptions for, among others, students who have worked for two or more years, who are married or who have children of their own. The income clawbacks are based hypothetically on resources available to the student, but it is assumed that all income earned by the student is available to support his or her educational expenses, while only a fraction of parental income is. This would contradict any arrangements within families whereby individuals who earn money are expected to use it in part to contribute to family expenses. On the other hand, the test for independence for welfare payments (for youth who are not students) is typically quite different and often involves age (NF/QC). Neither of these is typically based on actual arrangements, since it is difficult if not impossible to tell what these are, and because basing financial aid on such family arrangements may discourage these informal support mechanisms.

19. There is an extensive literature in economics about the distribution of income within families. A rough conclusion from that literature is that the arrangements of income-sharing within families are complicated but do depend in part on who earns the income.

Individual incidence

Let us begin by assuming that all of the benefits of the transfers go to individual students. In that case, the credits are basically a transfer from individuals who do not attend post-secondary institutions to those who do. Since few students earn high incomes, this might suggest that the transfers are progressive—that they benefit relatively low-income earners more than they benefit high-income earners. In 2004, 42 per cent of all 18-to-24-year-old tax filers claimed tuition and education tax credits. Figure 4 shows the distribution of claims of education and tuition tax credits by income quartile, where the income is calculated at the individual level.

It should be noted that a student earning \$10,000 annually is in quite different financial circumstances than a non-student earning the same amount. From that \$10,000, the student must pay tuition fees, meaning he has much less disposable income than the non-student. One of the aims of a redistributive taxation system is to treat people in the same position in the same way. These two, however, are clearly not in the same position. This year, the student will

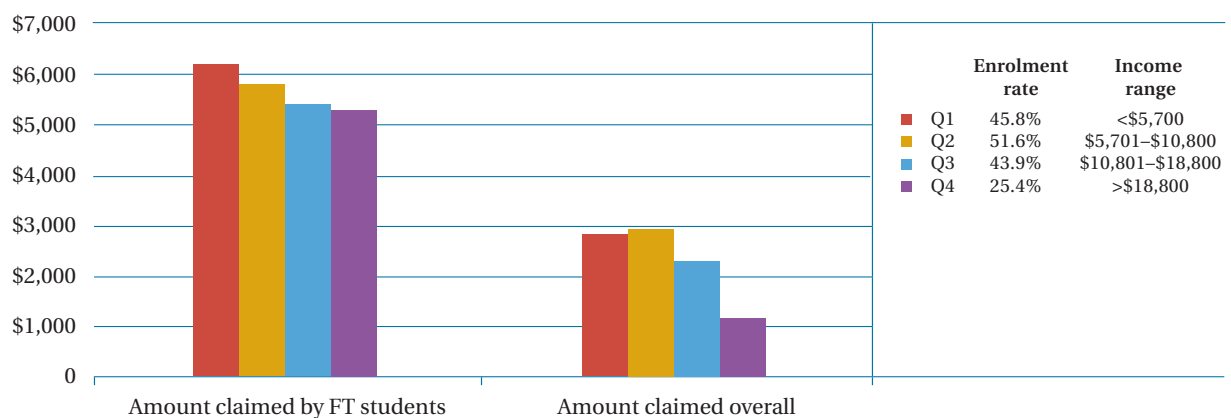
be in more straitened financial circumstances. The tuition credit is one way of recognizing that money spent on fees is not spent on consumption.²⁰

Another way to look at incidence on an individual basis is to consider whether the credits primarily benefit individuals who will be rich or poor over the course of their entire lives, rather than simply in one year. Typically, individuals who have attended post-secondary institutions earn higher incomes over their lifetime than do those who have not. Thus, the credits are actually benefiting people who are already likely to have relatively high lifetime incomes. That said, those higher incomes do mean that these individuals will on average pay higher taxes over the course of their lifetimes, given a progressive tax system.

Incidence over time

The introduction of the element of time into the analysis is also important from another perspective. Consider a policy that was designed to give an additional \$2,000 to an individual for each year of university education undertaken. For someone undertaking four years of university education, that would be

Figure 4 — Average value of federal tuition and education tax credits claimed by 18 to 24 year olds, by individual income quartile, 2004



Source: LAD, 2004.

Note: The amount claimed by full-time students is the average value of the tuition and education credits claimed by all full-time students with incomes that place them in each income quartile (income ranges for each quartile are shown in the figure). The claims are the total credit for which a student would be eligible in 2004. The figures do not include amounts used in 2004 but carried forward from previous years. They do include amounts earned in 2004 but carried forward to future years. The amount claimed overall is the average value of the tuition and education credits claimed by all individuals in the quartile, including full-time and part-time students, as well as non-students. Mathematically, it is the amount claimed by full-time students multiplied by the enrolment rate of youth in the quartile, as indicated in the figure. The LAD implies that the post-secondary enrolment rate for 18 to 24 year olds was around 40 per cent in 2004, a rate similar to estimates from other sources, including the *Labour Force Survey*. Income quartiles are calculated for the population of 18 to 24 year olds only.

20. This assumes that students attend university not because they enjoy it but because they consider it an investment in their future. If it were instead to be considered consumption—that is, providing only a current personal benefit to the student—then this argument would not hold.

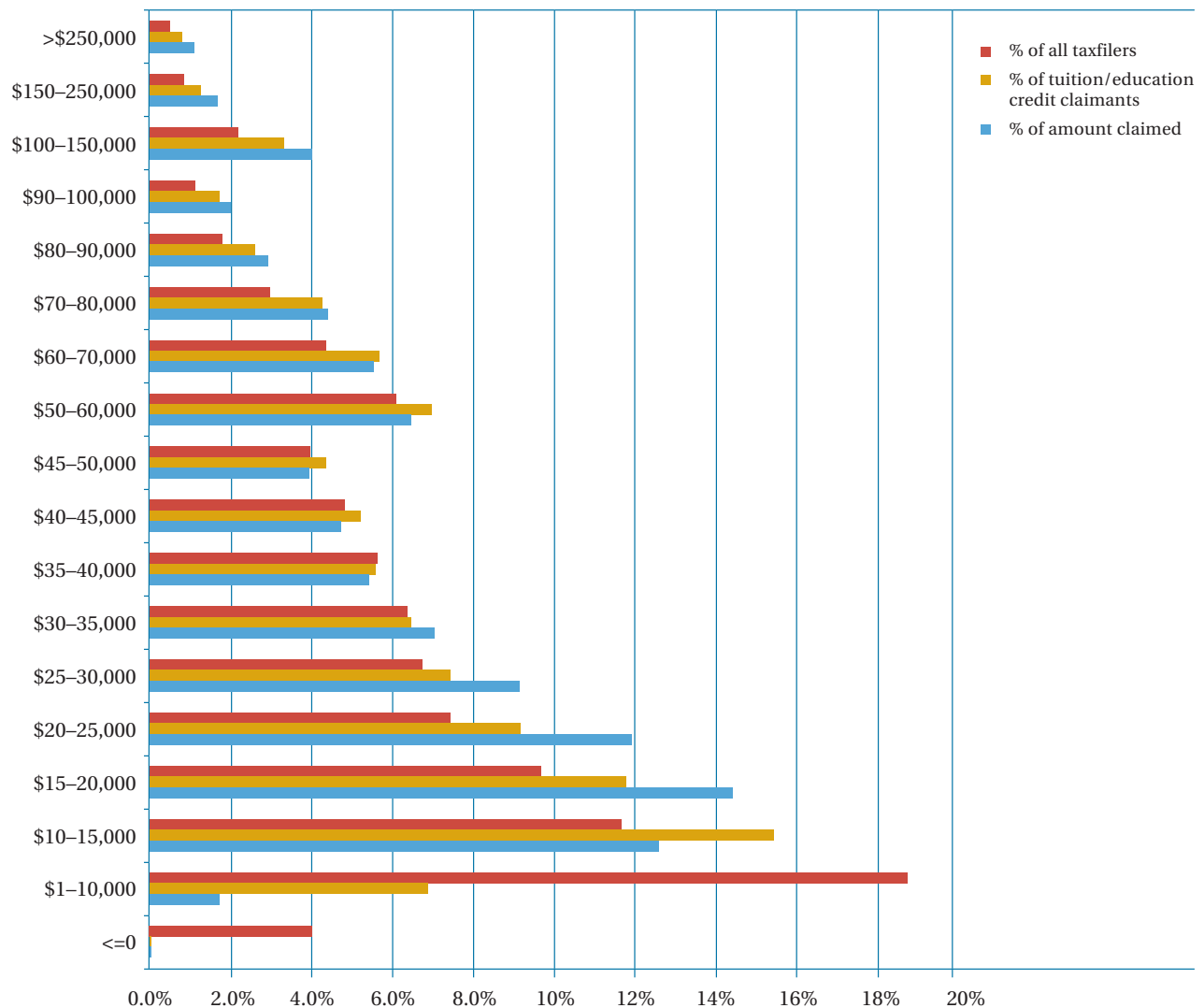
\$8,000 over their lifetime. What would be the optimal timing of these payments? It would seem uncontroversial that a sensible time to make these payments would be during the time an individual spent at school. The non-refundability of the tax credits, however, means that students may not be able to use the credits when they most need them. Worse, it is precisely lower income students who are least able to make use of the credits on their own tax returns while they are pursuing their studies.

Individuals in the bottom two quartiles in Figure 4 had incomes so low (less than \$10,800) that they would not have been required to pay taxes. More than

60 per cent of full-time students, then, could not have made use of the credits in the year in which they were earned. Only full-time students in the top income quartile, those with personal incomes greater than \$18,800, owed substantially less federal tax than non-students in the same quartile, likely the result of the tuition and education tax credits.

Figure 5 shows this same point slightly differently. It shows the distribution by income group of users of the tuition and education tax credits in 2004. Clearly, very low-income taxpayers are relatively under-represented among claimants of the credits—taxpayers with income below \$10,000 represent

Figure 5 — Distribution of claims of tuition and education tax credits by income group, 2004



Source: Canada Revenue Agency (2006)

19 per cent of all taxpayers, but only seven per cent of all users of tuition and education tax credits. This is despite the fact that students are likely to make up a relatively high proportion of this group, relative to other groups. The discrepancy is explained by the fact that individuals earning less than \$10,000 do not need to use the credits to reduce their taxes to zero, and so either carry them forward or transfer the amounts to a parent or spouse. Individuals earning between \$10,000 and \$15,000 also have a relatively low share of the overall amount of tuition and education tax credits claimed compared with their share of claimants of the credits. They represent 16 per cent of all claimants but 13 per cent of the total value of claims. Although this group needs to use some amount of tuition or education credit to reduce taxes to zero, they do not need the full amount of the credit they might be able to claim to do so, and either transfer credits to their parents or carry them forward to use themselves at a later time.

It is difficult to estimate precisely how many students are unable to claim the credits during their studies. It appears that the majority of claims are likely to be made by students or their parents in the taxation year in which they are earned, with a refund coming in at most 16 months later. Again, however, it is precisely those students most in need of the credits in the current year who are the least likely to be able to use them in that year. To the extent that there are financial constraints facing students, the tax credits do little to help. This mismatch in timing of need and availability of funds may, however, be relatively simple to fix.

Family incidence

An alternative to considering the distribution of the credits on the basis of an individual's income would be to consider the distribution of benefits on the basis of family income. Consistent with the approach to needs assessment taken under the Canada Student Loan Program, this is the most common way of describing the incidence effects of post-secondary education policies.

The Canadian Federation of Students (2003) uses this approach in arguing that the tuition and education tax credits “disproportionately benefit high-

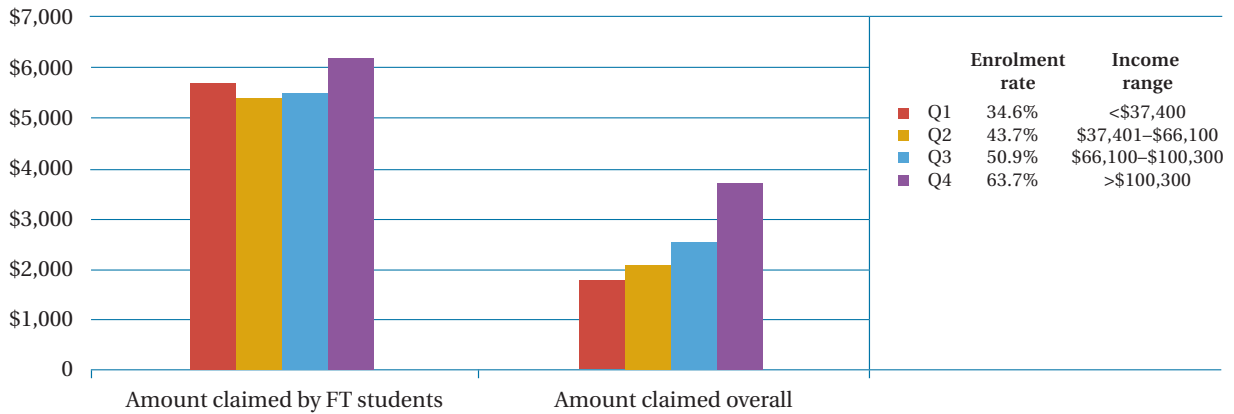
income households” (p. 1). The CFS position would be clearly true if it were not for the carry-forward provisions, since only individuals or households with incomes high enough to pay taxes would benefit.²¹ However, as Junor and Usher (2004) note, any bias toward high-income households under the current arrangements is largely a result of the higher enrolment rate of students from relatively high-income backgrounds. The same, however, is approximately true of any direct subsidy to post-secondary institutions (Usher, 2004). Indeed, these tax credits can be seen as having close to the same distributional effect as a fixed dollar subsidy per full-time student paid directly to post-secondary education institutions.

Data from tax file information shows this point very clearly. The average tuition-plus-education tax credit claimed by full-time students from relatively wealthy families is only slightly higher than the credits claimed by full-time students from relatively low-income families (Figure 6). This is because tuition amounts claimed by students from the highest income quartile are somewhat higher than those claimed by students from the lower quartiles, while education credits depend only on the number of months enrolled, not on the cost of the program. However, because the post-secondary enrolment rate for students from the highest quartile is almost twice that of students from the lowest quartile, the average tax credit claimed per young person in the top income quartile is two times that of the average tax credit available per young person in the bottom income quartile. So a greater percentage of total “spending” on the tuition and education tax credits ends up going to youth from higher income families, even though a student from a low-income family is eligible for the same credits as a student from a high-income family.

A similar result can be obtained through looking at data on enrolment rates and estimating the amounts of credits that should be available by income quartile, given these rates. Figure 7 shows that of all families with at least one 18 to 24 year old, those in the top quartile by income have twice as many full-time university students on average compared with those in the lowest income quartile. This result is very robust to

21. It would also be the case if, as was true until the late 1980s, these tax benefits were available as deductions from income rather than tax credits. In that case, the total effect on after-tax income would be greater for individuals with the highest marginal tax rates—i.e., those in the higher tax brackets.

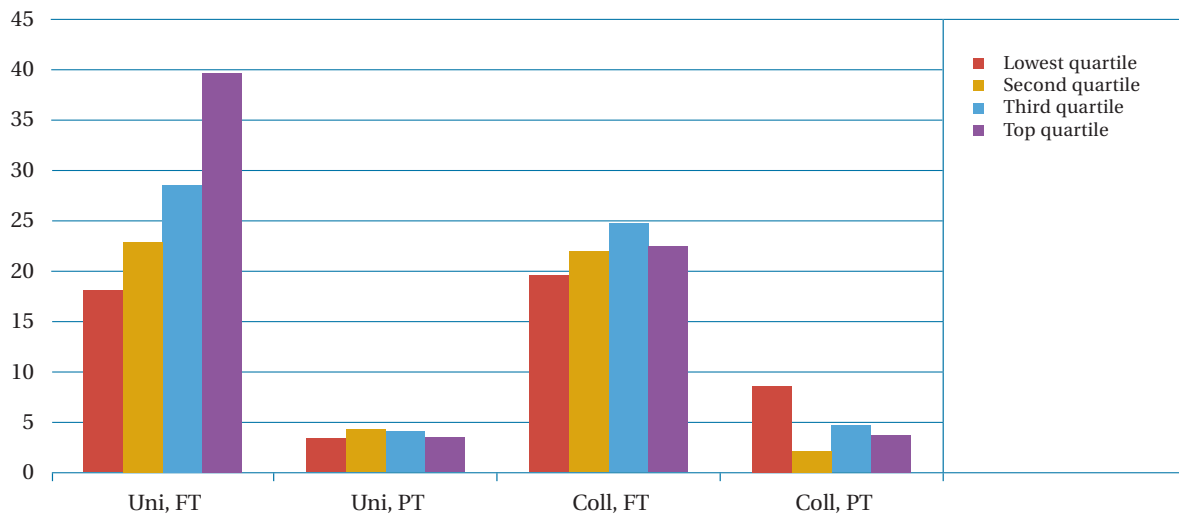
Figure 6 — Average value of federal tuition and education credits claimed by 18 to 24 year olds, by family income quartile, 2004



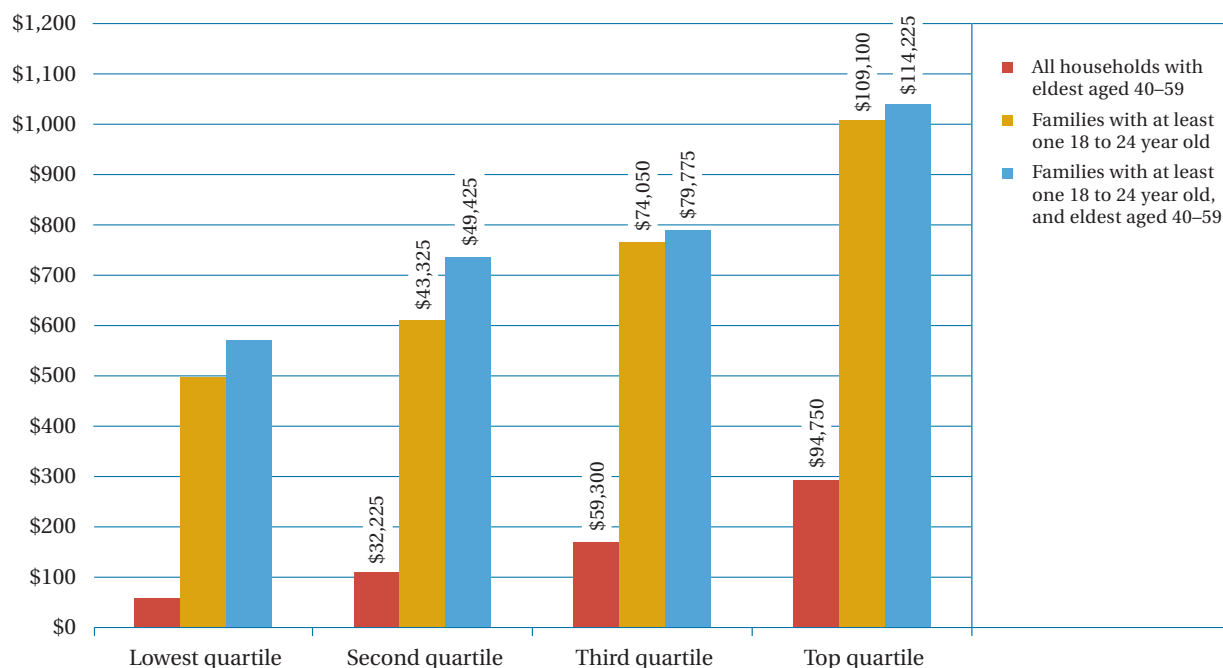
Source: LAD, 2004.

Note: The amount claimed by full-time students is the average value of the tuition and education credits claimed by all full-time students with incomes that place them in each income quartile (income ranges for each quartile are shown in the figure). The claims are the total credit for which a student would be eligible in 2004. The figures do not include amounts used in 2004 but carried forward from previous years. They do include amounts earned in 2004 but carried forward to future years. The amount claimed overall is the average value of the tuition and education credits claimed by all individuals in the quartile, including full-time and part-time students, as well as non-students. Mathematically, it is the amount claimed by full-time students multiplied by the enrolment rate of youth in the quartile, as indicated in the figure. Note that matching 18 to 24 year olds to their parents was only possible for around 82 per cent of the sample (89 per cent of full-time students, 77 per cent of non-students). Family income quartiles are calculated only for those families with at least one 18 to 24 year old child.

Figure 7 — Average number of students per 100 families with at least one 18 to 24 year old, by family total income quartile



Source: SLID, 2003.

Figure 8 — Hypothetical federal tax savings due to tuition and education tax credits per household

Source: Calculations are based on the average number of students per household (obtained from 2003 SLID) combined with hypothetical tuition and education amounts (tuition credits assume fees of \$5,000 per full-time university student, \$2,000 per full-time college student, and half these amounts for part-time students while education credits calculated are based on eight months enrolment only). Figures above the columns show the minimum household income required to be included in each of the top three quartiles. Note that there are no adjustments here for family size.

changes in the group of families considered.²² While the average number of part-time college students per family is highest for the lowest income quartile, there are relatively few part-time students compared to full-time students. Figure 8 shows the average amount of the hypothetical tax savings due to the education and tuition tax credits by family income quartile, given the enrolment rates shown in Figure 7.²³

Clearly, the reason why relatively high-income families benefit more from the tuition and education tax credits is the higher university enrolment rate of students from relatively high-income families. Regardless of whether the estimates of tax savings by income are from data on tax credits actually claimed or obtained through estimates based on enrolment

rates, the conclusions are very consistent: families with incomes in the top quartile claim credits worth at least twice as much as those in the lowest quartile. The tax credits are clearly regressive in effect, if not in intention.

It is also possible to break down the tuition and education amounts claimed by family rather than by individual. Table 5 shows actual claims of tuition and education amounts made by all members of a family, by family income quartile. Again, the tuition plus education amount available to families in the top income quartile is more than twice that of families in the lowest income quartile. The table also shows the amounts transferred to parents.²⁴ Amounts claimed by parents as transfers from their children are

22. The data in Figure 4 do not include children who are living independently of their parents, which may bias the results. Unfortunately, it is not possible to identify the parental income of individuals living away from home in a single year of data from the SLID. Drolet (2005) attempts to correct for this by using longitudinal information from the SLID and concludes that such corrections make little difference to the conclusions regarding relative enrolment rates by parental income.

23. Figure 2 shows the average value of the tax credit per 18 to 24 year old, taken from tax file data, but only includes full-time students. Figure 4 shows the value in terms of after-tax income (i.e., the value of the credit times the credit rate) and shows the average hypothetical claim per family rather than per 18 to 24 year old.

24. Note that the tuition/education amount available per family refers to the amount that all 18-to-24-year-old students in a particular family were able to claim based on tuition fees paid and months studied in the tax year 2004. Not all of these were necessarily used to reduce taxes in 2004. The amounts claimed by parents, on the other hand, were used to reduce taxes in 2004.

Table 5 — Claims of tuition and education tax credits by family income, 2004

	All Families	1st Quartile	2nd Quartile	3rd Quartile	4th Quartile
Income cutoffs for quartiles		\$48,800	\$82,200	\$121,200	
Average total income	\$98,700	\$28,800	\$65,600	\$100,300	\$200,100
Average number of children aged 18 to 24 per family	1.28	1.14	1.23	1.31	1.44
" who are full-time students	0.55	0.30	0.48	0.61	0.81
" who are part-time students	0.03	0.01	0.02	0.03	0.04
" who are not students	0.71	0.83	0.73	0.68	0.59
Average tuition/education amount					
" available per full-time student aged 18 to 24	\$6,022	\$5,886	\$5,660	\$5,766	\$6,428
" available per family	\$3,300	\$1,760	\$2,700	\$3,500	\$5,200
" claimed by parents	\$1,400	\$520	\$1,300	\$1,600	\$2,000

Source: LAD, 2004.

Note: Sample includes all families with at least one 18 to 24 year old identified as a child in the family. Income refers to total income of all family members in 2004. This sample covers around two thirds of all 18 to 24 year olds, and covers a relatively greater proportion of 18-to-24-year-old students than 18-to-24-year-old non-students (about 74 per cent compared with 64 per cent). Coverage is likely to be better the higher the income quartile, partly because of the higher post-secondary enrolment rates of youth with relatively high parental incomes. To the extent that this changes the conclusions, it will be to increase the number of children per family in low-income quartiles relative to high-income quartiles, most likely in the non-student category. This would have relatively little effect on the conclusions regarding relative claims of tuition and education credits by family income quartile, but would further reduce the value of credits claimed per 18 to 24 year old in the lower income quartiles relative to the higher income quartiles.

substantially higher for families in higher income quartiles than in low-income quartiles, though this appears to be in large part due to larger amounts being available to families in higher income quartiles, rather than a greater propensity to transfer the credits to parents. On average, families in all income quartiles paid positive federal taxes, with families with at least one full-time student paying somewhat lower but still positive taxes. This suggests that for at least some families, the student may have been able to transfer some tuition or education amounts to their parents but chose not to, even in relatively low-income families.²⁵

Summary of distributional effects

Overall, then, the education and tuition tax credits are not an effective way of raising the income of students when they most need it, and they are particularly poorly designed to meet this need for low-income students. Furthermore, when considering the entire population, government spending on these credits is most likely to be regressive, although no more so than are the more general government transfers to universities and colleges.

4.2 Tax credits and the incentive to invest in education

I have argued that the tuition and education tax credits are a failure on distributional grounds. However, there are other arguments in favour of such credits.

Collins and Davies (2005a) note that it is important to know the effect of government policies — both taxes and spending programs — on the incentive to undertake investments. Any investment that leads to higher lifetime incomes will be subject to a positive rate of taxation in an income tax system like Canada's. A system of tax deductions or credits for investments in education could then be justified on the basis that it would reduce the disincentive to make such investments. While this would apply to the tuition credit, it is more difficult to apply that logic to the education credit.²⁶

Collins and Davies (2005a) find that the income tax system tends to tax investment in post-secondary education relative to consumption, but that this disincentive to invest in education is lower than the disincentive to invest in physical capital. Furthermore,

25. This is not entirely clear, however. As described previously, the calculation of amounts eligible for transfer to parents is rather odd and ensures that students with very large available credits are often unable to transfer unused portions. Some students may therefore wish to transfer the credits to their parents but be forced to carry them forward instead.

26. Collins and Davies (2005b) suggest the education amount could be considered as a rough offset to the progressivity of the tax system.

once government spending programs—notably the transfers paid directly to universities and student loans and grants systems—are taken into account, there is a net subsidy to investment in education relative to consumption.

The effect of the education tax credits on effective tax rates is relatively small, however. Collins and Davies (2005b) estimate that the doubling of the education amount in 2001, from \$200 per month to \$400 per month, reduced the effective tax rate by around 1 percentage point—from 18.9 per cent to 17.7 per cent for men, and from 10.6 per cent to 9.3 per cent for women. On the other hand, a reduction in the progressivity of the income tax structure at the same time caused a much more substantial decline in effective tax rates, cutting them by half or more.

A subsidy to investment in education could be argued to be desirable if there are sufficient social benefits to post-secondary education. In this case, however, the credits could be justified only if they helped to increase enrolments above what they would be otherwise.²⁷ There are, however, good reasons to think that such credits will have little effect on enrolment rates.

Long (2004) examines whether education and tuition tax credits introduced in the U.S. in 1997 increased attendance at post-secondary institutions there. She finds little effect on overall enrolment, although there seems to be some shift from two-year to four-year colleges (roughly equivalent to Canada's college and university levels, respectively). This is in rather stark contrast to consistent findings in the U.S. that a decrease in the cost of university attendance—due to lower tuition fees or increased financial aid—leads to quite substantial increases in enrolments (Dynarski, 2002). Long attributes this to two factors: the lack of transparency in the system, which makes it difficult for those who are eligible for the credit to claim it; and the fact that the benefits of the subsidy come as late as 18 months after tuition fees are paid.

It is not clear that her results are directly applicable to Canada, however. The U.S. tax code is much less clear in explaining the available tax credits than its Canadian equivalent, and the provisions have been in place for a much shorter time. These would hinder awareness of the credits, making it likely that many individuals or families who should receive the benefits do not. Conversely, Canada's credits have been in place for many years, and most post-secondary institutions in Canada automatically provide the forms required to claim the credits. It seems unlikely that there are large numbers of students in Canada who are eligible for the tax credits but who are not claiming them in some form or another. Although it is very difficult to know for certain, the percentage of 18-to-24-year-old tax filers claiming the tuition and education amounts is quite close to the percentage of 18 to 24 year olds who claim to be studying in post-secondary institutions in surveys such as the *Labour Force Survey* or the *Survey of Labour and Income Dynamics*.²⁸

It may be the case, though, that there is a lack of awareness of the value of the tax credits at the time that the university or college entrance decision is being made. Usher (2005) notes that in a 2003 survey, the median estimate of the cost of one year's university tuition fees was \$6,800 for individuals from low-income families and \$5,000 for individuals from wealthier families, when the actual cost was around \$3,800 (not netting out the effects of the tax credits). He speculates that this mis-perception of the costs may be a major impediment to university enrolment. As noted earlier, the existence of these tax credits is advertised nowhere other than in the tax package, and it would not be surprising if many, or even most, parents of high school students were unaware of their value.

Another reason why the U.S. tax credits likely have little effect on overall enrolments is that they are targeted solely at students from middle-income families. Because they are non-refundable and cannot be

27. The provincial programs could also possibly be justified on the basis of helping to retain or attract highly educated workers although even then they would constitute potentially wasteful competition between provinces. As currently constituted, similar federal credits could not, however, be justified on this basis.

28. The SLID has 47% of 18 to 24 year olds attending community college/institutes, Cegeps or universities in 2003, while the LFS has around 40% of 18 to 24 year olds enrolled.

carried forward, they are not available to individuals from low-income families. Long says that students from families in the bottom 30 per cent of the income distribution are not eligible for the credits. In addition, these students are subject to clawbacks once family income exceeds certain amounts, so that students from families in the top 20 per cent of the income distribution are also ineligible. The Canadian tuition credits, on the other hand, are available to all regardless of income, and the education amounts increase their value considerably. The U.S. credits are available for tuition fees only. For these reasons, tuition tax credits cost the U.S. government only \$5 billion US in 2000, proportionally less than the cost of the Canadian credits at \$1.3 billion Cdn, despite the United States' much larger population of post-secondary students.

These factors suggest Canadian credits may have the potential to be more effective than the comparable U.S. credits. On the other hand, the carry-forward provisions also mean that there is a longer average delay between paying tuition fees and receiving the credits than in the U.S. Therefore, if there are any students who do not enrol in post-secondary education due to financial constraints, the tax credits will have little effect on their decision.

Unfortunately, a similar study to Long's would be very difficult to do in the Canadian case, since there is almost no variation in the availability of these tax credits either by province or by parental income. Nonetheless, the U.S. evidence is not particularly supportive of the notion that such tax credits are a particularly useful device for encouraging enrolment, as compared with an up-front grant or a reduction in tuition fees. This is especially true in any case where post-secondary enrolment is hampered by a lack of ready funds.

4.3 Federal-provincial tax relationship and administrative issues

Given that the tax credits do not seem likely to either increase enrolments or to provide targeted financial aid to those most in need of it, why are they used? There are two possible answers to this.

The first relates to the structure of government in Canada—the federal government does not have primary responsibility for post-secondary education, so that it may wish to target its involvement to areas that fall clearly within federal jurisdiction.²⁹ However, the only real constraint on federal spending on post-secondary education appears to be in providing funds directly to universities for their non-research-related activities. The federal government provides transfers to provincial governments to support their post-secondary spending through the Canada Social Transfer and funds the research activities of universities directly.³⁰ More importantly, given that the tax credits effectively constitute a transfer to individuals, the federal government is heavily involved in other programs that provide financing to students, through both the Canada Student Loan Program and the Canada Millennium Scholarship Foundation. The tax credits do predate both of these programs—the first by a few years, the second by some decades—but there seems to be little reason why the credits could not have been rolled into one or the other of these schemes at their inception.

At the provincial level, policy has been largely forced to mimic the federal credits. Most recently, the tuition and education tax credits were included in the group of credits that provinces were required to adopt upon the introduction of the Tax on Income (TONI) system in 2000.³¹ Nonetheless, the majority of provincial governments have allowed tuition- and

29. Cameron (2005) notes that the federal government has at times found ways around, or indeed ignored, the constitutional assignment of responsibility for post-secondary education to the provinces. He argues, however, that federal involvement should be kept to several clearly defined areas where it does have a clear constitutional role.

30. It should be noted that these transfers are unconditional—that is, they do not have to be used for post-secondary education—and are also intended to support provincial programs in other areas, most notably child care and social assistance.

31. The Tax on Income system allows provinces to evaluate an individual's provincial tax liability based on that individual's income, rather than on the taxes owed to the federal government, as had previously been the case.

education-related tax credits beyond those required by the inter-governmental taxation arrangements at some point in the past decade.³²

The provincial governments' policies could possibly be explained as an attempt not to increase the overall number of university graduates in Canada but to increase the percentage of university graduates who end up working in their own province. If this were the case, though, a pure "graduate tax credit," such as that operating in Saskatchewan, would make more sense than an education tax credit. In any case, there is little evidence that such a credit would substantially affect residential decisions in Canada. The introduction of the very large tuition tax credits in New Brunswick in the next few years may offer an opportunity to study this question further.

It is also interesting to question how the federal tax credits might affect provincial finances and tuition fee policy. In effect, the federal tax credits would seem to provide a subsidy to high tuition fee provinces relative to low tuition fee provinces and consequently encourage provinces to allow tuition fees to be higher than would otherwise be the case.

The tuition tax credits mean that residents of provinces with relatively high tuition fees can claim larger federal tax credits and pay less federal tax than those of provinces with relatively low tuition fees. Total tax credits "paid" to residents of high tuition

fee provinces will therefore be larger than total tax credits "paid" to residents of low tuition fee provinces, if all else is the same. Table 6 shows the distribution of users of federal tuition and education tax credits by province and the share of total federal tax credits going to each province in 2004, along with each province's share of all taxpayers in the same year. Taxpayers in Quebec receive somewhat smaller tuition and education credits on average than do taxpayers in other provinces, but the difference between Quebec's share of taxpayers and its share of tuition and education credits is not very large. The difference is partly due to Quebec having a slightly greater proportion of taxfilers claiming the credits than do other provinces on average, but mostly it is likely due to the effect of the education amount, which is the same for all full-time students.

Smart (1998) describes how the equalization system provides an incentive to provinces to increase tax rates. A similar, albeit slightly more complicated, effect may apply to tuition and education credits. The tax credits mean that an increase in tuition fees of \$100 in, say, Prince Edward Island, would result in an increase in net costs to students of \$75 at current credit rates. Of the tax credit savings of \$25, the federal government pays \$15. These federal funds to pay for the tax benefits come primarily from taxpayers in other provinces. Prince Edward Island

Table 6 — Distribution of users of tuition and education tax credits and amounts claimed by province, 2004

	Number of users ('000)	Total amount claimed (\$m)	Share of:		
			Taxpayers	Credit users	Amount claimed
NF	40.7	\$161.0	1.72%	1.77%	2.04%
PEI	11.0	\$46.2	0.45%	0.48%	0.58%
NS	61.2	\$247.1	3.01%	2.66%	3.12%
NB	46.2	\$180.5	2.48%	2.01%	2.28%
QC	571.8	\$1,687.0	24.80%	24.85%	21.33%
ON	873.4	\$3,249.6	38.02%	37.97%	41.09%
MB	77.8	\$267.2	3.65%	3.38%	3.38%
SK	66.3	\$228.8	3.12%	2.88%	2.89%
AB	251.8	\$867.4	9.89%	10.94%	10.97%
BC	300.4	\$972.9	12.87%	13.06%	12.30%

Source: Canada Revenue Agency (2006)

32. Specifically, Quebec, which has an independent tax system; Manitoba, Saskatchewan and New Brunswick, all of which at various times have had an additional tuition- or education-related credit (see Appendix 1 for details); and most recently New Brunswick, Ontario, Manitoba, Saskatchewan and Alberta, all of which have increased the monthly education amount beyond that required by the TONI agreement.

therefore has an incentive to allow tuition fees to be higher than they would otherwise be, in order to increase subsidies from other provinces to taxpayers in Prince Edward Island and reduce Prince Edward Island's own spending on post-secondary education. This effect nevertheless seems likely to be quite small, particularly since the effect on the provincial governments is not direct but via taxpayers.

Another argument in favour of the tax credits could be that it is a relatively low-cost means of providing a grant to post-secondary students. Since most individuals file tax returns in any case, and since the tax infrastructure is already quite well honed, the only administrative costs of the system are the addition of two extra lines plus a Schedule on the tax form, which is of little consequence. Chapman (2006) makes this argument in favour of a

tax-based income-contingent student loan system. However, this holds only in the event that the tax system is already used instead of an alternative administrative infrastructure that exists surrounding an independent student loan or grants system. It seems unlikely, therefore, that it would be applicable in Canada, where there are already student loans and grants administering bodies established separately from the tax office. As well, audits of the tuition and education amounts seem to be quite common, and the carry-forward and transfer provisions mean that the total costs of administering the system are not simply accounted for by the addition of a few extra lines on students' tax returns.³³ It is certainly not clear, then, that the tuition and education tax credits would save on administrative costs compared with alternative policies.

33. Indeed, these carry forward provisions mean that a move to a tax-based income contingent tuition fee repayment system, like Australia's HECS system, would have almost no administrative costs.

5. Alternative Policies

To summarize the previous section: there is no evidence that the education credits are effective in increasing enrolment, and the distributional consequences are at best neutral and at worst regressive. The tuition and education tax credits are therefore, on the basis of any criterion, simply bad policy. Supposing that these tax expenditures were eliminated and federal revenues increased by \$1.3 billion, and that the priority for spending those funds was the post-secondary education system, what could that money buy us?

To give a rough indication of the range of alternatives available, I consider in turn four alternative uses of the \$1.3 billion in federal spending on tuition and education tax credits:³⁴

1. making the tax credits refundable;
2. increasing grants paid directly to universities;
3. increasing grants paid directly to students; and
4. expanding the student loan program.

5.1 A refundable tax credit

A simple incremental improvement to the current system of tax credits would be to make the credits refundable.³⁵ This would have no effect on administrative costs and would ensure that students would receive the benefits of the credits no later than 15 months after the month in which they were earned.³⁶ As it stands, the carry-forward provisions mean that for at least some students the credit will be used only after graduation. For a student completing a four-year degree, this could mean a tax refund coming 55 months after tuition fees were first paid. Making credits refundable would have some cost to government revenue, to the extent that there is currently no indexation or interest payment on tax credits that are carried forward, but it would ensure the program better met its goals of assisting students with their education expenses. It would certainly improve the timing of income across a student's lifetime—instead of making use of the tax credits after graduation, when income is relatively high, it would allow students to access the funds during their relatively low-income student years. If Long (2004) is correct in her explanation for the minimal effect of the U.S. tax credits on enrolments, tightening the link between paying tuition fees and receiving the credit might improve accessibility and increase enrolments relative to the status quo. There would likely be not much change in administrative costs as a result. The number of tax returns processed would remain almost the same, but the tax forms could be simplified since there would no longer be any reason to have the transfer and carry-forward provisions in place.

34. The total funds available would be around \$1.8 billion if the equivalent provincial tax credits were removed at the same time. This is by no means automatic at present, given the nature of the tax collection agreement. However, removal of the provincial credits prior to the removal of the federal credits is not currently possible. The federal government will likely have to be the leader in any such reform.

35. Collins and Davies (2005a) also suggest this move, or even a credit paid in advance, if universities reported enrolment status to the Canada Revenue Agency as soon as it became available. This would only cause difficulties if a student later dropped out, at which point they would have to repay the advance credits paid to them.

36. A tax credit earned between January and December 2005 could be refunded by April 2006.

5.2 Direct grants to universities and colleges

Grants paid directly from governments are the largest source of funding for colleges and universities, accounting for 54 per cent of total expenditure. Increases in grants could have two effects on students.³⁷ First, they may enable an expansion of the post-secondary system and so an increase in the number of young people able to attend university. Secondly, they may allow universities to reduce revenue from other sources, in particular tuition fees.

Foot and Pervin (1983), Fortin (2005) and Neill (2006) all find that increased direct government spending on universities increases the percentage of young people enrolled in university.³⁸ An increase in federal grants direct to universities of \$1.3 billion would increase spending per 18 to 24 year old by just under \$500. The estimates in Fortin (2004) and Neill (2006) suggest that a one-off increase in funds to universities of \$500 would increase the total university enrolment rate by between 0.4 and 0.7 percentage points. That would constitute an additional 15,000 to 22,000 full-time university students across Canada.

The typical assumption made when examining the distributional effects of grants paid directly to universities is that the benefits accrue to the students enrolled in the universities, because such grants are expected to reduce student contributions to the costs of their own education via tuition fees.³⁹ However, the final distributional and economic effects would depend to a large extent on exactly how these grants were distributed across colleges compared with universities and how tuition fees were affected. The effects of the program on the distribution by current

family or individual income would be almost precisely replicated if each university or college were given a direct grant per full-time student. To the extent that it enabled a reduction in tuition fees, however, it would imply an improvement in the timing of the benefits to those students who would otherwise carry forward their tax credits.

It is less clear that such a move would have benefits in terms of the quality of university programs. Increasing grants directly to universities and colleges to enable fee reductions would reduce the share of funding these institutions receive from students. This may mean that universities and colleges would pay more attention to mechanisms to secure increases in funding according to whatever formula was used to distribute the extra funds, at the expense of focusing on the needs of students. The *Rae Report* in Ontario highlighted the importance of ensuring that grants to universities are distributed in a way that improves accountability and quality in post-secondary education (Rae, 2005). The effects of such a change would depend very heavily on the precise nature of the distribution system.

Furthermore, there are likely to be difficulties in replacing the federal tax credits with direct grants to universities, given that post-secondary education does not fall within the constitutional bailiwick of the federal government. It would presumably be less problematic for the federal government to allow provinces to abolish their own credits, which is not currently possible.⁴⁰

These factors together likely mean that, in practice, replacing the existing credits with federal transfers paid directly to post-secondary institutions might be difficult to achieve—or even undesirable, depending on the allocation formula.

37. A third effect is possible—that the increased revenue flow to universities could be used to increase salaries or improve working conditions for university faculty, staff and administrators. There is no empirical evidence on this issue, however.

38. There is no comparable estimate of the effects of increased spending on colleges.

39. This may not be a reasonable assumption if increases in grants are used to increase faculty salaries, with no commensurate improvement in the quality of teaching.

40. Whether the provinces would use that flexibility is unclear. About half the provinces have education credits that are greater than required by the TONI agreement. In 2002, Manitoba abolished its learning tax credit as an explicit part of a package of reforms that included an increase in provincial grants to universities to reduce tuition fees.

5.3 Grants direct to students

Assuming that the total number of full-time students in college and university in Canada in 2003 was approximately 1.2 million,⁴¹ \$1.3 billion would be enough to give each of these students a grant of around \$1,100.

Although there is little evidence on this subject from Canada, there is clear evidence from the U.S. that grants for university attendance have large enrolment effects (Kane, 2003; Dynarski, 2002). However, there is also a concern that increases in grants from governments have led to an increase in college tuition fees (Long, 2003). The longer term effects may therefore be smaller than the immediate effects.

A simple grant like this would have slightly positive effects on income distribution, since college students currently receive a smaller tuition tax credit than university students and university students are more likely to come from relatively advantaged households and to be relatively high-income after graduating, compared with college students. It would also benefit students by transferring the payments to the time during which they are studying and likely have relatively low income. The program could be made more progressive by tying the amount received to an assessment of financial need, based for instance on the Canada Student Loans Program assessment methodology. Operation of such a grant may remain somewhat difficult but could perhaps be undertaken as a direct rebate on the tuition fees charged to students at qualified post-secondary institutions.

5.4 Expanding the Student Loan Program

Surprisingly, federal spending on the student loan program, at around \$0.8 billion, is considerably smaller than spending on the tax credits.⁴² Indeed, spending on the tax credits is comparable to the total amount of federally provided loans disbursed in a given year.⁴³ In the 2006 Budget, the government announced an intention to reduce the expected parental contribution, which would increase the number of students eligible for the Canada Student Loans Program by around 30,000 (just under 10 per cent more than are currently eligible) from August 2007, costing an additional \$20 million per year.⁴⁴ Clearly, an injection of \$1.3 billion could achieve substantially more. It would mean that student loan program spending could be expanded to about 2.6 times its current level. The average federal loan could increase by 2.6 times its current level—to \$12,000 rather than the current \$4,600—or 2.6 times as many students could be eligible for loans at about the same average amount.⁴⁵

There is some evidence that the student loan program does increase enrolments and improve access to university for those students who receive them (Finnie and Laporte, forthcoming; Neill, 2006). There is also some recent evidence that students from middle-income families have been more affected by the increases in tuition fees over the 1990s than have students from either higher or lower income families (Neill, 2006; Frenette, 2005). Expansion of the student loan program to make such

41. Data on part-time enrolments in colleges are not available. The data on college enrolments are only available up to 1999. I have assumed some slight growth in college enrolments since that time.

42. The \$0.8 billion includes transfers from the federal government to Quebec, Nunavut and the Northwest Territories, which run independent loan programs.

43. Spending on student loans is less than the amount disbursed, because the loans are repayable.

44. This would result in an average loan to each new recipient of not much more than \$2,000 per year, assuming that the total costs of providing a loan are one third of the face value, which is currently a reasonable approximation to a program providing \$1.5 billion in new loans per year at a cost of \$0.6 to \$0.8 billion per year.

45. These are approximations, since they do not consider the effects on default rates, which may be higher than the average loan, or on administrative costs, which are likely to increase as the number of borrowers increases.

students eligible for substantial loans may be beneficial in enabling them to pursue post-secondary education. However, it is difficult to determine how much an expansion in student loan spending of the magnitude suggested here would affect enrolments.

The distributional effects would also depend on exactly how the money was put to use. As long as need was targeted to some degree, there would necessarily be an improvement over the way the funds are currently used. Individual recipients would also benefit in terms of income distribution over the course of their lifetime.

5.5 Other options

The changes I have described above are simple ones—they only involve injecting more funds into programs that already exist.

Finnie, Usher and Vossensteyn (2004), however, consider the possibility of using the funds released by eliminating the tax credits to more fundamentally reform the student financial architecture. Their preferred approach is to use the funds to target low-income students by increasing need-based student financial aid. In particular, they recommend providing loans to students with moderate amounts of assessed need and grants to students who have larger

assessed need, as well as greater debt relief for students who have low incomes after graduation. Their proposal would also see parental resources being taken into account to a greater extent than now. It therefore focuses to a large extent on ensuring that the funds available are distributed reasonably on the basis of an individual student's lifetime income and on the basis of the current resources available to a student and his or her family. The extent of the funds available would mean that there would be a need to consider whether the student loan program should be extended to cover students from considerably higher income families than is now the case. Rae (2005) also mentions the need to reconsider the post-secondary financing system as a whole, including the role of the tax credits.

Perhaps more interestingly, the elimination of these universal tax credits may offer the opportunity to move the student financial aid system more in the direction of a true income-contingent repayment system. The clear advantage of this type of system is that unlike almost any other type of program targeting post-secondary students, it is unlikely to be regressive on a lifetime income basis. This notion has, however, been a politically contentious issue in Canada, despite the successful implementation of such schemes in several similar countries.⁴⁶

46. In particular, Australia, New Zealand and the U.K. Chapman (2006) describes the conditions which seem to have contributed to the successful adoption of income-contingent loans schemes in these countries. While Canada has a fairly similar post-secondary education system, in that most institutions are public, federal-provincial relationships make such a move more difficult in Canada than in the unitary states of the U.K. and New Zealand or in the more centralized federation of Australia.

6. Conclusion

There is no evidence that tax credits increase enrolments in post-secondary education. Their only other possible justification is on the grounds of equity. Yet the argument here is also weak: ultimately, graduates of post-secondary programs earn more income over their lifetime than high school graduates, and in many cases the benefits of the tax credits become available only after a student has graduated and begun earning money. Furthermore, because university students are disproportionately likely to come from well-off families and to have relatively high incomes themselves after graduation, spending on the tax credits goes disproportionately to relatively wealthy families and individuals.

If the existing system of credits is to be maintained, then a minimum first step should be to increase publicity around the system. Usher, in several papers, including his most recent work (2006), provides an excellent beginning. It is important that the information be provided more broadly to potential students than at present. For example, the CanLearn website, which provides quite detailed estimates of the cost of a post-secondary education, makes no mention of the tax credits. Nor do the web pages of Canadian colleges and universities make mention of the size of the tax credits. Similarly, the credits are not mentioned on the web pages of the Canada Student Loans Program or the Canada

Millennium Scholarship Foundation, both places potential students may look to find out about university financing issues. It would be very easy to remedy this situation.

Greater publicity on the existence of the credits may help to make the system better. But there remains the question of whether even then the tax revenue foregone to sustain the credits could be put to better use. Every analyst who has examined the system of tax credits—most notably Collins and Davies (2005a), Finnie, Usher and Vossensteyn (2004) and Usher (2004)—comes to the same conclusion as I have here: any other use of funds in the post-secondary education system would be preferable, both in terms of the effects on enrolments in post-secondary institutions and in terms of the distributional effects.

At a minimum, the credits should be converted into refundable credits, so that the benefits are available to students when they are most needed—rather than, as is the case at present, being mostly useful for reducing taxable income after graduation. However, the availability of an additional \$1.8 billion or more in combined federal and provincial funds would provide an opportunity to consider even more effective ways of restructuring the complex web of student financial aid systems in Canada.

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Appendix I

Brief history and further details

History of federal tuition and education amounts

- 1961:** Tuition tax deduction first allowed. It could be claimed only by students. Tuition fees could be applied to reduce taxable income, so that they were valued at the taxpayer's marginal tax rate. Thus, the value of the deduction increased with individual income.
- 1974:** Education tax deduction first allowed, at \$50 per month. It could be claimed by students or transferred to their parents/spouse.
- 1979:** Dependent child amount could no longer be claimed by parents of adult children attending a post-secondary institution full-time if the student was over 21 years of age.
- 1988:** Tuition and education deductions were converted into non-refundable credits. Education amount was increased to \$60 per month of full-time study. Exemption for dependent university students under 21 years of age removed.
- 1992:** Education credit increased to \$80 per month.
- 1996:** Education credit increased to \$100 per month.
Amount able to be transferred to parents increased from \$4,000 to \$5,000.
- 1997:** Carry-forward provisions introduced. Prior to this time, the credit was not able to be used by individuals or families who paid no taxes and thus was more valuable for higher income individuals or families.
Education credit increased to \$150 per month.
Tuition credit expanded to include ancillary fees.
- 1998:** Education credit increased to \$200 per month.
Part-time education amount introduced, at \$60 per month.
- 2001:** Tax on Income (TONI) approach to federal collection of provincial taxes was introduced, making it easier for provinces (other than Quebec) to set their own tax parameters, including the value of tax credits. Provinces moved to use the system at different times over the next few years. The agreement provided that provinces would use the same definitions for the non-refundable tax credits as did the federal government and would be required to allow non-refundable credits in at least the amounts that applied in 1997 for the education credit and at least the current federal amount for the tuition credit. Provinces were able to increase the value of these credits relative to the federal government or introduce new credits at an additional administrative cost paid to the Canada Revenue Agency.
(<http://www.fin.gc.ca/fapt/fapte.pdf>)
- 2001:** Education amount increased to \$400 per month for full-time students and \$120 per month for part-time students.
- 2006:** Textbook credit introduced, valued at \$65 per month for full-time students and \$20 per month for part-time students.

Further detail on provincial education-related tax measures

Manitoba

In 1996, Manitoba introduced the refundable Manitoba Learning Tax Credit. This credit enabled students (or their parents, if amounts were transferred to them) to claim a credit equal to ten per cent of the total value of the tuition and education amounts they had claimed, but these credits were refundable. The credit rate was reduced to seven per cent in 1998 and then to four per cent in 2001 before it was abolished in the 2002 tax year as part of a package of reforms to student financial aid and university tuition fees.

Saskatchewan

In 2000, Saskatchewan introduced the post-secondary graduate tax credit. This was a non-refundable credit of \$350 for qualifying graduates who start work in Saskatchewan. Individuals needed to apply for a certificate from the Saskatchewan government in order to claim the credit. While it is non-refundable, it can be carried forward for up to four years. It was increased to \$500 in 2004 and then to \$675 in 2005. It is scheduled to increase to \$850 in 2006 and then to \$1,000 in 2007.

New Brunswick

The New Brunswick Tuition Tax Cash Back was announced in the 2005 Budget, with legislation receiving assent in June 2006. The credit allows students to recover 50 per cent of eligible tuition fees paid after January 2005, up to a lifetime maximum of \$10,000 in credits (\$20,000 in tuition fees). There is a limit of \$2,000 on the amount of tax reduction that can be claimed in any one year, and the credit can be carried forward for up to 20 years but not transferred. The program appears to be directed at increasing the number of workers in New Brunswick with post-secondary qualifications. (For further information, see: http://www.gnb.ca/0024/tax/Tax_Cash_Back-e.asp)

Quebec

Quebec collects tax revenue itself, rather than through the Canada Revenue Agency as do the other provinces. This means that its education and tuition tax deductions and credits system has not been harmonized with the equivalent federal measures.

This manifests itself in several ways. First, Quebec was the last province to convert its tuition deductions to credits, in 1994. Second, Quebec does not allow students to claim an education amount.

However, as was the case in the rest of Canada prior to the switch from a deductions-based system to a credit-based system, parents are able to claim a non-refundable credit for their dependent children that is reduced according to their children's income. Currently, Quebec residents can claim a credit valued at \$2,585 per dependant over the age of 18. If the dependant is a post-secondary student, an additional \$1,780 per session can be claimed for up to two completed sessions, making the total value \$3,560 for a student enrolled for a full academic year. From this total amount, the dependant's income is subtracted. Tax is then reduced by the net amount multiplied by the tax credit rate of 20 per cent. Since this credit is non-refundable and not able to be carried forward, it benefits those whose children earn little income in a given year but who themselves have a relatively high income. Thus, having a dependant who is a post-secondary student in the family allows parents to reduce their taxes paid by up to \$712 more than if the dependant were not a post-secondary student.

This amount is analogous to the education amounts available in other provinces and is very generous compared to those amounts: the largest tax reduction available due to an education tax credit is in Alberta, where a tax credit of \$3,600 for eight months of study would reduce taxes by \$360, given the tax credit rate of ten per cent. However, the Alberta tax reduction is not dependent on the student's income and is able to be carried forward to future years. Given the differences in treatment, these credits have not been included in the discussion above, but they would mean that, particularly for students who earn very little during their studies, Quebec's system of credits is more generous than the figures in this paper suggest.

Appendix 2

In calculating the value of the tuition and education tax credits in Tables 1, 2 and 3, the following assumptions are used:

1. Does not include SK's graduate tax credit program. This is dependent not on having studied at all but on graduating.
2. Does not include NB's tuition tax rebate program. The latter would add an additional \$2,500 to the tax savings of a student who paid \$5,000 in tuition fees, meaning the total value of available tax assistance in NB would be increased to just over \$4,500. Students paying a tuition fee of \$5,000 and paying tax in NB would therefore pay just under \$500 per year in tuition fees. If tuition fees were \$2,000, the net tuition fee payment per year would be negative—that is, students would be paid to attend college.
3. Does not include Quebec's dependent student credit. (Alternatively: assume that the student is making a minimum of \$6,145, in which case he would not qualify for the credit.)
4. I am making no adjustments for the possibility that these amounts will need to be transferred or carried forward to future years.
5. For the hypothetical calculations: the tuition fee for full-time university students is \$5,000 for the academic year, and for full-time college students it is \$2,000 for the academic year. Part-time fees are half these amounts. There are no ancillary fees.
6. Tax rates are for the 2006 academic year. This includes the federal textbook tax credit (i.e., the increase in the full-time education amount from \$400 to \$465). The provincial governments have not increased their education amounts to match the federal increase for 2006.

