

The Demand for Student Loans and Access to Post-Secondary Education

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ABSTRACT

In this paper we use the 2002 Post-Secondary Education Participation Survey (PEPS) dataset to shed new light on the government student loan system and its role in broadening access to post-secondary education (PSE) in Canada. Who received a student loan? Did the loans received play a critical role in helping individuals access PSE? Is there a demand for greater borrowing? Were some individuals prevented from pursuing PSE because they could not get a loan? Is debt aversion a significant problem?

We find that 64.5 percent of the total PEPS sample of 17 to 24 year olds had accessed PSE at the time of the interview in 2002. Of these, 33.8 percent had taken out a student loan. The great majority of these (70.1 percent) said they would not have been able to pursue their PSE studies without the loans they received, this being especially the case among those from lower socio-economic status families. Student loans also had other important effects, such as increasing educational choices, and reducing borrowing from others and work during school.

Of those who had not accessed PSE, only 17 percent said this was primarily due to monetary factors. Most of those who gave monetary factors also said they had no student loan because they did not need one, suggesting that lack of affordability is not an important barrier to PSE. The greatest number instead cited a lack of interest (43 percent), while others credited insufficient preparedness (17 percent), an intention to go later (9 percent) or other factors (14 percent).

Debt aversion appears to be a small problem and students generally say they are ready to borrow what it costs to finance their studies. Indeed, a substantial number of individuals would have liked to borrow more, and at least some of these appear to have turned turn to private borrowing sources (banks, credit cards, etc.) due to the constraints in the availability of government student loans.

I. INTRODUCTION

Government student loan programs comprise an important element of the Canadian student financial aid system, which is generally aimed at improving the opportunities for accessing post-secondary education (PSE), especially for individuals from lower income families. In Canada (although not in certain other countries), eligibility for government student loans is controlled, based on assessments of need which are calculated as the difference between estimated schooling costs and the resources to which the student is assumed to have access (including those from his or her family).¹

Various data sources indicate that approximately 40 to 50 percent of recent (PSE) graduates finish their schooling with student loans, while recent cohorts of graduates have been borrowing greater amounts, paying off their debts more slowly, and facing greater problems in repayment than earlier generations of students.²

But knowing how many students borrow in what amounts does not tell us how effective the student system is in actually improving access or where it could be doing better. This paper reports the results of an empirical analysis carried out with Statistics Canada's Post-Secondary Education Participation Survey (PEPS) that attempts to get at some of these issues. The PEPS is based on information gathered during interviews of young persons aged 18-24 (from 17 in Quebec) carried out in 2002 which focussed on student loans and their relation to opportunities for accessing PSE.

In a companion paper to this one, we use the PEPS data to identify the extent to which student loans have been effective in improving access to PSE, putting these results in the broader context of the various reasons that young people choose not to participate, including a general lack of interest and not meeting the entrance criteria for their program(s) of choice. There, we report that student loans appear to have played an important role in improving access for those who receive them, while relatively few individuals appear to have been prevented from participating in PSE due to their inability to get a student loan. We also find that debt aversion – individuals who are unwilling to borrow money even when it is available – seems to be an issue of almost trivially small magnitude.

The present paper extends this analysis by focussing on another margin, the demand for additional borrowing among those who make it into the PSE system, and placing student loans in the context of borrowing from other sources: from private institutions, from parents, and from others. We present data on the extent of borrowing from these various sources and attempt to identify the role to which constraints on borrowing from government loan programs may be causing students to borrow from these alternative sources.

The analysis has numerous policy implications. If students are in fact being forced to borrow from these other sources, especially private credit providers, policy makers might want to consider increasing eligibility for student loans (i.e., allow more students to borrow) and to

¹ Other important components of student financial aid systems in Canada and elsewhere include grants, scholarships, bursaries and tax credits, along with loan-related debt remission programs and assistance for students in repayment. See Finnie and Usher [2005] and Finnie and Schwartz [1996] for general descriptions of the Canadian student financial aid system.

² See Junor and Usher [2005] for a resume of the recent evidence.

increase loan limits for those who are already borrowing. The reason is that the justification for government student loans is well established (e.g., Chapman [1997]), and simply having a government student loan program in place does not ensure that it is doing all that it should, and evidence of any “spillover” borrowing might indicate it is not. Any shortcomings in this respect has implications not only for “access to PSE” as usually defined in terms of being able to participate or not (i.e., a rather crude 0-1 indicator), but also for the more general set of opportunities faced by students, including program choice, institution attended, the amount of work during school, and other elements of the broader access issue.

Any such evidence indicating that students want (and need) to borrow more than is available from government programs, and that such increases in borrowing might be important for improving access in a more general sense might, however, also prompt policy makers to think about the amount of (additional) debt students would be forced to take on, and whether grants should be used instead of increased lending or whether student financial aid packages need to be adjusted in other ways – at least for students who are already facing substantial burdens in order to finance their schooling. While the PEPS indicates little evidence of debt aversion, and suggests students would be generally willing to borrow more if required to finance their PSE, this enthusiasm might have its limits, and policy makers might decide borrowing should be limited for other reasons, including the well-being of students in the payback period.

Finally, and related to the preceding point, policy makers might be concerned about students who borrow from private sources since such individuals will – unlike in the case of government student loans – generally be paying interest on those loans from the time they are taken out and will not benefit from the significant “insurance” aspects offered by government loan systems in Canada (both federal and provincial) in the form of interest relief and debt reduction.³ Again, private borrowing implies a negative set of effects on the well-being of students in terms of both the amounts they will have to repay, and the terms under which they will have to pay back those loans.

The layout of the paper is straight-forward: it starts with a review of the literature and the analytical approach used here, discusses the PEPS database, presents the empirical findings, and then concludes with a summary of the main findings and some of their implications.

II. THE LITERATURE AND ANALYTICAL APPROACH

Although the problem is rarely laid out in such terms, essentially four conditions must be met for an individual to participate in PSE.⁴ First, the person must decide that PSE is a worthwhile activity; that is, he or she must perceive that the benefits of PSE (in broad terms) outweigh the costs (again in broad terms and including both direct and implicit opportunity costs). Second, the individual must be able to pay for the schooling, including both tuition (and other direct schooling expenses) and living costs – in short, there must be no “liquidity constraint” (or

³ Interest relief programs pay the interest on loans held by individuals who are unemployed or who have relatively low earnings levels in the payback years, while debt reduction provides for the forgiveness of the principal for those who are chronically enrolled in interest rate relief programs

⁴ See Finnie [2005a], from which much of this discussion is pulled.

“credit” or “financial” constraint) preventing the person from participating.⁵ Third, the education system must have a place for the potential student: that is, there is sufficient supply of places in the system.⁶ And finally, the student must possess the required marks and other requisites for being admitted to a program of choice.

In this context, student loans can affect post-secondary participation decisions in two main ways.⁷ First, and most importantly, loans can provide the money students need to pay their schooling-related expenses (including both direct schooling-related and living costs) and thus overcome credit constraints. Second, to the extent a student loan is subsidized, it also reduces the effective cost of the schooling, thus affecting the rate of return and potentially influencing participation decisions through this path as well.⁸ In particular, student loans are, in practice, very often – including everywhere in Canada – interest-free while students are in school, and this can represent a substantial subsidy (even if it is often not recognised as such). Any covering of default costs represents another kind of subsidy, as is assistance provided for those experiencing difficulty in repayment more generally.⁹

Yet despite the potentially important role played by student loans in improving access to PSE and opening other PSE opportunities, few researchers have studied this relationship in any precise fashion.¹⁰ We are aware of no work done in Canada that explicitly addresses the loan-access issue. Corak *et al* [2003] make fairly broad conjectures on how changes in the student loan system may have affected PSE access based on trends in access patterns by family background and parallel changes in the student loan system, suggesting that the improvements in access among students from certain middle and lower income family types may have been associated with the increases in student loan limits put in place in the mid-1990s. But the connection they make is, although interesting, relatively circumstantial since their conclusions are based on national-level participation trends over a period when not only did student loan limits change, but so too did many other factors that may have affected enrolment patterns over this same period.¹¹

⁵ See Cameron and Taber [2004] and Keane [2002] for more formal presentations of this kind of model, but the basic elements are consistent with those just described.

⁶ See Finnie [2005b] for a discussion of the role of capacity constraints in determining PSE participation.

⁷ Again see Finnie [2005a].

⁸ As Barr [1993] states: “Subsidised loans are a mixture of loan and implicit grant; the source of support is in part the student himself [i.e., paid out of future earnings] and in part the taxpayer (if it is the state which pays the subsidy).” (p. 724).

⁹ That said, some kinds of loan subsidies act principally to offset the costs of the borrowing, including those related to the risks of the loan being excessively burdensome if the student’s future income is lower than anticipated (or the debt load higher), as well as other kinds of “debt aversion”. Such “loan-facilitating subsidies” do not, therefore, necessarily decrease the true overall costs of the schooling, and as a result do not change the net returns of the investment – or the student’s schooling decision – in the same way as grants or loan subsidies which do reduce the student’s effective schooling costs.

¹⁰ Certain grant programs have, in contrast, received more attention, especially in the U.S. For example, Dynarski [2003] analysed the impact of the elimination of the Social Security Student Benefit Program in 1982 on college attendance and completed schooling, finding that the elimination of the program reduced college attendance by 3.7 to 4.8 percentage points per thousand dollar change in benefits, while Kane [1995] found that the introduction of the Pell Grant program had no measured effect on college attendance.

¹¹ The Corak *et al* paper is also based only data of individuals living at home in a context where PSE participation, family background, and living arrangements are all likely to be endogenous.

This lack of empirical evidence on the effects of student loans is not, however, without good reason, since the empirical task is a challenging one – especially with a student loan system in place since 1964, when the federal Canada Student Loan Program came into being. The essential requirement is to identify which students would not have been able to participate in PSE in the absence of a loan they received. The most effective means of doing this might rest with the “natural experiments” that have occurred in student loan programs over the years, these resulting in expanded eligibility or increased lending limits, perhaps exploiting the variations that have occurred across provincial programs in particular. But even were such experiments (and reasonable comparator groups), to be identified, the data required to carry out such an analysis – which includes observing PSE participation and linking this to family background (which determine loan eligibility) – have not been available thus far.¹²

A similar problem exists with respect to identifying the factors that affect borrowing from various sources: government, parent, private institutions, and others. And it is, strictly speaking, necessary to have this process well understood in order to identify the unmet demand for government student loan programs, the spillover of any such unmet demand to other sources of borrowing, and the consequences of these dynamics on access in its various dimensions. That is, we would like to identify who has been forced into taking a private loan and, ideally, observing the consequences of that shifted borrowing.

In the context of these substantial methodological challenges, the goal of this paper is quite limited relative all that we would like to know, and its only claim is that it attempts to exploit the unique aspects of the PEPS data to shed at least a bit of new light on these aspects of student borrowing. We do this by identifying the extent of borrowing from different sources and then use a variety of questions asked of PEPS respondents regarding the adequacy of the student loans they held. In particular, we investigate the degree to which those who say their government student loans were not sufficient borrowed in greater amounts from other sources – from private institutions in particular, but also from parents and others.

Using this approach, we cannot assess the “legitimacy” of students’ demands for greater borrowing – and perhaps those wanting more or greater loans are financially inept spendthrifts wishing to find support for their profligate habits, especially if it could come in the relatively generous form of a government student lending (which essentially carries a negative real interest rate while the student is still in school).

That said, we feel that the simple fact of having taken out a loan from a private institution (in particular), with all the disadvantages relative to government student loans mentioned above that such private loans carry, might be taken as a rough indication that the financial needs of such borrowers are in fact real, at least in a substantial number of cases. Using this approach seems especially legitimate when we make tighter comparisons among government student loan program borrowers, since previous studies have identified deficiencies in eligibility and lending formula and, somewhat incredibly, student loans do not necessarily ensure that the student’s financial need is met entirely even as that need is identified by government.¹³

¹² This problem may be resolved by exploiting the information available on student tax credits available in the Longitudinal Administrative Database (LAD), a Statistics Canada file based on individuals’ tax records. Work is underway on this project.

¹³ See Hemingway [2003] identifies the ways in which student loan programs are probably in many cases unrealistic in terms of how they identify both the costs faced by students, and the resources available to them (especially the

III. THE DATA

III.1 The PEPS Survey and Samples Used

The Post-Secondary Participation Survey (PEPS) was put into the field by Statistics Canada (in collaboration with Human Resources Development Canada) in February-March 2002. The PEPS was a supplement to the Labour Force Survey (LFS), using five current rotations of LFS respondents, and comprises a random sample representing the 18 to 24 years olds (17 to 24 in Quebec) living in those households. No proxy responses were used; in all cases, the targeted individuals were interviewed directly.

The main issues addressed in the survey are post-secondary access (i.e., gaining entry into PSE) and persistence (i.e., continuing on from that point) and the role played by the student loan system in these dynamics. The PEPS also provides various socio-demographic characteristics of the young people interviewed and the families from which they come.¹⁴

The total sample includes 5,141 observations, representing an underlying population base of 2,962,807 individuals.¹⁵

For the work reported in this paper, the sample was restricted to 4,307 observations, thus representing 84 percent of the original sample size. First, individuals still attending high school, as well as those who never attended, were excluded.¹⁶ Second, only Canadian citizens (by birth or through immigration), are included in the analysis, meaning landed immigrants (who are not yet citizens), visa students and others without Canadian citizenship are excluded. PSE access patterns are generally different for these groups, a substantial proportion of whom are in Canada for the specific purpose of pursuing PSE, and most importantly for the purposes of this analysis, such individuals are not generally eligible for student loans. Finally, those who answered “do not know”, who refused to answer, or who ambiguously answered any of the key questions concerning their PSE experiences or student loans were also excluded.¹⁷

For the greatest part of the analysis presented here, the sample was further restricted to those who were enrolled in PSE in 2001-02 (i.e., the year of the survey), the reason being that a more specific set of loans-related questions were asked regarding the loans held that year. This sample contains 1,894 observations.

expected parental contributions for those in the middle income ranges). See Finnie and Usher for the general structure of student financial aid programs and how they do not necessarily meet student’s defined needs.

¹⁴ The PEPS dataset is composed of four different files: the main loans- and PSE-based component; the BR module, which contains information on all PSE programs ever enrolled in; the JR module, which contains socio-economic information on the parents or guardians of the respondent; and the LFS file which is based on the usual information collected by the Labour Force Survey from the household where the respondent was currently living.

¹⁵ For more information on the PEPS, including the survey methodology, see Barr-Telford et al [2003].

¹⁶ See Finnie, Laporte and Lascelles [2004] for a discussion of the relevant issues and the justification of this exclusion.

¹⁷ This includes 163 individuals who stated they had accessed PSE when verification of their institution and type and duration of program indicated they had not. The problem for this group is that while they could not be legitimately treated as PSE participants for the questions they actually were asked (e.g., those related to student loans), they did not pass the appropriate sets of questions pertaining to their (actual) non-participation.

III.3 The Variables Used in the Analysis

Government student loans have traditionally comprised by far the most important source of student borrowing (Junor and Usher [2004]). Students in most PSE programs qualify for student loans, especially those programs in the public sector. As discussed earlier, students need to apply for a loan, qualify, and then actually take up the loan. The relevant mechanisms have varied over time (Finnie and Schwartz [1996]), but the application and acceptance procedures rest with the provinces (and thus vary accordingly to some degree). As for the actual issuing of the loans, since 2000 the federal government and most provinces effectively provide loans directly to students (as opposed to earlier systems where private financial institutions provided the funds) using bodies established for these purposes.¹⁸ The PEPS data indicate that most students (and even the majority of non-students) know where to get information on government student loans and how to apply for these loans.

Borrowing from parents is defined in a straight-forward manner, with the relevant PEPS questions putting an emphasis on the expectation that the money would have to be paid back – and not forgiven.

Private borrowing includes borrowing from banks and other private institutions and includes conventional personal loans, private “student loans”, card borrowing, and the like. What differentiates these private loans from government student loans is that market interest rates apply immediately, as opposed to remaining interest free while the student is still enrolled, and the student is not subsequently eligible in the payback period for the interest rate and debt reduction in repayment programs offered to those borrowing from government student loan programs. Private loans are thus considerably more financially onerous, and risky, than their government counter-parts.

Such private sources of credit for students have been widely expanded in recent years, and been marketed heavily. One common form is partly based on the increasingly popular “line of credit” concept – and is often referred to as such: “student line of credit”. With these, the student borrows only as the money is required, up to the given limit – as with a conventional line of credit. What separates student lines of credit from more conventional forms (e.g., those based on housing equity) is that the student does not then pay down the line of credit, but rather gets another line the next year, with a new limit, repeating the process. Borrowing thus ratchets up over time, rather than providing a means of “smoothing” expenses and revenues as is more usual. Some financial institutions have attempted to plug into the generally positive image of government student loans by referring to their various forms of student-specific programs using the same “student loan” moniker, and one hears of students even being confused as to what kind of loan they are getting, although the authors are aware of no hard data on this phenomenon.

Borrowing from others includes family members apart from parents, guardians, friends, and others. As will be seen below, these turn out to be of relatively minor importance in student loan portfolios.

¹⁸ Once a loan is approved, it must be issued upon the student’s take-up. The actual issuing of loans is thus a relatively minor bureaucratic procedure.

Other variables used in the analysis include the following. Age is the individual's age at the time of the survey. Parental education represents the highest level of education obtained by the natural or adoptive mother or father. The individual's family type refers to the situation in which the person was living at the end of high school. Family income is available on the PEPS only for those individuals living at home, since it was not collected as part of the PEPS survey for those not living at home; the limited nature of this information means that we gain only a limited perspective of the income-access dynamic which we therefore exploit only with due caution.¹⁹ Region represents the one in which the individual was living when he or she last went to high school and is thus exogenous to the youth's PSE participation decisions, loan eligibility, and related outcomes. The immigrant status variable identifies those who were not born in Canada and thus became Canadian citizens after coming to this country.

III.4 Descriptive Statistics

Table 1 gives the descriptive statistics for the broad PEPS-based sample of 4,307 individuals, thus illustrating the general characteristics of the data before the more specific sample selection rules used in the greatest part of the analysis – restricting the sample to those in PSE the year of the survey – are applied. The data show that 64.5 percent of the 17/18 to 24 year olds in the sample had gained access to PSE at the time of the PEPS interview, with 29.9 percent of these participating at the university level and 34.6 percent at the college-trade level. By sex, 70 percent of the women had participated in some form of PSE, as compared to 59.2 percent for men, and 35.1 percent of the women went to university versus 24.8 percent for men.

We also see that 21.8 percent of the entire PEPS sample (i.e., including both PSE participants and non-participants) had received a student loan by the time of the survey, with more women having a loan (25.0 percent) than men (18.8 percent). These patterns reflect both PSE participation rates (as just seen) and the rate of borrowing conditional on participation (as analysed below).

The other descriptive statistics point to a well balanced sample, generally representative of the underlying population.

IV. EMPIRICAL RESULTS: PSE ACCESS AND STUDENT BORROWING

IV.1 PSE Participation

Table 2 shows the results of a regression of access to PSE, defined here (as is usual) as having ever gone to university or college ("persistence" or completion is typically considered as a separate issue). We use the broader PEPS sample here and consider access to PSE at any point in time as the dependent variable, although after this context is established the sample is restricted to those in PSE in the year of the survey for the rest of the analysis.²⁰

¹⁹ Family income refers to the sum of usual weekly earnings received by all family members, including the person targeted by the PEPS.

²⁰ A companion paper to this one by the same authors focuses on the access dynamic. The analysis of access patterns presented here is offered only to put the main analysis of student borrowing in context.

Linear probability models are employed, as in the other regression results presented below. Although probits or logits are often considered the more appropriate model for dichotomous outcomes such as these linear probability models have been found to be more robust and to in any event generate results very similar to probit and logit models when the mean of the dependent variable is not close to zero or one, as is the case in the models estimated here (Moffitt [1999]). In any event, these specifications were estimated using probit models and generated very similar results to those shown here.

Separate models are estimated for PSE participation at any level (i.e., college or university) and for participation at the university level *per se*. This allows us to identify a general effect (any PSE) and a more specific effect (university), with the literature generally finding that college attendance is relatively widely and evenly distributed in Canada, the real difference in PSE participation coming with respect to university. The models in the first two columns are for all individuals in the sample, the models in the last two columns representing just those individuals living at home (i.e., with their parents) at the time of the survey, with family income being available for this latter group only.

Women have higher rates of PSE participation than men, holding other factors constant (as was found in the raw data – see Table 1), these differences driven entirely by participation patterns at the university level.

Access is strongly related to parental education, the effect again focussed on university attendance. Parent's education of course represents myriad influences, including the environment in which the young person was raised, value formation (including the importance attached to PSE), the availability of financial resources, and more. We do not try to disentangle these various influences here. Taken overall, the parental education effects point to substantial differences in educational opportunities along this one socio-economic dimension, regardless of the specific mechanism(s) at work.

Young people are more likely to go to PSE in general, and university in particular, if they are from one of the Atlantic provinces. Those from Quebec go to college at high rates, at least partly due to the special nature of the CEGEP system, which includes both a “tech” or applied set of programs and a pre-university track which individuals enter around the age of 16 or 17. University attendance in Quebec is not similarly elevated. Those in the Prairie provinces (defined here due to sample size restrictions as including Manitoba, Saskatchewan, and Alberta) are more likely to go to university, but not college (i.e., overall PSE rates are not statistically different from those in most others provinces).

Interestingly, coming from a lone-mother family has no significant effect on PSE participation (lone-father and other family types are included in the regressions but are not reported because the results are never statistically significant, at least partly due the small sample sizes involved). The evidence on immigrants is mixed: they are more likely to attend university when income is not controlled for, but this effect disappears when the income variables are added, suggesting that it is in fact an income effect.

As for those income effects, we see that although they affect the immigrant effects in the manner just described, they have almost no other influence on the other variables and are themselves not statistically significant, while the coefficient estimates are mostly very small (effects of less than

4 percent or so) and not of any particularly regular pattern. The data suggest, in short, that parental education completely dominates family income when it comes to determining PSE participation patterns.

Finally, individuals whose parents saved for PSE were significantly more likely to go on to higher education, again mostly due to differences at the university level. This relationship again – like parental education – represents myriad influences, including values (i.e., the importance of going on to PSE), the person's earlier environment (parents who save are probably more likely to provide their children with an environment that is enriched in various ways), financial resources (from the specific savings for school as well other sources), and more. We do not hope to separately identify these various influences here, and merely note the correlation as being interesting and potentially significant – and one that comes through in the other models shown below.

IV.2 Student Borrowing from Different Sources

Table 3 shows the extent of borrowing from government student loan programs and from other sources – private, parents, other – for those enrolled in PSE in 2001-02, the year of the PEPS survey. (The samples for all subsequent tables are of this same group.) We focus first on government loans, as represented in the first two columns which show rates of borrowing and average amounts borrowed among those who borrow, respectively. Individuals are aggregated by sex and include both college and university students in order to maintain sample size.

Overall, 24.3 percent of those enrolled in PSE in 2001-02 had a student loan that year. Average borrowing among those with a loan was \$642 per month. With a typical program lasting 8 months, this corresponds to borrowing of \$5,136 on an annual basis.

Borrowing was at similar rates and in similar amounts for women and men. More individuals level held loans at the university (27.4 percent), although only in moderately higher amounts (\$667) than did those at the college-trade level (20.2 percent and \$597). These differences are presumably driven by the different cost structures as well as family resources available: university students face higher tuition (and other) fees and are more likely to be studying away from home, which drives up costs, but we have just seen that their parents tend to have higher education levels (and thus higher incomes), which affects loan need/eligibility.

The rate of borrowing declines with parental education level, again reflecting need/loan eligibility rules, with schooling costs to some degree offsetting access to resources in this regard: those with more highly educated parents are more likely to go to university and to go away to school (i.e., thus boosting costs), but on average have greater family income to draw upon for their schooling expenses.

Single mother families borrow more, as do immigrants (although sample sizes are too small to report average borrowing among immigrants).

Borrowing from student loan programs is much more extensive – in terms of both rates and mean amounts – for those from the Atlantic provinces than elsewhere. Their borrowing is as much as double what is found for those from Quebec in both respects. Yet, we need to keep in mind that young people from Atlantic Canada are still more likely to participate in PSE, in particular at the

university level, *despite* their greater borrowing – or perhaps to some degree *because* of it, since the whole point of student loans is to facilitate access to PSE.

The relationship between the government student loan borrowing and family income is somewhat curious, perhaps more uneven and generally flatter than might have been anticipated. Those whose parents had incomes of \$25-50,000 had higher rates of borrowing than those with incomes below that; rates were slightly higher for the \$75-100,000 group than the \$50-75,000 group; while rates are sharply lower at incomes above this level. Given all that family income captures, we hold off further discussion of these relationships until the regression analysis presented below.

Students with parents who saved for their children's schooling borrowed at less than half the rates of those whose parents did not save (15.9 versus 33.7 percent), and in slightly lower amounts as well. Taken at face value, these findings point to the importance of parents as a first line of financial support for students and suggest that the more parents are ready to lend to their children, the less likely those children are to need to borrow (from government). But again this indicator likely captures a number of influences (including presumably family income level) which will likely affect both the student's financial need and eligibility for a government student loan, so it is best to wait for the regression results to discuss this variable any further.

While Table 3 presents a similar set of univariate findings for each of the other kinds of borrowing, those discussions will also be held back until the relevant regressions are presented below. It is, however, worth mentioning the simple overall rates of borrowing across the different categories, as this provides a useful overview of the different sources of student borrowing. As seen above, 24.3 percent of all current students borrowed from government student loan programs, and average borrowing was \$642 per month. Borrowing from private sources compares at a rate of 14.1 percent overall, with an average amount of \$815 per month – so, the rates of private borrowing were lower, as would presumably be expected, but the rates are still substantial, and it is at higher average amounts where it is held.

Sixteen point two percent of the current PSE students borrowed from their parents, but at an average of just \$303 per month – the latter figure in particular being substantially lower than the other sources of borrowing. Borrowing from other sources (other family members, friends, etc.) is almost negligible, at just 2 percent (the average is \$317).

How are we to interpret borrowing from these different sources? Perhaps private borrowing is in fact a *privilege*, yielding *advantages*, available only to those with the means of providing the required co-signatures and/or collateral, which would tend to be more common among better off students. That said, the terms of private loans are not generally all that attractive for students, since interest accumulates at market rates from the point the loan is taken out and there is no coverage similar to the interest and debt relief programs offered by governments for students in the repayment period. Let us see what comparing across categories of borrowing can tell us when we bring in students' self-identified need for further borrowing and otherwise attempt to control for need and other factors in a variety of ways. Perhaps this will help better identify those who borrow from private sources, and why. We will treat borrowing from parents and other sources in like manner, while putting the emphasis on private borrowing as the best potential indicator of unmet demand for student loans.

IV.3 Alternative Borrowing According to Government Loan Status and Expressed Need

Table 4 presents the extent of borrowing from various sources among those with and without government student loans, further broken down by the students' evaluation of the adequacy of the government loan received (among borrowers) or the reason for no loan (among non-borrowers). We thus attempt to get at the notion of unmet demand for borrowing and the spillover of any such excess demand into the other (non-government) sources, private financial markets in particular.

We first see in Table 4 that of all those university and college PSE participants (separating the groups yields similar findings for each) who received a government student loan in the survey year, 59.6 percent said they would have liked and been willing to borrow more than the amount they received, leaving 40.4 who said they had no interest in borrowing more, including not only those who said their loan was sufficient, but 6.5 percent for whom the loan was “too large” (meaning they did not borrow all that was offered).²¹ Combining various PEPS variables also allows us to identify that 71 percent of non-borrowing PSE participants did not have a student loan primarily because they did not need a loan, 21.2 percent could not get one, and the remainder (5.7 percent) were unwilling to take a loan (i.e., they were “debt averse”). If private borrowing is the result of the spillover of unmet demand for borrowing from the public system, we would expect more private borrowing among i) those borrowers who said they would have liked to borrow more and ii) those non-borrowers who said they did not have a loan because they could not get one.

This is exactly what is found. The rate of private borrowing is almost twice as high among those borrowers who said their government student loans were too small as compared to those who said their government loans were sufficient (22.6 percent versus 10.5 percent). Even more dramatically, private borrowing was almost three times as common among non-borrowers who said they did not have a loan because they could not get one as among non-borrowers who said they did not need one (21.2 versus 7 percent).²²

The data thus show that a substantial proportion of those individuals who said they wanted more student loan money or did not have a student loan because they were unable to obtain one demonstrated with their actions that this was more than idle talk, more than some artefact of student loans being (with their negative real interest rates while the individual is in school and benefit programs in the repayment period) a generally attractive investment by actually going to

²¹ Some of those who said they would have liked to borrow more also said their loan was “enough”, creating a certain ambiguity with respect to the notion of unmet demand for student loans. The apparent contradiction is, however, perhaps not as surprising as might seem at first: for some students the amount of the loan they received might have been “enough” for them to, for example, attend PSE and choose the program and even institution of their choice but they could still have benefited from a greater loan (e.g., less need to work during school, a higher standard of living, etc.) and were in any event *willing to borrow more*. We thus treat the expressed desire to have been able to borrow more as an approximate indicator for unmet demand for student loans, which serves the purposes of this analysis in terms of identifying the consequences of such unmet need.

²² The small group who did not want a loan for “other” reasons had relatively high rates of private borrowing, but this category is potentially endogenous to the private loan question, with not needing loans being potentially related to the availability of a private loan. Those who expressed debt aversion has small amounts of private borrowing, suggesting their aversion is not complete, and perhaps applies at the margin to certain types of loan rather than others. The missing results in the table are due to sample sizes being too small.

private credit markets in significantly greater numbers than others. There would, in short, appear to a significant amount of demand for unmet borrowing among certain groups of students.

V. REGRESSION ANALYSIS OF BORROWING AND WORKING

V.1 Government Student Loan Borrowing

We next attempt to see if these relationships hold up in a multivariate framework. Table 5 presents linear probability model regression results for the probability of holding a student loan (among current PSE students). A number of specifications are presented. The first set of four regressions are for all current PSE students, the last two are restricted to the “at home” sample for which we have family income. The first model includes only what may be considered exogenous variables – essentially capturing family background, the next two include the other types of borrowing, which may be endogenous to government borrowing, and the fourth and sixth models separate university students from others. All-in-all, not many of the regressors are significant, which is perhaps not surprising in a context where having a student loan is related to assessed need, which is based on both costs and resources available. We focus here on the results of greatest interest to the themes of this paper regarding the demand for student loans.

In all the models, students in Atlantic Canada are more likely to have government student loans, presumably reflecting their greater need, especially on the cost side (tuition tends to be higher and many students have to go away to study), since parental education and income are controlled for (in different combinations in the various models). Mother-only families are, *ceteris paribus*, moderately more likely to have loans, as are immigrants, these latter effect being stronger once family income is controlled for.

Perhaps most interesting, however, is that students whose parents saved for their PSE were significantly less likely to have government loans, and this even when parental education and income are controlled for. Furthermore, this result holds (to varying degrees) even if we also control for whether the student borrowed from any of the alternative (non-government) sources considered here, namely private institutions, parents, or other – and even whether the student actually used some of those parental savings. Finally, the effect of having parents who saved (a zero-one indicator) remains even if we also control for the *amount* of parental savings (as well as the *amount* of borrowing from the various alternative sources).

To be clear: having parents who saved for PSE is correlated with substantially less government borrowing whether or not we control for whether the individual actually borrowed from his or her parents (or other sources) or otherwise received some of the money that had been saved and regardless of the amount of money actually saved.²³

These findings thus suggest that at least some of the “effects” of parental saving do not operate (solely) through increased parental financial support, although borrowing does decline (further) with the amount of those savings and with the amount of money borrowed from parents, and is also lower where some of those savings were in fact used to finance the student’s schooling. It would be interesting to probe these issues further: what are the precise effects of parental saving

²³ Other models were estimated with other combinations of these borrowing and related variables, and the results were generally robust: what shows up as significant in the reported results tended to be significant in the various other specifications.

being captured? This is a particularly interesting variable from a policy perspective in a context where governments have instituted various programs to encourage precisely this (the RESP and CESG programs). The PEPS data are, however, at their limit in this regard, and it is difficult to imagine a way of exploiting the data further to get at the truly exogenous *causal* effects of the act of saving, especially when we need to control for the amount of saving, the amount of borrowing from other sources, and the other variables included in the regressions.

Having borrowed from a private source is positively associated with government borrowing (column 2), but the actual *amount* of private borrowing does not have a significant effect (column 3) – although the estimated coefficient is positive and we might be up against sample size limitations here. Borrowing from other sources has no identifiable effect.

The relationship between government borrowing and family income is generally inverse, but is again seen to be nonlinear in places, with those in the \$25,000-\$50,000 range having significantly higher rates of borrowing than those with both lower and (especially) higher incomes.

V.2 Private Borrowing

Table 6 presents the regression results for private borrowing.²⁴ In general, these models are – even more than the government loan models – somewhat difficult to interpret because private borrowing implies both a “need” for the money and being willing and able to obtain a private loan. So, for example, the patterns by family income could go either way, since those from higher income families might have less absolute need for a private loan, but be in a better situation to obtain one and be more comfortable with doing so than those from lower family incomes. And indeed, most of the variables included in the models are not significant. Results are presented for both the general population of PSE participants (the first four models) and just those with government loans in order to provide a focus on unmet need coming out of the public system.²⁵

We thus focus on a few specific findings. Of some interest is that those with parents at the highest and lowest education levels had less private borrowing than those with parents with education levels in the middle range – presumably reflecting the two countervailing forces mentioned above (need versus the ability to obtain a private loan and comfort level with doing so).²⁶ Those in British Columbia and the Territories are somewhat less likely to have private loans.

Most important, and consistent with the simple tabulations presented above, those individuals who wanted more in the way of government loans had significantly higher rates of private borrowing than others. This is again consistent with the idea that there is at least some unmet demand for student loans in the public student loan system which is spilling into the private

²⁴ Tobit models of the amount of private borrowing as well as the amount of borrowing from parents have also been estimated, and generate about the same results as the linear probability models of the likelihood of having these kinds of loans presented here.

²⁵ Individuals with a government student loan have passed the loan eligibility criteria (as well as having applied for and subsequently their loans) and are thus of relatively homogeneous nature, unlike those without loans who may be a more diverse group.

²⁶ The models are not presented for the more restricted “at-home” sample because of its general limitations.

sector, with possibly negative consequences in a variety of respects. This holds for the population in general, and for those with government loans taken alone.

Furthermore, this results holds even when we control for borrowing from other sources (government, parents, others – either the simple 0-1 indicators or actual amounts) or the use of parental savings by the student.

That said, it is interesting to note that those whose parents saved for their schooling were significantly less likely to have a private loan, reinforcing the importance of this variable (the effect going in the same direction) found for government programs, while – *unlike* the case of government loans – actually borrowing from one’s parents is associated with *higher* rates of private borrowing. We might thus conjecture that parents’ act of saving represents a set of values perhaps related to not only savings behaviour, but also spending and borrowing, while actually borrowing from one’s parents is a marker for need.

V.3 Borrowing From Parents

Table 7 presents the regression results for borrowing from parents. This is a less interesting set of results because it tells us little about unmet need, and again represents the result of a mix of factors including need on the one side and the availability of funds on the other. The results are thus left mostly for the reader to peruse. A few findings are, however, worth noting. The set-up of the models is the same as for the private loan results just seen.

Parental education again has a nonlinear effect, with the effects reversed from those found for private loans: those at the lowest and highest levels having higher levels of parental borrowing than others when we consider all students. But once we restrict the models to those having a government student loan, the effects disappear. These results suggest that parental education is in fact associated with need, those with lower education parents have less family income to draw upon, those with higher education parents being in more expensive programs. But this is largely speculation and would require further analysis. Students from Quebec borrow at lower rates from their parents overall, but not among those with a loan.

Overall, borrowing from parents is positively associated with having borrowed from a private source and (especially) others (which includes other family members), and is negatively associated with having a government student loan. Here, there seems to be no effect of having parents who have saved for their children’s schooling, but the *amount* of saving *is* significant, while having used those parental savings is not significant. We attach little importance to these findings beyond their being statistical correlations which emerge in the multivariate framework these regressions represent.

V.3 Work During School

An important policy issue relating to government student loans is whether students who cannot borrow (enough) from student loan programs are forced to work – or work more hours – during school, thus impeding their academic performance and progress, while also affecting scholastic outcomes and their quality of life in general.

We address this issue here by looking at work during school in our student borrowing framework. The two outcomes we define (based on what is available in the PEPS data) are i) working any positive number of hours during school, and ii) working “long” hours, taken to mean 15 hours of week or more.

Table 8 presents some means for these outcomes by the variables included in the analysis, and we see that 64.7 percent of the currently enrolled PSE students worked positive hours, and 38.3 percent worked “long” hours. The average number of hours worked among these are 19.5 hours per week (all workers) and 24.9 hours per week (long hours). The earnings gained from this employment amounts to an average of \$700 per month (all) and \$934 (long). This is clearly a good deal of work, which in turn represents a substantial revenue source for students. The rest of the table presents these outcomes by the various characteristics shown, but we pass over these to a more analytically interesting set of results which relate to the major themes of this paper.

Table 9 shows working outcomes by the adequacy of the government student loan system – comparable to the private borrowing results presented above. Among those with government student loans, those who said they would have liked to borrow more were actually *less* likely to work at all or to work long hours than those who said their loan was sufficient. Those wanting more in the way of loans worked more hours on average, however, especially among the long hours group. Average earnings were lower for those wanting more loans overall, but substantially higher among long hours workers.

Among non-borrowers, the implications are a little less clear-cut to start, because one of the reasons for not having would be that the person was working. And the results are generally mixed in terms of working or not, average hours, and average earnings (although those not needing a loan did have higher average earnings both overall and among those with long hours).

Tables 10 and 11 present the regression results which better isolate the effects of wanting a larger government student loan on working at all, or working long hours. The results indicate that, controlling for other factors, wanting a greater student loan is actually – where significant – *negatively* associated with working, either at all, or working longer hours. Meanwhile, *ceteris paribus*, simply *having* a student loan is also negatively associated with working, and working longer hours. On the face of it, then, student loan borrowers work less than others, but those who express a wish to borrow do not work any more in addition – although one must take into account the various other correlations represented in the models before interpreting this finding further, which is an exercise that lies beyond the scope of the present paper.

One of those other interesting correlations is in fact that those who borrow from private sources are also more likely to work, and especially to work longer hours. This finding reinforces the notion developed above that private borrowing is both a function – and indicator – of genuine financial need. Indeed, it could be that the private borrowing variable is the most pertinent one in these models, since it further separates those who simply express a wish to borrow more (“wanted more government loans”) from those facing sufficient real need to actually borrow privately. In short, private borrowing would again seem to be important to identifying real unmet need in the student loan system.

Further to this finding on private borrowing, whereas having borrowed some positive amount from private sources is significant, the precise amount of private borrowing is not. This result is,

however, perhaps due to the limitations on the relevant sample sizes (of private borrowers), whereby an overall simple zero-one relationship can be identified, but going beyond this is not possible. But here we are only speculating, and further analysis awaits samples larger than those provided by the PEPS.

VI. CONCLUSION

This paper has used the unique properties of the PEPS database to look at student borrowing and student finances more generally. The particular focus of the paper has been to try to identify if and where the government student loan system has possibly left students with unmet need. We use the information in the PEPS on different kinds of borrowing, with private borrowing taken to be the best indicator of unmet demand for borrowing from the public system, the idea being that private loans are generally much less attractive for a student than a government student loan because interest accumulates from the point the loan is taken out and there are no special programs for assistance in repayment.

One of the principal findings is that i) those borrowers who said they would have liked to borrow more from government and ii) those non-borrowers who said they did not have a loan because they could not obtain one did in fact have private loans at much higher rates than those who said their loans were sufficient or who did not have a loan because they did not need one.

The rates of private borrowing are, furthermore, substantial enough – 14 percent of all current PSE participants in the 2001-02 academic year upon which the PEPS is based (as compared to 24.3 percent with government loans) while for those who said they were restricted from receiving the government loans they would have liked the rates are 21-23 percent. Furthermore, obviously not all those who face borrowing constraints will in fact borrow privately, so the potential for governments to help more students who need it could be closer to the 59 percent of all borrowers who said they would have liked to borrow more, and the 24 percent of non-borrowers who did not have a loan because they could not get one.

These results are reinforced by the findings regarding work during school. Being borrowing-constrained in the way described above and hours of work are related in an uneven fashion, the regression results in particular indicating there is no effect. But having a private loan is significantly related to working more, and working longer hours in particular, thus implying that private borrowing is in fact the superior marker of unmet need.

While we may thus perhaps conclude that certain individuals are loan-constrained, and pointed to some of the consequences of those constraints, we have not been able to identify *who* faces government student loan program borrowing constraints. In fact, a regression analysis where this is the dependent variable yields virtually nothing that is statistically significant. Yet other studies have pointed to gaps and limitations in the student loan system which should make us unsurprised at our findings. The problem is that these constraints come *after* the student loan system has done its job of identifying need, so it is basically a kind of *residual* need that must be identified: who among the needy (borrowers) do not have their needs fully met, and who among those deemed to not be needy (non-borrowers) also require assistance?

Hence we are looking for individuals such as those whose parents do not make the assumed contributions (perhaps because of unreasonable expectations in this regard), those who are not able to find the expected jobs during summer or save what is expected of them, those who have higher costs than those that are easily to work into student loan formulas, those who have assessed need that is beyond what student financial programs deliver, and so on. So it is perhaps not surprising that such individuals are not easy to find based on the sorts of observables found in the PEPS data. That does not make the problem any less real, or important, it only means that other means must be used to identify the underlying problems. The contribution of this analysis is thus to have pointed our way in the direction of further, different work.

REFERENCES

- Barr, Nicolas [1993], "Alternative Funding Resources for Higher Education", *The Economic Journal*, Vol.103, no 418, pp.718-728.
- Barr-Telford, Lynn, Fernando Cartwright, Sandrine Prasil and Kristina Shimmons [2003], "Access, Persistence and Financing: First Results from the Post-Secondary Education Participation Survey (PEPS)", Education, Skills and Learning—Research Papers, Catalogue 81-595-MIE, No.007, Statistics Canada.
- Baum, Sandy and O'Mailley Marie [2003], "College on Credit: How Borrowers Perceive their Education Debt : Results of the 2002 National Student Loan Survey", Nellie Mae Corporation, February 2003.Nellie Mae Corporation, February 2003.
- Callender, Claire [forthcoming], "Does the Fear of Debt Deter Student from Higher Education?", *Journal of Social Policy*.
- Cameron, Stephen and Christopher Taber [2004], "Estimation of Educational Borrowing constraints using Returns to Schooling", *Journal of Political Economy*, vol. 112, no.1, part 1, pp.132-82.
- Canton, Erik and Andreas Blom [2004], "Can Student Loans Improve Accessibility to Higher Education and Student Performance? : An Impact Study of the Case of SOFES, Mexico", World Bank Policy Research Working Paper, No. 3425.
- Card, David [2001], "Estimating the Return to Schooling: Progress on Some Persistent Econometric Problems", *Econometrica*, Vol. 69(5), pp.1127-60.
- Carneiro, Pedro and James Heckman [2003], "Human Capital Policy", NBER Working Paper, No.9495.
- Carneiro, Pedro and James Heckman [2002], "The Evidence on Credit Constraints in Post-Secondary Schooling", *Economic Journal*, 112 (October), pp.705-734.
- Chapman, Bruce [1997], "Conceptual Issues and the Australian Experience with Income Contingent Charges for Higher Education", *The Economic Journal*, Vol.107, No. 442 (May), pp. 738-51.
- Chevalier, Arnaud and Gauthier Lanot [2002], "The Relative Effect of Family and Financial Characteristics on Educational Achievement", *Education Economics*, vol.10, no.2
- Christofides, Louis N., Jim Cirello, and Michael Hoy [2001], "Family Income and Postsecondary Education In Canada", *The Canadian Journal of Higher Education*, Vol. 31, No. 1, pp.177-208.
- Coelli, Michael [2004], "Parental Income Shocks and the Education Attendance of Youth", Doctoral Dissertation – Preliminary, University of British Columbia, Vancouver.
- Corak, Miles, Garth Lipps and John Zhao [2003], "Family Income and Participation in Post-Secondary Education", Analytical Studies Branch Research Paper Series, Vol. 210, Statistics Canada.
- Drolet, Marie [2005], "Participation in Post-Secondary Education in Canada: Has the Role of Parental Income and Education Changed over the 1990s?", Analytical Studies Branch Research Paper Series, Vol. 243, Statistics Canada.

- Dynarski, Susan [2003], “Does Aid Matter? Measuring the Effect of Student Aid on College Attendance and Completion”, *The American Economic Review*, vol. 93, no. 1, pp.279-288.
- Dynarski, Susan [2000], “Hope for Whom? Financial Aid from the Middle Class and Its Impact on College Attendance”, *National Tax Journal*, Vol.53, no.3, pp. 629-661.
- Finnie, Ross [2005a], “Student Financial Aid: The Roles of Loans and Grants” [2005], in Frank Iacobucci and Carolyn Tuohy (eds.), *Taking Public Universities Seriously*, Toronto: University of Toronto Press, pp. 476-497.
- Finnie, Ross [2005b], “Access and Capacity in the Canadian Post-Secondary Education System: A Policy Discussion Framework”, in Anisef, Paul and Robert Sweet (eds.), *Preparing for Post Secondary Education: New Roles for Governments and Families*. Montreal and Kingston: McGill-Queen’s University Press, pp. 17-54.
- Finnie, Ross [2001], *Measuring the Load, Easing the Burden: Canada’s Student Loan Programs and the Revitalization of Canadian Postsecondary Education*, Toronto: C.D. Howe Institute Commentary No. 155, Nov., 2001 (32 pp.)
- Finnie, Ross and Christine Laporte [forthcoming], “Lending Opportunity: Student Loans and Access to Post-Secondary Education”, Analytical Studies Branch Research Paper Series, Statistics Canada.
- Finnie, Ross, Christine Laporte and Eric Lascelles [2004], “Family Background and Access to Post-Secondary Education: What Happened Over the 1990’s?” Analytical Studies Branch Research Paper Series, No. 226, Statistics Canada.
- Finnie, Ross, Eric Lascelles and Arthur Sweetman [2004], “Who Goes? The Direct and Indirect Effects of Family Background on Access to Post-Secondary Education”, in Charles Beach, Robin Boadway, and Marvin McInnis (eds.), *Higher Education in Canada*, Kingston: John Deutsch Institute, McGill-Queen’s University Press, 2004, pp. 295-338. (See also Analytical Studies Branch Research Paper Series, No. 237, Statistics Canada.)
- Finnie, Ross and Alex Usher [2005], “The Canadian Experiment in Cost-Sharing and its Effect on Access to Higher Education, 1990-2002”, School of Policy Studies, Working Paper No. 39, Queen’s University.
- Finnie, Ross, Alex Usher and Hans Vossensteyn [2005], “Meeting the Need: A New Architecture for Canada’s Student Financial Aid System” in Beach Charles, Robin Boadway and Marvin McInnis (eds.), *Higher Education in Canada*, McGill’s-Queen’s University Press.
- Greenaway, D. and M. Hayes [2003], “Funding Higher Education in the UK: The Role of Fees and Loans”, *The Economic Journal*, Vol.113, No. 485, pp.F150-160.
- Heller, Donald [1997], “ Student Price Response in Higher Education: An Update to Leslie and Brinkman”, *Journal of Higher Education*, Vol. 68, No. 6, pp.624-659.
- Hemingway, Fred [2003], “Assessing Canada’s Student Aid Need Assessment Policies”, Montreal: Canada Millennium Scholarship Foundation.
- Hernstein, R. and Murray, C. [1994], *The Bell Curve*, Free Press, New York.
- Human Resources Development Canada [2002], *Knowledge Matters*. Ottawa.

- Jackson, G.A. and Weathersby [1975], "Individual Demand for Higher Education", *Journal of Higher Education*, Vol.46, No.6, pp.623-652.
- Junor, Sean and Alexander Usher [2004], *The Price of Knowledge 2004: Access and Student Finance in Canada*, Canada Millennium Scholarship Foundation, Research Series.
- Kane, Thomas [2001], "College-going and Inequality: A Literature Review", Working paper, Russell Sage Foundation.
- Kane, Thomas [1995], "Rising Public College Tuition and College Entry: How Well Do Public Subsidies Promote Access to College?", National Bureau of Economic Research, Working Paper No.5164.
- Keane, Michael [2002], "Financial Aid, Borrowing Constraints, and College Attendance: Estimates from Structural Estimates", *The American Economic Review*, Vol. 92, No. 2, pp.293-297.
- Light, Audrey and Kathleen McGarry [2004], "Why Parents Play Favorites: Explanations for Unequal Bequests", *The American Economic Review*, Vol. 94, No.5, pp.1669-1681.
- Looker, Dianne E. [2001], "Why Don't They Go On? Factors Affecting the Decisions of Canadian Youth Not To Pursue Post-secondary Education", Working paper, Canada Millennium Scholarship Foundation.
- Looker, Dianne E. and Graham S. Lowe [2001], "Post-Secondary Access and Student Financial Aid in Canada: Current Knowledge and Research Gaps", Canadian Policy Research Networks, Ottawa
- Keane, Michael P. [2002], "Financial Aid, Borrowing Constraints, and College Attendance: Estimates from Structural Estimates", *The American Economic Review*, Vol. 92, No.2, pp.293-97.
- Moffitt, Robert, A. [1999], "New Developments in Econometric Methods for Labor Market Analysis", in Ashenfelter, O. and D. Card (eds.), *Handbook of Labor Economics*, Elsevier, pp. 1367-1397.
- Thiessen, Victor and Dianne Looker [forthcoming], "Distributing Scarce Resources: Parental Investment in Their Children's Post-Secondary Education", in Anisef, Paul and Robert Sweet (eds.), *Preparing for Post Secondary Education: New Roles for Governments and Families*. Montreal: McGill-Queen's University Press.

Table 1: Descriptive Statistics

		All		Women		Men	
		%	S.D.	%	S.D.	%	S.D.
PSE Participation							
	No PSE	35.5	[47.9]	30.0	[45.8]	40.8	[49.2]
	Any PSE	64.5	[47.6]	70.0	[45.8]	59.2	[49.2]
	College and trade	34.6	[47.6]	34.9	[47.7]	34.4	[47.5]
	University	29.9	[45.8]	35.1	[47.8]	24.8	[43.2]
LOAN							
	Ever received a loan	21.8	[41.3]	25.0	[43.3]	18.8	[39.1]
	Never received a loan	78.2	[41.3]	75.0	[43.3]	81.2	[39.1]
AGE							
	17	2.3	[15.1]	3.4	[18.1]	1.3	[11.4]
	18	10.7	[30.9]	10.0	[30.0]	11.3	[31.7]
	19	12.4	[32.9]	11.9	[32.3]	12.8	[33.5]
	20	15.8	[36.4]	14.6	[35.3]	16.8	[37.4]
	21	15.9	[36.5]	16.6	[37.2]	15.2	[35.9]
	22	15.8	[36.5]	15.5	[36.2]	16.0	[36.7]
	23	13.9	[34.6]	15.2	[35.9]	12.6	[33.2]
	24	13.4	[34.0]	12.9	[33.5]	13.8	[34.5]
PARENTAL EDUCATION							
	Less than high school	11.1	[31.5]	11.3	[31.7]	11.0	[31.3]
	High school completed	20.9	[40.7]	22.0	[41.5]	19.9	[39.9]
	Some or completed college	31.8	[46.6]	32.1	[46.7]	31.6	[46.5]
	Some or completed university	24.4	[43.0]	22.7	[41.9]	26.0	[43.9]
	Unknown -- No parents	11.7	[32.1]	11.9	[32.4]	11.4	[31.8]
FAMILY TYPE							
	Two parents	66.4	[47.3]	65.7	[47.5]	67.0	[47.0]
	Mother only	24.4	[42.9]	25.1	[43.4]	23.7	[42.5]
	Father only	4.9	[21.6]	4.3	[20.3]	5.5	[22.8]
	Other	4.3	[20.4]	4.8	[21.4]	3.9	[19.3]
CURRENT LIVING ARRANGEMENTS							
	Living at home	57.7	[49.4]	52.5	[49.9]	62.6	[48.4]
	Not living at home	42.3	[49.4]	47.5	[49.9]	37.4	[48.4]
FAMILY INCOME (For those living at home only)							
	Less than \$25,000	15.2	[35.9]	17.0	[37.6]	13.8	[34.5]
	\$25,000 to \$50,000	20.7	[40.5]	22.0	[41.5]	19.7	[39.8]
	\$50,000 to \$75,000	25.8	[43.8]	25.2	[43.5]	26.3	[44.0]
	\$75,000 to \$100,000	18.2	[38.6]	15.9	[36.6]	20.0	[40.0]
	\$100,000 and more	20.1	[40.0]	19.9	[39.9]	20.2	[40.2]
SAVING FOR PSE							
	Parents saved money for PSE	42.7	[49.5]	43.6	[49.6]	41.8	[49.3]
	No money saved	57.3	[50.5]	56.4	[50.4]	58.2	[50.7]
REGION							
	Atlantic	8.1	[27.3]	8.4	[27.8]	7.8	[26.8]
	Québec	26.9	[44.4]	27.9	[44.9]	25.9	[43.8]
	Ontario	35.0	[47.7]	34.0	[47.4]	36.0	[48.0]
	Prairies	16.3	[37.0]	15.8	[36.5]	16.8	[37.4]
	BC and Territories	12.6	[33.1]	12.3	[32.9]	12.8	[33.4]
	Out of Canada	1.1	[10.2]	1.5	[12.1]	0.7	[8.0]
IMMIGRANT STATUS							
	Immigrant	8.5	[0.3]	8.2	[27.5]	8.8	[28.4]
	Not immigrant	91.5	[0.3]	91.8	[27.5]	91.2	[28.4]
Number of observations		4307		2239		2068	

Table 2: Regressions on Access to PSE, Any Year

	All		At home	
	Any PSE	University	Any PSE	University
Female	0.109*** [0.018]	0.109*** [0.018]	0.145*** [0.025]	0.154*** [0.025]
Parents saved money for PSE	0.149*** [0.019]	0.133*** [0.020]	0.111*** [0.025]	0.113*** [0.027]
PARENTAL EDUCATION (High school)				
Less than high school	-0.117*** [0.039]	-0.076*** [0.026]	-0.163*** [0.059]	-0.068 [0.042]
Some or completed college	0.100*** [0.026]	0.076*** [0.024]	0.073** [0.037]	0.05 [0.033]
Some or completed university	0.235*** [0.027]	0.271*** [0.029]	0.272*** [0.037]	0.290*** [0.040]
Mother only	-0.024 [0.022]	-0.022 [0.021]	-0.002 [0.031]	0.003 [0.030]
REGION (Ontario)				
Atlantic	0.104*** [0.025]	0.129*** [0.026]	0.081*** [0.031]	0.151*** [0.034]
Québec	0.151*** [0.027]	-0.022 [0.025]	0.158*** [0.037]	-0.037 [0.033]
Prairies	-0.032 [0.024]	0.080*** [0.024]	-0.031 [0.033]	0.075** [0.033]
BC and Territories	-0.002 [0.032]	0.080*** [0.031]	0.007 [0.045]	0.062 [0.043]
Immigrant	0.054 [0.045]	0.072* [0.042]	-0.072 [0.059]	-0.032 [0.053]
FAMILY INCOME (\$50,000 to \$75,000)				
(For those living at home only)				
Less than \$25,000			0.06 [0.037]	-0.004 [0.037]
\$25,000 to \$50,000			0.02 [0.037]	-0.009 [0.036]
\$75,000 to \$100,000			-0.027 [0.040]	-0.041 [0.036]
\$100,000 and more			-0.023 [0.039]	-0.043 [0.039]
Constant	0.418*** [0.036]	0.057* [0.032]	0.431*** [0.053]	0.098** [0.046]
Observations	4305	4305	2351	2351
R-squared	0.176	0.157	0.198	0.182

Robust standard errors in brackets.

The models also include age.

* significant at 10%; ** significant at 5%; *** significant at 1%

Table 3: Extent of Borrowing from Different Sources for all PSE Participants in 2001-02

	Government		Private		Parents		Other	
	%	\$/month	%	\$/month	%	\$/month	%	\$/month
ALL	24.3 [1.0]	642.3 [25.3]	14.1 [0.8]	815.4 [138.8]	16.2 [0.9]	303.8 [19.4]	2.0 [0.3]	317.2 [71.2]
SEX								
Men	24.1 [1.5]	637.8 [33.4]	14.9 [1.3]	1110.1 [289.4]	17.2 [1.3]	298.0 [22.6]	2.3 [0.5]	-- --
Women	24.5 [1.3]	646.0 [36.1]	13.4 [1.1]	536.3 [32.3]	15.3 [1.1]	309.4 [31.2]	1.8 [0.4]	-- --
EDUCATION LEVEL								
College and trade	20.2 [1.4]	597.2 [34.6]	15.0 [1.3]	1022.9 [292.6]	16.4 [1.3]	251.5 [22.2]	2.0 [0.5]	-- --
University	27.4 [1.4]	666.7 [34.3]	13.4 [1.1]	640.8 [35.5]	16.0 [1.1]	344.0 [29.6]	2.0 [0.4]	-- --
PARENTAL EDUCATION								
Less than high school	29.0 [4.0]	685.4 [83.8]	11.1 [2.8]	-- --	21.8 [3.6]	-- --	1.3 [1.0]	-- --
High school completed	26.8 [2.5]	733.5 [93.8]	18.7 [2.2]	737.0 [74.5]	10.3 [1.7]	246.2 [35.5]	2.7 [0.9]	-- --
Some or completed college	26.0 [1.7]	583.8 [29.3]	15.9 [1.4]	1189.2 [357.8]	14.9 [1.4]	258.4 [26.7]	1.4 [0.5]	-- --
Some or completed university	19.3 [1.7]	650.1 [39.4]	11.6 [1.4]	549.1 [43.9]	18.5 [1.6]	304.2 [33.2]	2.2 [0.6]	-- --
FAMILY TYPE								
Two parents	21.8 [1.1]	598.1 [21.9]	12.8 [0.9]	717.7 [62.9]	17.0 [1.0]	297.2 [22.5]	1.7 [0.4]	-- --
Mother only	29.8 [2.4]	739.4 [74.1]	16.9 [1.9]	1217.7 [584.0]	14.4 [1.8]	341.6 [49.6]	3.3 [0.9]	-- --
PARENTS SAVED MONEY								
No	33.7 [1.6]	666.6 [34.8]	17.8 [1.3]	578.6 [33.4]	15.1 [1.2]	221.7 [17.4]	2.1 [0.5]	-- --
Yes	15.9 [1.2]	595.2 [30.4]	10.4 [1.0]	621.1 [46.9]	17.3 [1.2]	369.1 [31.1]	2.0 [0.5]	-- --
REGION								
Atlantic	44.3 [2.7]	772.2 [30.9]	15.3 [1.9]	738.0 [65.9]	16.1 [2.0]	312.0 [49.5]	3.3 [1.0]	-- --
Québec	22.2 [2.0]	367.0 [27.8]	16.1 [1.8]	384.5 [42.3]	10.4 [1.5]	152.7 [26.8]	2.7 [0.8]	-- --
Ontario	21.4 [1.9]	744.2 [47.9]	15.3 [1.6]	1281.1 [396.3]	20.1 [1.8]	368.6 [37.6]	1.7 [0.6]	-- --
Prairies	25.1 [2.3]	821.3 [103.5]	13.7 [1.8]	672.3 [68.5]	17.3 [2.0]	320.9 [46.9]	1.8 [0.7]	-- --
BC and Territories	23.3 [3.3]	584.3 [61.8]	6.8 [2.0]	-- --	18.5 [3.0]	271.7 [39.5]	0.9 [0.7]	-- --
IMMIGRANT STATUS								
Not immigrant	23.3 [1.0]	661.1 [27.4]	14.9 [0.9]	839.3 [144.8]	16.6 [0.9]	305.1 [20.4]	2.0 [0.3]	-- --
Immigrant	32.6 [4.7]	-- --	7.4 [2.6]	-- --	12.5 [3.3]	-- --	2.2 [1.5]	-- --
FAMILY INCOME (For those living at home only)								
Less than \$25,000	28.3 [3.1]	613.4 [40.4]	8.3 [1.9]	-- --	12.5 [2.3]	-- --	1.0 [0.7]	-- --
\$25,000 to \$50,000	34.8 [3.0]	639.6 [100.4]	12.9 [2.1]	1914.5 [1106.0]	15.3 [2.3]	238.7 [36.1]	2.0 [0.9]	-- --
\$50,000 to \$75,000	13.7 [1.9]	552.4 [42.8]	14.2 [2.0]	654.2 [79.3]	18.4 [2.2]	344.9 [63.2]	1.5 [0.7]	-- --
\$75,000 to \$100,000	15.6 [2.5]	549.2 [44.8]	16.3 [2.6]	737.5 [75.1]	23.4 [3.0]	277.6 [41.7]	1.5 [0.8]	-- --

Table 4: Sources of Borrowing for those With and Without Government Student Loans

	Government	Private		Parent		Other	
	\$/month	%	\$/month	%	\$/month	%	\$/month
I WITH GOVERNMENT STUDENT LOANS (484)	642.3 [25.3]	18.5 [1.8]	584.9 [45.8]	12.6 [1.5]	204.9 [17.5]	1.7 [0.6]	302.6 [136.3]
Loan is considered...							
too big (6.5%)	--	--	--	--	--	--	--
enough (34.1%)	701.6 [55.5]	10.5 [2.3]	-- [83.7]	8.0 [2.0]	-- [40.2]	0.6 [0.6]	--
too small (59.4%)	624.7 [25.4]	22.6 [2.5]	605.7 [55.9]	15.8 [2.2]	207.1 [20.2]	2.5 [0.9]	--
II WITHOUT GOVERNMENT STUDENT LOANS (1168)		11.1 [0.9]	726.6 [78.9]	17.7 [1.1]	319.7 [25.4]	1.5 [0.4]	--
Reasons for no government loans							
Could not get a loan (23.5%)		21.2 [2.5]	761.8 [60.9]	19.6 [2.4]	347.6 [47.2]	1.8 [0.8]	--
Did not want a loan -- Debt aversion (5.7%)		6.6 [3.1]	--	26.5 [5.5]	--	0.0 [0.0]	--
Did not need a loan (63.8%)		7.0 [0.9]	752.6 [179.0]	15.4 [1.3]	313.4 [37.2]	1.6 [0.5]	--
Did not want a loan -- other (7.2%)		18.1 [4.4]	--	24.9 [4.9]	--	1.5 [1.4]	--

Table 5: Regressions on Government Student Loans

	All				At home	
	Any PSE		University		Any PSE	University
Female	0.001 [0.027]	0.011 [0.026]	0.007 [0.027]	-0.012 [0.038]	0.015 [0.027]	0.01 [0.041]
Parents saved money for PSE	-0.161*** [0.028]	-0.136*** [0.029]	-0.146*** [0.028]	-0.206*** [0.039]	-0.187*** [0.029]	-0.228*** [0.043]
PARENTAL EDUCATION (High school)						
Less than high school	-0.009 [0.056]	0.005 [0.055]	0.004 [0.056]	-0.112 [0.077]	-0.097 [0.061]	-0.164* [0.097]
Some or completed college	0.003 [0.038]	0.011 [0.038]	-0.002 [0.038]	-0.022 [0.060]	0.028 [0.038]	-0.022 [0.063]
Some or completed university	-0.048 [0.037]	-0.02 [0.038]	-0.038 [0.038]	-0.097* [0.055]	-0.03 [0.037]	-0.079 [0.058]
Mother only	0.063* [0.034]	0.063* [0.033]	0.061* [0.034]	0.062 [0.047]	0.037 [0.037]	0.105** [0.053]
REGION (Ontario)						
Atlantic	0.229*** [0.041]	0.232*** [0.041]	0.222*** [0.041]	0.125** [0.056]	0.207*** [0.044]	0.156*** [0.055]
Québec	-0.009 [0.039]	-0.015 [0.039]	-0.027 [0.040]	-0.011 [0.059]	-0.055 [0.042]	-0.058 [0.067]
Prairies	0.021 [0.038]	0.019 [0.038]	0.017 [0.038]	-0.008 [0.049]	-0.043 [0.039]	-0.076 [0.047]
BC and Territories	0.005 [0.046]	0.003 [0.046]	0.01 [0.046]	-0.001 [0.059]	-0.059 [0.047]	-0.108* [0.060]
Immigrant	0.110* [0.057]	0.108* [0.058]	0.097* [0.057]	0.108 [0.071]	0.165** [0.065]	0.178** [0.083]
FAMILY INCOME (\$50,000 to \$75,000) (For those living at home only)						
Less than \$25,000					0.133*** [0.043]	0.075 [0.061]
\$25,000 to \$50,000					0.201*** [0.044]	0.221*** [0.061]
\$75,000 to \$100,000					0.029 [0.037]	0.054 [0.057]
\$100,000 and more					-0.045 [0.037]	-0.033 [0.057]
BORROWED MONEY FROM ...						
Private		0.068* [0.041]				
Parents		-0.048 [0.032]				
Others		-0.03 [0.068]				
Used parental savings		-0.105*** [0.030]				
AMOUNT OF BORROWING (\$/month) (/1000)						
Private			0.047 [0.048]			
Parents			-0.161*** [0.046]			
Others			-0.042 [0.124]			
Amount of Parent Savings (\$/month) (/1000)			-0.117*** [0.033]			
Constant	0.269*** [0.048]	0.294*** [0.052]	0.289*** [0.051]	0.355*** [0.073]	0.216*** [0.053]	0.313*** [0.090]

Table 6: Regression on Private Loan

	With and Without Government Loans				With Government loans		
University	-0.016 [0.024]	-0.02 [0.024]	-0.012 [0.023]	-0.011 [0.023]	-0.026 [0.052]	-0.02 [0.051]	-0.022 [0.052]
Female	-0.014 [0.021]	-0.013 [0.021]	-0.009 [0.021]	-0.008 [0.021]	-0.067 [0.046]	-0.067 [0.047]	-0.06 [0.046]
PARENTAL EDUCATION (High School)							
Less than high school	-0.090** [0.043]	-0.091** [0.043]	-0.098** [0.042]	-0.099** [0.044]	-0.183** [0.087]	-0.178** [0.085]	-0.172** [0.087]
Some or completed college	-0.033 [0.035]	-0.034 [0.035]	-0.038 [0.035]	-0.04 [0.035]	-0.062 [0.076]	-0.054 [0.073]	-0.059 [0.074]
Some or completed university	-0.059* [0.035]	-0.055 [0.035]	-0.057* [0.034]	-0.051 [0.035]	-0.152* [0.078]	-0.143* [0.076]	-0.150* [0.077]
Mother only	0.039 [0.030]	0.034 [0.029]	0.028 [0.029]	0.031 [0.029]	0.061 [0.061]	0.057 [0.057]	0.055 [0.057]
REGION (Ontario)							
Atlantic	0.011 [0.030]	-0.002 [0.031]	-0.004 [0.031]	-0.001 [0.030]	-0.063 [0.061]	-0.065 [0.057]	-0.063 [0.057]
Québec	0.015 [0.031]	0.014 [0.031]	0.016 [0.030]	0.002 [0.030]	0.04 [0.081]	0.054 [0.079]	0.051 [0.079]
Prairies	-0.009 [0.030]	-0.011 [0.030]	-0.02 [0.030]	-0.021 [0.030]	-0.091 [0.066]	-0.103 [0.067]	-0.1 [0.066]
BC and Territories	-0.073** [0.029]	-0.073** [0.029]	-0.078** [0.029]	-0.078** [0.029]	-0.101 [0.067]	-0.109 [0.067]	-0.127* [0.067]
Immigrant	-0.067** [0.032]	-0.074** [0.033]	-0.072** [0.032]	-0.088** [0.029]	-0.150*** [0.051]	-0.165*** [0.052]	-0.166*** [0.053]
Parents saved money for PSE			-0.052** [0.021]	-0.055*** [0.021]		-0.05 [0.049]	-0.053 [0.049]
Wanted more government loans			0.103** [0.045]	0.118*** [0.036]		0.088* [0.047]	0.092** [0.046]
BORROWED MONEY FROM...							
Government		0.057** [0.027]	-0.013 [0.036]				
Parents			0.073** [0.031]			0.168** [0.068]	
Others			0.072 [0.108]			0.054 [0.186]	
Used parental savings			-0.004 [0.022]			-0.001 [0.049]	
AMOUNT OF BORROWINGS (\$/month) (/1000)							
Government				-0.061** [0.030]			
Parents				0 [0.044]			0.524** [0.263]
Others				0.381 [0.269]			-0.306** [0.135]
Amount of parent savings (\$/month) (/1000)				-0.027 [0.022]			0.059 [0.096]
Constant	0.209*** [0.045]	0.200*** [0.045]	0.219*** [0.048]	0.243*** [0.047]	0.309*** [0.105]	0.244** [0.106]	0.251** [0.106]
Observations	1808	1808	1808	1803	484	484	484
R-squared	0.042	0.046	0.065	0.068	0.126	0.164	0.159

Robust standard errors in brackets.

The models also include age.

* significant at 10%; ** significant at 5%; *** significant at 1%

Table 7 : Regression on Borrowing From Parents

	With and Without Government Loans				With a Government loans		
University	-0.018 [0.026]	-0.016 [0.026]	-0.017 [0.026]	-0.011 [0.025]	0.012 [0.049]	0.005 [0.050]	0.02 [0.050]
Female	-0.009 [0.023]	-0.009 [0.023]	-0.008 [0.023]	-0.002 [0.023]	0.026 [0.047]	0.02 [0.043]	0.027 [0.045]
PARENTAL EDUCATION (High School)							
Less than high school	0.113** [0.056]	0.114** [0.056]	0.126** [0.055]	0.106* [0.055]	-0.003 [0.072]	0.04 [0.067]	0.007 [0.065]
Some or completed college	0.04 [0.026]	0.04 [0.026]	0.045* [0.026]	0.035 [0.026]	-0.039 [0.056]	-0.036 [0.054]	-0.043 [0.056]
Some or completed university	0.072** [0.029]	0.069** [0.029]	0.070** [0.029]	0.077*** [0.029]	-0.034 [0.067]	-0.022 [0.065]	-0.028 [0.068]
Mother only	-0.022 [0.028]	-0.019 [0.028]	-0.028 [0.028]	-0.02 [0.028]	-0.068* [0.040]	-0.086** [0.038]	-0.085** [0.039]
REGION (Ontario)							
Atlantic	-0.046 [0.034]	-0.038 [0.035]	-0.043 [0.034]	-0.039 [0.034]	-0.018 [0.055]	-0.014 [0.052]	-0.006 [0.053]
Québec	-0.107*** [0.030]	-0.106*** [0.030]	-0.106*** [0.029]	-0.112*** [0.030]	-0.04 [0.057]	-0.038 [0.059]	-0.012 [0.060]
Prairies	-0.029 [0.033]	-0.028 [0.033]	-0.026 [0.032]	-0.027 [0.032]	-0.027 [0.056]	-0.024 [0.053]	-0.035 [0.053]
BC and Territories	-0.012 [0.041]	-0.012 [0.041]	-0.002 [0.041]	-0.006 [0.040]	-0.044 [0.086]	-0.02 [0.079]	-0.041 [0.081]
Immigrant	-0.068* [0.040]	-0.063 [0.040]	-0.057 [0.038]	-0.083** [0.037]	0.016 [0.074]	0.049 [0.071]	0.044 [0.073]
Parents saved money for PSE			0.004 [0.024]	0.007 [0.023]		0.042 [0.038]	0.052 [0.038]
Wanted more government loans			0.035 [0.036]	0.026 [0.035]		0.065 [0.042]	0.080* [0.043]
BORROWED MONEY FROM...							
Government		-0.037 [0.024]	-0.055* [0.030]				
Private			0.084** [0.036]			0.131** [0.055]	
Others			0.285*** [0.093]			0.196 [0.199]	
Used parental savings			0.018 [0.024]			0.088** [0.043]	
AMOUNT OF BORROWINGS (\$/month) (/1000)							
Government				-0.077** [0.032]			
Private				0.041 [0.043]			0.128* [0.073]
Others				0.575*** [0.136]			0.698*** [0.106]
Amount of parent savings (\$/month) (/1000)				-0.076*** [0.022]			0.053 [0.062]
Constant	0.178*** [0.038]	0.183*** [0.038]	0.154*** [0.041]	0.188*** [0.042]	0.240*** [0.076]	0.125* [0.075]	0.151** [0.076]
Observations	1808	1808	1808	1803	484	484	484
R-squared	0.031	0.033	0.053	0.056	0.04	0.103	0.092

Robust standard errors in brackets.

The model also include age.

* significant at 10%; ** significant at 5%; *** significant at 1%

Table 8: Work During School for all PSE participants in 2001-02

	Work			Work 15 hours and +		
	%	hours/week	\$/month	%	hours/week	\$/month
ALL	64.7 [1.1]	19.5 [0.4]	699.7 [30.8]	38.3 [1.1]	24.9 [0.4]	934.6 [47.5]
SEX						
Men	62.9 [1.7]	21.1 [0.6]	797.6 [49.3]	39.3 [1.7]	26.0 [0.6]	987.7 [68.3]
Women	66.3 [1.5]	18.3 [0.4]	621.3 [38.9]	37.4 [1.5]	24.0 [0.5]	887.6 [66.1]
EDUCATION LEVEL						
College and trade	64.7 [1.7]	21.0 [0.6]	772.1 [61.8]	42.3 [1.8]	25.6 [0.6]	983.2 [87.9]
University	64.8 [1.5]	18.3 [0.5]	645.9 [28.1]	35.2 [1.5]	24.3 [0.5]	891.5 [43.8]
PARENTAL EDUCATION						
Less than high school	59.4 [4.3]	21.0 [1.5]	665.5 [94.9]	34.3 [4.2]	27.6 [1.3]	925.6 [146.0]
High school completed	71.1 [2.6]	18.9 [0.8]	732.3 [53.1]	43.1 [2.8]	23.9 [0.8]	911.6 [69.1]
Some or completed college	66.0 [1.8]	20.7 [0.7]	787.0 [57.9]	40.7 [1.9]	26.2 [0.7]	1091.9 [85.6]
Some or completed university	63.0 [2.0]	17.6 [0.6]	566.7 [31.5]	32.0 [2.0]	23.6 [0.7]	760.0 [45.8]
FAMILY TYPE						
Two parents	64.4 [1.3]	19.5 [0.4]	716.9 [39.8]	37.3 [1.3]	25.2 [0.5]	967.4 [62.9]
Mother only	62.6 [2.5]	19.3 [0.7]	674.3 [51.0]	36.6 [2.5]	24.7 [0.8]	909.9 [76.2]
PARENTS SAVED MONEY						
No	66.8 [1.6]	19.9 [0.5]	758.9 [52.0]	40.4 [1.7]	25.1 [0.6]	982.7 [77.5]
Yes	63.0 [1.6]	19.2 [0.5]	637.0 [33.3]	36.3 [1.6]	24.7 [0.6]	877.2 [52.8]
REGION						
Atlantic	52.3 [2.7]	22.5 [1.3]	372.7 [29.3]	30.1 [2.5]	28.8 [1.5]	494 [44.4]
Québec	71.5 [2.2]	17.4 [0.5]	649.7 [38.1]	44.2 [2.4]	21.5 [0.5]	826.2 [52.9]
Ontario	64.2 [2.2]	20.9 [0.8]	683.5 [46.3]	37.4 [2.2]	27.2 [0.8]	955.3 [69.3]
Prairies	63.3 [2.5]	21.0 [0.9]	883.7 [91.2]	35.4 [2.5]	27.4 [1.0]	1110.4 [137.4]
BC and Territories	62.3 [3.8]	18.1 [1.1]	888.0 [187.4]	37.0 [3.8]	23.2 [1.2]	1271.8 [306.4]
IMMIGRANT STATUS						
Not immigrant	65.7 [1.1]	19.7 [0.4]	697.8 [27.2]	39.2 [1.2]	24.9 [0.4]	917.6 [39.8]
Immigrant	56.3 [4.9]	18.2 [1.5]	719.1 [254.2]	30.7 [4.6]	25.3 [1.7]	1126.8 [476.8]
FAMILY INCOME (For those living at home only)						
Less than \$25,000	67.9 [3.2]	16.3 [0.7]	462.1 [34.8]	32.9 [3.2]	21.2 [0.9]	649 [51.9]
\$25,000 to \$50,000	68.2 [2.9]	17.3 [0.8]	579.6 [63.5]	38.2 [3.1]	22.9 [0.8]	744.9 [78.1]
\$50,000 to \$75,000	66.8 [2.6]	19.3 [0.7]	584.8 [48.1]	40.7 [2.8]	24.1 [0.7]	700.1 [61.5]
\$75,000 to \$100,000	68.1 [3.3]	17.0 [1.0]	617.1 [75.7]	35.5 [3.4]	22.8 [1.2]	908.4 [122.0]
\$100,000 and more	73.9	23.0	827.5	48.0	28.8	1051.5

Table 9: Work for Those With and Without Government Student Loan

	Work			Work 15 hours and +		
	%	hours/week	\$/month	%	hours/week	\$/month
I WITH GOVERNMENT STUDENT LOANS (484)	55.8 [2.3]	14.3 [0.7]	478.9 [33.0]	26.5 [2.0]	23.3 [1.0]	669.9 [55.8]
Loan is considered...						
too big (6.5%)	--	--	--	--	--	--
enough (34.1%)	60.8 [3.6]	13.2 [0.9]	485.4 [47.8]	25.7 [3.2]	21.9 [1.0]	561.1 [59.7]
too small (59.4%)	53.1 [3.0]	14.5 [1.1]	457.8 [47.2]	24.5 [2.6]	24.9 [1.7]	736.8 [91.1]
II WITHOUT GOVERNMENT STUDENT LOANS (1168)	67.3 [1.4]	17.5 [0.4]	751.1 [42.3]	41.4 [1.4]	24.6 [0.5]	981.5 [63.1]
Reasons for no loans						
Could not get a loan (23.5%)	70.9 [2.8]	17.5 [1.0]	644.4 [87.2]	39.8 [3.0]	26.0 [1.3]	895.5 [153.4]
Did not want a loan -- Debt aversion (5.7%)	61.4 [6.0]	17.6 [2.0]	831.4 [106.7]	35.1 [5.9]	--	--
Did not need a loan (63.6%)	66.9 [1.7]	17.6 [0.5]	800.2 [54.4]	43.4 [1.8]	24.1 [0.5]	1017.8 [79.0]
Did not want a loan -- other (7.2%)	63.5 [5.5]	16.5 [1.6]	628.5 [156.8]	34.1 [5.4]	24.6 [1.6]	813.5 [144.5]

Table 10 : Regression on Working

	With and without Government Loans				With a Government Loans		
University	0.005 [0.033]	0.014 [0.033]	0.026 [0.033]	0.029 [0.033]	0.059 [0.069]	0.07 [0.071]	0.067 [0.070]
Female	0.024 [0.031]	0.023 [0.031]	0.028 [0.031]	0.026 [0.031]	0.09 [0.065]	0.095 [0.064]	0.088 [0.063]
PARENTAL EDUCATION (High School)							
Less than high school	-0.111* [0.065]	-0.109* [0.065]	-0.101 [0.064]	-0.121* [0.066]	-0.155 [0.104]	-0.169* [0.102]	-0.157 [0.106]
Some or completed college	-0.053 [0.041]	-0.053 [0.041]	-0.047 [0.040]	-0.068* [0.040]	-0.036 [0.078]	-0.038 [0.075]	-0.026 [0.076]
Some or completed university	-0.074* [0.044]	-0.083* [0.044]	-0.064 [0.044]	-0.076* [0.044]	-0.044 [0.092]	-0.045 [0.090]	-0.034 [0.091]
Mother only	-0.031 [0.037]	-0.022 [0.037]	-0.026 [0.037]	-0.026 [0.038]	-0.03 [0.070]	-0.036 [0.068]	-0.031 [0.070]
REGION (Ontario)							
Atlantic	-0.122*** [0.044]	-0.095** [0.045]	-0.096** [0.044]	-0.111** [0.044]	-0.09 [0.086]	-0.097 [0.084]	-0.099 [0.085]
Québec	0.076* [0.043]	0.079* [0.043]	0.067 [0.043]	0.051 [0.044]	0.102 [0.099]	0.075 [0.097]	0.071 [0.099]
Prairies	-0.017 [0.044]	-0.013 [0.044]	-0.02 [0.043]	-0.02 [0.043]	0.041 [0.101]	0.035 [0.098]	0.036 [0.098]
BC and Territories	-0.013 [0.054]	-0.013 [0.053]	-0.012 [0.053]	-0.015 [0.054]	-0.003 [0.125]	-0.004 [0.118]	-0.001 [0.116]
Immigrant	-0.083 [0.063]	-0.069 [0.063]	-0.068 [0.063]	-0.085 [0.062]	0.014 [0.112]	0 [0.109]	-0.005 [0.111]
Parents saved money for PSE			-0.037 [0.032]	-0.034 [0.032]		-0.130* [0.069]	-0.135** [0.067]
Wanted more government loans			-0.05 [0.063]	-0.108** [0.050]		-0.046 [0.069]	-0.05 [0.069]
BORROWED MONEY FROM...							
Government		-0.117*** [0.038]	-0.112** [0.055]				
Private			0.078** [0.036]		0.056 [0.074]		
Parents			-0.027 [0.038]		-0.183** [0.083]		
Others			0.049 [0.097]		-0.238 [0.252]		
Used parental savings			-0.057* [0.032]		0.031 [0.069]		
AMOUNT OF BORROWINGS (\$/month) (/1000)							
Government				-0.069 [0.052]			
Private				0.04 [0.049]			-0.029 [0.103]
Parents				-0.011 [0.077]			-0.477 [0.358]
Others				-0.179 [0.134]			-0.301 [0.202]
Amount of parent savings (\$/month) (/1000)				-0.139*** [0.053]			0.068 [0.101]
Constant	0.687*** [0.056]	0.705*** [0.055]	0.738*** [0.057]	0.746*** [0.057]	0.382*** [0.116]	0.474*** [0.124]	0.481*** [0.126]
Observations	1808	1808	1808	1803	484	484	484
R-squared	0.036	0.046	0.056	0.061	0.101	0.139	0.131

Table 11 : Regression on Working 15 Hours and More

	With and without Government Loans				With a Government Loans		
University	-0.071** [0.035]	-0.058* [0.035]	-0.044 [0.035]	-0.039 [0.035]	0.009 [0.058]	0.026 [0.055]	0.023 [0.057]
Female	-0.021 [0.031]	-0.023 [0.030]	-0.016 [0.030]	-0.017 [0.030]	-0.051 [0.055]	-0.035 [0.053]	-0.049 [0.053]
PARENTAL EDUCATION (High School)							
Less than high school	-0.093 [0.066]	-0.09 [0.067]	-0.077 [0.066]	-0.095 [0.065]	-0.075 [0.096]	-0.06 [0.098]	-0.066 [0.103]
Some or completed college	-0.027 [0.048]	-0.027 [0.047]	-0.018 [0.047]	-0.046 [0.047]	-0.078 [0.076]	-0.063 [0.073]	-0.066 [0.074]
Some or completed university	-0.098* [0.050]	-0.110** [0.050]	-0.085* [0.050]	-0.103** [0.049]	-0.158* [0.084]	-0.125 [0.086]	-0.136 [0.085]
Mother only	-0.038 [0.039]	-0.025 [0.038]	-0.027 [0.038]	-0.023 [0.038]	-0.055 [0.059]	-0.073 [0.058]	-0.061 [0.060]
REGION (Ontario)							
Atlantic	-0.059 [0.043]	-0.02 [0.042]	-0.019 [0.041]	-0.035 [0.041]	0 [0.065]	0.002 [0.061]	0 [0.063]
Québec	0.069 [0.044]	0.073* [0.043]	0.061 [0.043]	0.028 [0.044]	0.103 [0.078]	0.07 [0.077]	0.082 [0.077]
Prairies	-0.011 [0.042]	-0.006 [0.042]	-0.012 [0.042]	-0.011 [0.042]	0.048 [0.084]	0.05 [0.080]	0.045 [0.080]
BC and Territories	0.018 [0.056]	0.018 [0.055]	0.019 [0.055]	0.009 [0.055]	0.072 [0.107]	0.083 [0.098]	0.083 [0.097]
Immigrant	-0.084 [0.057]	-0.063 [0.056]	-0.061 [0.055]	-0.09 [0.056]	-0.029 [0.083]	-0.024 [0.083]	-0.031 [0.084]
Parents saved money for PSE			-0.022 [0.032]	-0.023 [0.032]		-0.135** [0.056]	-0.140** [0.056]
Wanted more government loans			-0.063 [0.052]	-0.110** [0.044]		-0.044 [0.051]	-0.041 [0.051]
BORROWED MONEY FROM...							
Government		-0.167*** [0.034]	-0.158*** [0.046]				
Private			0.103** [0.045]			0.209*** [0.079]	
Parents			-0.045 [0.038]			-0.125** [0.060]	
Others			0.006 [0.100]			-0.082 [0.208]	
Used parental savings			-0.084** [0.034]			0.001 [0.056]	
AMOUNT OF BORROWINGS (\$/month) (/1000)							
Government				-0.173*** [0.044]			
Private				0.048 [0.060]			0.1 [0.103]
Parents				-0.153** [0.074]			-0.457** [0.202]
Others				-0.104 [0.130]			-0.051 [0.168]
Amount of parent savings (\$/month) (/1000)				-0.159*** [0.037]			0.13 [0.085]
Constant	0.459*** [0.062]	0.484*** [0.061]	0.519*** [0.065]	0.535*** [0.063]	0.249*** [0.095]	0.291*** [0.106]	0.310*** [0.103]
Observations	1808	1808	1808	1803	484	484	484
R-squared	0.049	0.07	0.084	0.093	0.113	0.171	0.155

Table A.1: Tobit on the Amount of Private Loan

	With and without Government Loans				With a Government Loans		
University	-11.433 [81.399]	-27.009 [81.662]	21.321 [83.182]	9.221 [83.029]	-62.275 [155.955]	-26.432 [156.499]	-31.743 [154.345]
Female	-136.268* [76.464]	-135.372* [76.361]	-125.059 [76.858]	-116.261 [76.506]	-467.791*** [149.918]	-450.585*** [147.023]	-458.133*** [149.545]
PARENTAL EDUCATION (High School)							
Less than high school	-386.525** [177.295]	-385.559** [177.723]	-392.579** [177.581]	-382.762** [177.003]	-502.804* [280.369]	-437.924 [275.664]	-454.45 [279.464]
Some or completed college	-156.953 [105.811]	-147.837 [106.178]	-155.109 [106.246]	-156.672 [106.105]	-60.173 [173.533]	-27.93 [172.589]	-77.188 [171.556]
Some or completed university	-228.440** [112.038]	-201.328* [112.723]	-208.763* [114.708]	-164.29 [113.156]	-347.872 [218.616]	-326.378 [219.775]	-366.935* [217.356]
Mother only	124.506 [91.478]	107.073 [91.862]	88.145 [91.973]	91.234 [92.067]	39.193 [156.352]	10.977 [159.994]	11.551 [158.571]
REGION (Ontario)							
Atlantic	-672.039*** [144.964]	-711.969*** [146.217]	-705.143*** [145.793]	-712.208*** [146.058]	-875.737*** [227.011]	-867.036*** [224.030]	-844.611*** [225.499]
Québec	-80 [96.817]	-89.343 [96.702]	-104.476 [99.285]	-154.07 [100.473]	-168.765 [173.891]	-137.973 [175.796]	-116.855 [175.154]
Prairies	-393.630*** [116.113]	-394.258*** [115.740]	-417.381*** [115.638]	-422.733*** [115.582]	-598.581*** [228.608]	-632.837*** [224.551]	-622.778*** [227.057]
BC and Territories	-451.837*** [152.914]	-451.991*** [152.555]	-495.215*** [153.689]	-498.594*** [154.219]	-532.934* [300.329]	-551.765* [297.319]	-557.669* [298.619]
Immigrant	-131.169 [146.318]	-142.643 [144.885]	-158.593 [147.467]	-228.284 [151.432]	-775.959** [370.102]	-759.683** [358.450]	-764.920** [358.437]
Parents saved money for PSE			-246.899*** [82.244]	-236.685*** [81.720]		-177.108 [148.289]	-213.804 [149.997]
Wanted more government loans			501.533*** [145.862]	481.332*** [115.958]		418.601*** [156.449]	455.467*** [157.591]
BORROWED MONEY FROM...							
Government		189.041** [84.917]	-176.53 [131.831]				
Parents			236.854** [96.358]			421.937** [187.250]	
Others			53.812 [235.829]			372.912 [422.854]	
Used parental savings			-7.454 [81.058]			-4.81 [153.297]	
AMOUNT OF BORROWINGS (\$/month)							
Government				-0.273** [0.136]			
Parents				0.012 [0.234]			1.337* [0.734]
Others				0.667* [0.357]			-0.472 [1.298]
Amount of parent savings (\$/month)				-0.118 [0.117]			0.32 [0.246]
Constant	-560.759*** [144.682]	-597.624*** [146.509]	-500.952*** [152.118]	-447.832*** [149.076]	-100.662 [264.513]	-396.071 [295.000]	-397.556 [295.184]
Observations	1808	1808	1808	1803	484	484	484

Standard errors in brackets

* significant at 10%; ** significant at 5%; *** significant at 1%

Table A.2: Tobit on the Amount of Borrowing from Parents

	With and without Government Loans				With a Government Loans		
University	12.921 [45.040]	20.314 [44.857]	6.606 [45.632]	27.101 [45.480]	-1.962 [55.054]	-13.969 [53.940]	3.954 [53.229]
Female	-62.165 [41.852]	-59.85 [41.640]	-55.37 [41.863]	-40.702 [41.469]	-18.948 [50.630]	-10.437 [51.431]	1.889 [49.822]
PARENTAL EDUCATION (High school)							
Less than high school	408.255*** [93.173]	396.358*** [92.409]	407.089*** [93.055]	370.993*** [92.592]	59.311 [98.173]	124.815 [98.545]	51.654 [100.650]
Some or completed college	126.831* [72.259]	112.95 [71.593]	112.921 [71.734]	106.415 [71.241]	-8.436 [69.063]	-15.045 [68.026]	-26.46 [65.550]
Some or completed university	237.079*** [72.800]	212.632*** [72.483]	203.520*** [72.898]	233.151*** [72.880]	8.829 [77.566]	2.647 [76.597]	11.461 [73.124]
Mother only	-38.746 [53.600]	-31.84 [53.334]	-33.233 [53.417]	-24.879 [53.091]	-88.425 [61.680]	-114.506* [61.662]	-117.420* [60.699]
REGION (Ontario)							
Atlantic	-555.429*** [84.358]	-521.555*** [84.683]	-522.370*** [84.948]	-508.513*** [83.806]	-267.077*** [81.773]	-259.032*** [80.096]	-243.150*** [77.868]
Québec	-298.675*** [60.806]	-293.369*** [60.552]	-287.745*** [61.477]	-318.623*** [61.195]	-71.134 [68.939]	-77.394 [68.663]	-25.308 [66.427]
Prairies	-267.962*** [63.524]	-263.969*** [63.241]	-252.899*** [63.574]	-258.584*** [63.007]	-76.676 [76.496]	-63.2 [77.102]	-90.394 [77.047]
BC and Territories	-69.53 [67.112]	-71.518 [66.906]	-55.274 [67.471]	-87.521 [67.497]	-6.349 [88.435]	52.02 [87.629]	-3.579 [85.083]
Immigrant	-78.797 [75.224]	-58.508 [75.150]	-56.892 [76.157]	-118.347 [77.252]	103.836 [74.766]	178.324** [75.218]	151.083** [73.333]
Parents saved money for PSE			63.097 [44.424]	79.483* [43.448]		110.931** [51.647]	126.013** [51.380]
Wanted more government loans			214.881** [96.116]	124.342* [72.618]		140.104** [57.084]	160.098*** [56.044]
BORROWED MONEY FROM...							
Government		-126.020** [53.209]	-254.039*** [85.938]				
Private			75.651 [57.568]			178.454*** [62.437]	
Others			307.498*** [119.235]			230.058 [141.170]	
Used parental savings			25.964 [45.243]			124.714** [54.465]	
AMOUNT OF BORROWINGS (\$/month)							
Government				-0.312*** [0.093]			
Private				0.003 [0.077]			0.164** [0.074]
Others				0.627*** [0.193]			0.621*** [0.230]
Amount of parent savings (\$/month)				-0.257*** [0.072]			0.04 [0.097]
Constant	-504.699*** [90.333]	-470.268*** [89.910]	-530.850*** [96.402]	-472.936*** [92.540]	-136.82 [98.595]	-375.140*** [115.039]	-311.865*** [110.156]
Observations	1806	1806	1806	1803	484	484	484

Standard errors in brackets.

The models also include age.

* significant at 10%; ** significant at 5%; *** significant at 1%

Table A.3 : Tobit on Hours of Work

	With and without Government Loans				With a Government Loans		
University	-2.519** [1.133]	-1.934* [1.122]	-1.302 [1.126]	-1.098 [1.115]	0.29 [2.468]	0.863 [2.410]	0.446 [2.416]
Female	-0.095 [1.046]	-0.17 [1.032]	0.208 [1.030]	-0.115 [1.019]	0.686 [2.219]	1.545 [2.237]	0.782 [2.204]
PARENTAL EDUCATION (High School)							
Less than high school	-2.807 [2.363]	-2.777 [2.333]	-2.236 [2.326]	-2.737 [2.326]	-4.17 [4.696]	-4.258 [4.582]	-4.184 [4.605]
Some or completed college	-0.794 [1.560]	-0.769 [1.540]	-0.378 [1.530]	-1.477 [1.531]	-1.229 [3.050]	-1.231 [2.987]	-1.252 [2.985]
Some or completed university	-2.918* [1.592]	-3.455** [1.573]	-2.255 [1.578]	-2.779* [1.570]	-0.552 [3.439]	-0.058 [3.392]	-0.205 [3.370]
Mother only	-1.039 [1.302]	-0.461 [1.289]	-0.574 [1.285]	-0.209 [1.278]	-0.826 [2.532]	-1.622 [2.514]	-1.123 [2.495]
REGION (Ontario)							
Atlantic	-11.304*** [2.149]	-9.486*** [2.139]	-9.453*** [2.126]	-10.163*** [2.111]	-10.176*** [3.593]	-9.912*** [3.511]	-10.424*** [3.516]
Québec	1.27 [1.360]	1.502 [1.345]	0.906 [1.352]	-0.764 [1.360]	3.359 [2.896]	2.075 [2.863]	1.456 [2.900]
Prairies	-2.695* [1.631]	-2.422 [1.611]	-2.775* [1.608]	-2.667* [1.599]	-1.01 [3.401]	-1.07 [3.396]	-1.685 [3.423]
BC and Territories	-0.761 [1.764]	-0.733 [1.741]	-0.844 [1.738]	-1.096 [1.731]	1.094 [3.778]	1.038 [3.752]	1.234 [3.777]
Immigrant	-1.608 [1.750]	-0.594 [1.734]	-0.682 [1.725]	-2.164 [1.720]	1.857 [3.178]	1.066 [3.163]	1.022 [3.189]
Parents saved money for PSE			-1.424 [1.084]	-1.262 [1.067]		-7.441*** [2.268]	-7.673*** [2.286]
Wanted more government loans			-2.206 [2.069]	-5.020*** [1.657]		-1.604 [2.254]	-1.673 [2.243]
BORROWED MONEY FROM...							
Government		-7.699*** [1.248]	-7.700*** [1.741]				
Private			2.845* [1.474]			5.063* [2.778]	
Parents			-2.404* [1.413]			-9.496*** [3.508]	
Others			2.034 [3.593]			-9.735 [8.907]	
Used parental savings			-3.965*** [1.094]			-0.289 [2.300]	
AMOUNT OF BORROWINGS (\$/month)							
Government				-0.008*** [0.002]			
Private				0 [0.002]			0 [0.004]
Parents				-0.009*** [0.003]			-0.048*** [0.016]
Others				-0.006 [0.008]			-0.026 [0.050]
Amount of parent savings (\$/month)				-0.009*** [0.001]			0.002 [0.004]
Constant	8.152*** [2.030]	9.200*** [2.010]	11.383*** [2.144]	12.077*** [2.113]	-5.957 [4.784]	-1.582 [4.938]	-0.283 [4.953]
Observations	1808	1808	1808	1803	484	484	484

Standard errors in brackets

Table A.4 : Tobit on Labour Income

	With and without Government Loans				With a Government Loans		
University	-7.281 [49.287]	15.583 [48.884]	50.4 [48.747]	35.871 [48.934]	53.452 [76.430]	61.424 [75.469]	53.361 [75.648]
Female	-94.737** [45.261]	-97.480** [44.742]	-78.663* [44.339]	-92.991** [44.553]	-120.251* [68.706]	-102.39 [69.280]	-117.623* [68.575]
PARENTAL EDUCATION (High school)							
Less than high school	-210.595** [102.232]	-211.270** [101.166]	-189.909* [100.402]	-221.694** [101.794]	-108.208 [146.644]	-132.332 [145.113]	-119.385 [146.622]
Some or completed college	-109.144 [67.470]	-107.065 [66.676]	-85.168 [65.970]	-124.858* [66.796]	-23.444 [94.873]	-20.748 [94.135]	-11.974 [94.151]
Some or completed university	-198.492*** [68.601]	-221.680*** [67.884]	-156.228** [67.807]	-197.379*** [68.004]	-2.162 [107.510]	9.648 [107.403]	13.046 [106.920]
Mother only	-68.132 [56.634]	-43.552 [56.167]	-42.773 [55.692]	-43.959 [56.133]	-71.303 [78.946]	-73.183 [79.207]	-54.17 [78.749]
REGION (Ontario)							
Atlantic	-604.517*** [92.483]	-529.052*** [92.291]	-521.147*** [91.190]	-562.226*** [91.780]	-409.802*** [110.832]	-406.986*** [109.440]	-415.069*** [109.706]
Québec	129.088** [59.016]	138.503** [58.456]	113.772* [58.397]	80.93 [59.586]	168.064* [89.511]	131.494 [89.210]	122.024 [90.214]
Prairies	2.953 [70.184]	15.49 [69.443]	-0.487 [68.933]	7.159 [69.571]	171.563* [103.556]	180.799* [104.027]	180.841* [104.833]
BC and Territories	62.974 [76.779]	66.159 [75.912]	56.373 [75.399]	78.617 [75.961]	-16.198 [118.439]	-10.174 [118.102]	7.025 [118.392]
Immigrant	-217.912*** [77.108]	-174.296** [76.559]	-177.755** [75.810]	-211.998*** [76.680]	-97.56 [100.094]	-127.621 [100.829]	-132.356 [101.782]
Parents saved money for PSE			-55.442 [46.750]	-69.515 [46.502]		-154.653** [70.018]	-161.770** [70.698]
Wanted more government loans			-151.162* [88.522]	-320.845*** [72.149]		-129.639* [70.078]	-138.154** [69.812]
BORROWED MONEY FROM...							
Government		-327.019*** [53.688]	-305.860*** [74.284]				
Private			126.627** [63.635]		60.593 [87.714]		
Parents			-74.33 [60.538]		-216.633** [107.659]		
Others			-1.207 [154.960]		-365.092 [279.614]		
Used parental savings			-240.603*** [47.104]			-42.539 [71.468]	
AMOUNT OF BORROWINGS (\$/month)							
Government				-0.163** [0.070]			
Private				0.124 [0.083]			-0.009 [0.119]
Parents				-0.075 [0.129]			-0.494 [0.417]
Others				-0.416 [0.353]			-1.53 [1.772]
Amount of parent savings (\$/month)				-0.266*** [0.057]			0.001 [0.116]
Constant	399.550*** [87.557]	445.745*** [86.839]	560.345*** [92.295]	518.246*** [92.193]	-86.912 [143.650]	79.507 [150.361]	62.831 [151.140]
Observations	1796	1796	1796	1794	484	484	484

Standard errors in brackets.

Table A.5 : Tobit on Hours of Work 15 Hours and More

	With and without Government Loans				With a Government Loans		
University	-2.290** [0.943]	-2.073** [0.941]	-1.900** [0.947]	-1.869* [0.963]	-5.780** [2.835]	-5.483* [2.788]	-5.394* [2.773]
Female	-1.449* [0.874]	-1.568* [0.871]	-1.286 [0.882]	-1.556* [0.881]	1.536 [2.736]	1.758 [2.673]	1.939 [2.680]
PARENTAL EDUCATION (High School)							
Less than high school	3.807* [2.015]	3.813* [2.004]	4.010** [2.007]	3.733* [2.026]	4.621 [4.907]	6.14 [4.893]	5.354 [4.890]
Some or completed college	1.407 [1.257]	1.237 [1.251]	1.315 [1.256]	1.201 [1.258]	-0.772 [3.354]	-1.095 [3.236]	-2.155 [3.356]
Some or completed university	-1.045 [1.324]	-1.376 [1.323]	-1.093 [1.347]	-1.049 [1.328]	5.202 [3.784]	4.714 [3.706]	2.993 [3.765]
Mother only	-0.417 [1.101]	-0.368 [1.095]	-0.212 [1.102]	-0.126 [1.114]	1.119 [2.894]	1.192 [2.847]	1.342 [2.910]
REGION (Ontario)							
Atlantic	1.585 [1.883]	2.153 [1.886]	2.001 [1.882]	1.914 [1.902]	5.606 [3.951]	5.858 [3.818]	4.763 [3.924]
Québec	-5.559*** [1.101]	-5.315*** [1.099]	-5.378*** [1.114]	-5.895*** [1.125]	-4.247 [3.139]	-2.751 [3.134]	-4.091 [3.370]
Prairies	0.706 [1.371]	0.925 [1.366]	0.565 [1.375]	0.573 [1.383]	5.388 [3.840]	3.905 [4.017]	4.442 [4.240]
BC and Territories	-3.149** [1.514]	-2.862* [1.510]	-3.104** [1.514]	-3.171** [1.536]	-2.408 [4.141]	-2.333 [4.118]	-1.786 [4.284]
Immigrant	-1.21 [1.659]	-0.896 [1.656]	-0.924 [1.669]	-1.243 [1.673]	-2.562 [4.422]	-2.651 [4.373]	-3.993 [4.501]
Parents saved money for PSE			-0.863 [0.942]	-0.795 [0.930]		-2.884 [2.720]	
Wanted more government loans			1.342 [2.134]	-1.033 [1.712]		4.690* [2.748]	5.466* [2.808]
BORROWED MONEY FROM...							
Government		-3.147*** [1.201]	-4.154** [1.740]				
Private			-0.672 [1.168]			-3.501 [3.135]	
Parents			0.58 [1.213]			7.298* [4.373]	
Others			0.725 [3.034]			-12.511 [10.601]	
Used parental savings			-1.3 [0.924]			-3.363 [2.755]	
AMOUNT OF BORROWINGS (\$/month)							
Government				-0.003 [0.002]			
Private				-0.002 [0.002]			-0.005 [0.004]
Parents				0 [0.003]			-0.022 [0.023]
Others				0.005 [0.008]			-0.152 [0.267]
Amount of parent savings (\$/month)				-0.002 [0.001]			-0.007 [0.004]
Constant	26.056*** [1.626]	26.327*** [1.621]	27.206*** [1.724]	27.051*** [1.717]	19.302*** [5.958]	19.640*** [6.341]	18.999*** [6.255]
Observations	646	646	646	643	114	114	114

Standard errors in brackets

Table A.6 : Tobit on Labour Income of Those Working 15 hours and More

	With and without Government Loans				With a Government Loans		
University	17.36 [66.679]	36.729 [66.288]	69.263 [66.141]	40.398 [67.732]	-102.673 [124.420]	-122.88 [127.808]	-82.562 [123.745]
Female	-122.867** [61.839]	-134.068** [61.343]	-102.467* [61.589]	-137.139** [62.146]	-201.356* [113.376]	-201.839* [116.873]	-200.005* [114.239]
PARENTAL EDUCATION (High school)							
Less than high school	-12.935 [142.284]	-14.39 [140.949]	10.115 [139.837]	-22.34 [142.965]	354.006 [214.943]	304.339 [223.757]	312.258 [217.022]
Some or completed college	31.195 [88.666]	18.591 [87.909]	46.326 [87.346]	25.251 [88.415]	179.293 [145.756]	152.829 [146.644]	111.669 [146.496]
Some or completed university	-177.642* [92.589]	-207.478** [92.121]	-140.166 [92.789]	-183.732** [92.683]	169.85 [165.852]	145.459 [168.569]	109.753 [166.869]
Mother only	-29.169 [78.239]	-23.258 [77.524]	1.193 [77.325]	-25.613 [78.844]	-13.193 [126.194]	-10.044 [130.170]	38.799 [128.568]
REGION (Ontario)							
Atlantic	-385.110*** [133.159]	-331.739** [132.800]	-348.248*** [131.414]	-355.264*** [134.098]	-135.687 [173.288]	-126.578 [175.239]	-70.536 [174.814]
Québec	2.348 [77.469]	24.345 [77.003]	22.997 [77.321]	-0.013 [78.975]	10.783 [137.117]	8.782 [143.096]	59.186 [150.853]
Prairies	117.907 [97.211]	137.922 [96.471]	111.821 [96.245]	134.701 [98.000]	532.688*** [165.717]	607.683*** [181.110]	736.667*** [186.515]
BC and Territories	184.807* [107.964]	212.990** [107.258]	187.069* [106.567]	210.997* [108.496]	80.64 [177.939]	114.995 [185.313]	159.242 [186.133]
Immigrant	-166.428 [118.959]	-132.215 [118.253]	-172.567 [118.037]	-166.029 [119.675]	-139.315 [186.345]	-131.609 [189.322]	-78.791 [188.324]
Parents saved money for PSE			16.55 [65.878]	-6.583 [65.363]		78.866 [121.287]	
Wanted more government loans			69.061 [144.830]	-178.751 [118.789]		-27.525 [115.002]	-50.801 [115.401]
BORROWED MONEY FROM...							
Government		-289.133*** [83.198]	-352.068*** [118.242]				
Private			-12.83 [81.244]			49.067 [129.897]	
Parents			-43.659 [84.550]			75.226 [197.353]	
Others			-147.039 [211.111]			-546.003 [432.071]	
Used parental savings			-240.899*** [64.400]			11.146 [116.749]	
AMOUNT OF BORROWINGS (\$/month)							
Government				-0.138 [0.148]			
Private				0.057 [0.112]			0.269 [0.186]
Parents				0.116 [0.215]			-0.806 [0.922]
Others				-0.177 [0.587]			-3.160* [1.772]
Amount of parent savings (\$/month)				-0.085 [0.104]			-0.019 [0.172]
Constant	948.562*** [114.334]	972.921*** [113.477]	1,042.204*** [119.711]	968.526*** [120.752]	531.510** [241.569]	504.608* [268.265]	473.904* [268.443]
Observations	635	635	635	635	114	114	114

Standard errors in brackets

Table B.1: Regressions on loans

	Ever PSE			
	All		At home	
	Any PSE	University	Any PSE	University
Female	0.039 [0.024]	-0.024 [0.035]	0.018 [0.027]	-0.017 [0.042]
Parents saved money for PSE	-0.176*** [0.025]	-0.202*** [0.035]	-0.192*** [0.030]	-0.238*** [0.043]
PARENTAL EDUCATION (High school)				
Less than high school	-0.005 [0.049]	0.004 [0.078]	-0.047 [0.068]	-0.034 [0.103]
Some or completed college	-0.006 [0.034]	-0.036 [0.056]	0.022 [0.041]	-0.037 [0.071]
Some or completed university	-0.077** [0.035]	-0.161*** [0.053]	-0.041 [0.042]	-0.126* [0.069]
Mother only	0.042 [0.031]	0.059 [0.045]	0.009 [0.038]	0.097* [0.057]
REGION (Ontario)				
Atlantic	0.262*** [0.034]	0.159*** [0.048]	0.226*** [0.041]	0.181*** [0.054]
Québec	-0.007 [0.034]	0.005 [0.058]	-0.055 [0.044]	-0.044 [0.078]
Prairies	-0.027 [0.033]	-0.061 [0.046]	-0.055 [0.039]	-0.080* [0.048]
BC and Territories	-0.015 [0.040]	-0.03 [0.054]	-0.066 [0.046]	-0.088 [0.061]
Immigrant	0.122** [0.057]	0.208*** [0.072]	0.187*** [0.067]	0.251*** [0.088]
FAMILY INCOME (\$50,000 to \$75,000)				
(For those living at home only)				
Less than \$25,000			0.101** [0.046]	0.057 [0.071]
\$25,000 to \$50,000			0.152*** [0.043]	0.180*** [0.064]
\$75,000 to \$100,000			0.018 [0.042]	0.018 [0.063]
\$100,000 and more			-0.118*** [0.042]	-0.104* [0.062]
Constant	0.335*** [0.047]	0.436*** [0.072]	0.317*** [0.061]	0.440*** [0.100]
Observations	2696	1231	1519	753
R-squared	0.122	0.183	0.179	0.231

Robust standard errors in brackets

The models also include age.

* significant at 10%; ** significant at 5%; *** significant at 1%