

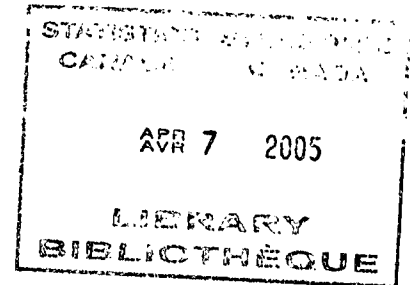
**STUDENT LOANS: EMPIRICAL  
EVIDENCE AND POLICY IMPLICATIONS**

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## **STUDENT LOANS: EMPIRICAL EVIDENCE AND POLICY IMPLICATIONS**

This paper has two goals. First, it summarizes the results of an empirical investigation of borrowing and repayment patterns of four recent cohorts of post-secondary graduates, thus updating and extending previous work by the author. Secondly, it addresses a number of related policy issues, including i) the need for further research to generate the information needed to fully evaluate the student loan system, ii) the advantages of extending the assistance available for those facing problems with their debt burdens in the post-schooling period, iii) the need to increase borrowing limits, iii) the efficiency and equity advantages of providing assistance to post-secondary students through loans rather than the grants which many have been calling for, and iii) a proposal for revitalising the cash-strapped post-secondary system with infusions from both federal and provincial governments and students themselves of equal parts, the latter facilitated by the appropriate changes in the loan system (higher limits and more support for those who run into trouble with repayment).

The paper should, therefore, be of interest to those directly interested in the economic situation of students and access to the post-secondary system; to those more narrowly interested in the performance of the CSLP and the related provincial programmes, including those with an eye to their further reform; and to those interested in the future of our colleges and universities at a time when it so badly needs more resources.



## **I. INTRODUCTION**

The Canadian Student Loan Program (CSLP) has been the primary vehicle for delivering direct financial assistance to post-secondary students in Canada since its inception in 1964. Yet while it has helped millions of Canadians pursue higher education and thereby achieve major career and life goals, it has been the subject of various criticisms: that it is too easy for some students to get support while not enough is provided to others, that the system is not flexible enough with respect to repayment arrangements, that default rates are too high, that it should be replaced with an income contingent repayment system, and so on.<sup>1</sup>

In more recent years, one important set of concerns has focussed on levels of borrowing and the associated debt loads, as recent post-secondary students appear to have been borrowing more, paying off their debts more slowly, and defaulting in larger numbers than before. This has resulted in concerns regarding not only the hardship faced by students in the post-schooling payback period, but also access to the post-secondary system, as it is felt that individuals have been foregoing, delaying, or slowing down their studies due to the rising debt burdens; that other individuals' choices regarding field of study, which particular institution to attend, part-time versus full-time enrolment, outside work during school, and going on to graduate school have also been affected; and that these effects are hitting young people from lower socio-economic backgrounds the hardest, rendering access to the Canadian post-secondary education system increasingly related to family background rather than individuals' ability to do the work and desire to make a go of it.

Rising debt levels are thus related to important efficiency and equity issues: i) access to post-secondary education is perhaps being increasingly limited just when a highly skilled labour force is of unprecedented importance to the country's productivity and international competitiveness in the "New Knowledge/Global Economy", ii) the opportunity to pursue post-secondary studies seems to be increasingly drawn along class lines at a time when the value of a post-secondary education appears to be greater than ever, as college and university graduates have been "holding their own" while the fortunes of those with less schooling have been in steady decline (Finnie [1999]).

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<sup>1</sup> See AUCC [1999], Cameron [1995], Cook and Stager [1969], Duncan [1993], Kesselman [1993], Stager [1985, 1989], Stager and Derlach [1992], Students' union of Nova Scotia [1994], West [1993].



These concerns are, furthermore, occurring in the face of some important recent changes in the CSLP and the related provincial programmes. CSLP lending limits have been raised, need assessment procedures have been revised, interest relief programmes have been extended, debt reduction has been introduced, the primary responsibility for loan defaults passed from the government to the banks from 1995 to 2000 but new arrangements are just now being negotiated, provincial grant systems have been effectively replaced with loans – and all this has occurred as tuition fees have been steadily rising.<sup>2</sup> Furthermore, additional changes are afoot, including federal-provincial negotiations aimed at standardizing students' access to the CSLP and implementing assessment procedures to evaluate these programmes along various dimensions.

This paper has two goals. First, it summarizes the results of an empirical investigation of borrowing and repayment patterns of four recent cohorts of post-secondary graduates, thus updating and extending previous work by the author (Finnie [1994], Finnie and Garneau [1996a, b], Finnie and Schwartz [1996, 2000]). Secondly, it addresses a number of related policy issues, including i) the need for further research to generate the information needed to fully evaluate the student loan system, ii) the advantages of extending the assistance available for those facing problems with their debt burdens in the post-schooling period, iii) the need to increase borrowing limits, iii) the efficiency and equity advantages of providing assistance to post-secondary students through loans rather than the grants which many have been calling for, and iii) a proposal for revitalising the cash-strapped post-secondary system with infusions from both federal and provincial governments and students themselves of equal parts, the latter facilitated to a significant degree by the appropriate changes in the loan system (higher limits and more support for those who run into trouble with repayment) to make the increased tuition feasible for those in need.

The paper should, therefore, be of interest to those directly interested in the economic situation of students and access to the post-secondary system; to those more narrowly interested in the performance of the CSLP and the related provincial programmes, including those with an eye to their further reform; and to those interested in the future of our colleges and universities at a time when it so

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<sup>2</sup> Finnie and Schwartz [1996, 2000].





badly needs more resources.

## **II. THE DATA**<sup>3</sup>

This research employs four waves of the National Graduates Survey (NGS) databases, which represent those who successfully completed their programmes at Canadian universities and colleges in 1982, 1986, 1990, and 1995. For each cohort, information was gathered during interviews carried out two and five years after graduation. The analysis presented here is based on the first surveys for each cohort which include the pertinent information on student loans.

These databases, developed by Statistics Canada in partnership with Human Resources Development Canada, are well suited to the analysis for a number of reasons. First, the large size of the NGS files (approximately 30,000 university and college graduates per survey), facilitates the detailed analysis presented here (including the breakdown of all results by sex and degree level), while their representative nature allows the results to be generalised to the population of graduates at large.<sup>4</sup> Second, the availability of data for four different cohorts permits the more enduring patterns to be separated from those which have been shifting over time, while also bringing the record as up to date as possible. Third, the two-years-after-graduation timing of the interviews provides a perspective of the relevant outcomes (*e.g.*, the amount of debt paid down) which is precisely situated at a specific point in time relative to graduation, thus providing a coherent view of the results among those included in the surveys. Finally, the databases contain a selection of variables related to student borrowing, including the amounts borrowed, the debt remaining two years after graduation, and self-identified problems with making loan repayments which can be linked to the educational, labour market, and socio-demographic information available on the files, thus making the present analysis possible.

The major set of sample restrictions were imposed to eliminate graduates who had not actually completed their education at the time they finished the programmes in question so as to have a clearly

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<sup>3</sup> The material in this section and the next is covered in more detail in Finnie [2000c].

<sup>4</sup> The NGS databases are based on a stratified sampling scheme (by province, level of education, and field of study), with all results reported below reflecting the appropriate sample weights (see Finnie [2000a] for further



defined framework of analysis in which students are captured at this precise – and critical – point in the school-to-work transition: that is, we focus on total accumulated borrowing by the end of the individual's schooling and payback rates in the post-schooling period. Graduates with the following characteristics were therefore dropped from the analysis: those who obtained an additional “major” diploma by the first interview, part-time workers who cited school as the reason for their only partial involvement in the labour market, those not currently (as of the first interview) looking for work due to school, and those currently enrolled in a (major) diploma programme.<sup>5, 6</sup> The key loan variables were then verified for consistency and a small number of records were either dropped or corrected. Finally, observations were not included in specific tables when the required information was missing or deemed likely erroneous.

### **III. THE EMPIRICAL FINDINGS**

#### **III.1 Levels of Borrowing**

Figure 1 shows the levels of borrowing from student loan programmes as of graduation by degree level, sex, and cohort.<sup>7</sup> Two sets of numbers are presented: the proportion of graduates with loans (“incidence”), and the mean amount owed among those who borrowed (given throughout in constant 1997 dollars). These amounts reflect *total* borrowing from governments (including the provinces), not just through the federal programme (CSLP), reflecting the information given in the NGS databases.

For both College and Bachelor's graduates, borrowing generally grew across the four cohorts. At the College level, the incidence of borrowing rose from 1982 to 1986, then remained approximately stable to finish at rates of .41 and .44 for men and women of the class of 1995. The mean levels of borrowing among College graduates with loans, however, rose much more significantly, from just under just

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details).

<sup>5</sup> Students like the ones deleted here are included in the samples at the point they ultimately completed their studies.

<sup>6</sup> This latter piece of information was not available for the 1982 graduates. Instead, those enrolled full-time in either January or October 1983 were deleted (this information was in turn missing from the other surveys).

<sup>7</sup> See Finnie [2000c] for tables of the results shown in the figures presented here as well as other more detailed sets of findings.



under \$4,000 for the 1982 cohort to around \$9,500 for the class of 1995 (males and females both). Among Bachelor's graduates, the incidence of borrowing rose more moderately, especially for men, to finish at rates of .47 and .45 (versus .45 and .39 for the earliest cohort), but mean amounts again increased sharply, growing from around the \$6,000 mark for the 1982 cohort to \$13,390 and \$13,840 for the most recent group of men and women respectively.

Turning to upper level graduates, the incidence of finishing with a student loan at the Master's level increased moderately, from rates of .32 (men) and .31 (women) in 1982 to .37 and .35 in 1995, while the mean amounts borrowed again increased more sharply, from around the \$6,500 mark to \$13,250 and \$14,040 for men and women. Ph.D. men were an exception to the other groups in that they actually had significant drops in the incidence of borrowing from 1982 through 1995, finishing at a rate of just .23, by far the lowest of all sex-education groups, while for women the borrowing rate rose from a very low level of .22 to .29 over this period. Average amounts borrowed rose substantially for both groups, from just over \$5,000 to \$12,450 and \$13,130 for males and females in 1995.

To measure borrowing in a manner which simultaneously reflects the changes in the incidence of borrowing and the average amounts borrowed, Figure 2 shows the incidence of borrowing times the mean amount borrowed for each group, thus effectively representing average borrowing over *all* graduates (including non-borrowers). The trends thus reflect the mostly moderate increases in the incidence of borrowing in conjunction with the uniformly substantial rises in mean amounts borrowed, with overall borrowing rising from a little over \$1,000 to around \$4,000 at the College level (males and females), from between \$2,000 and \$3,000 to over \$6,000 among Bachelor's graduates, from about \$2,000 to a little under \$5,000 for Master's finishers, from a little under \$2,000 to just below \$3,000 for men at the Ph.D. level,, and from just beyond the \$1,000 level to almost \$4,000 for their female classmates.

Do these levels represent a lot of borrowing? To some observers, averages around the \$13,000 level (lower for College graduates) for from one-quarter to just under one-half of the post-secondary graduate population might not seem excessive - equivalent, for example, to the price of one of the least expensive new cars on the market (which marketers put a good deal of energy into flogging to



such recent graduates) in the case of those holding loans, and obviously less than half this when averaged over all graduates taken together (*i.e.*, including those without loans). Such debt levels might seem especially reasonable when one considers the benefits – which have been steadily rising over this period – of a post-secondary diploma and the fact that higher education is highly subsidized in any event. Others, might, however, judge these amounts to be large, be particularly concerned with the general increases over time and those individuals with above average debt loads (see Finnie [2000c] for these distributions), and worry how these burdens might be dissuading qualified individuals from continuing with their post-secondary studies – especially those from lower income families.

### **III.2 The Burden of Student Loans**

One simple measure of the burden which this borrowing has represented is to calculate debt-to-earnings ratios, defined here as the amount owed to student loan programmes at graduation divided by the annual rate of pay in the job held at the first interview. These ratios can, by definition, be calculated only for those with jobs as of the first interview. Median debt-to-earnings ratios (means are overly sensitive to outliers) by degree level, sex, and cohort are shown in Figure 3.

Among university graduates, debt burdens decline substantially with degree level, especially for women, primarily due to the underlying earnings patterns (Finnie [1999]). College graduates' burdens have been roughly similar to those at the Master's level – the former characterised by less borrowing but substantially lower earnings as well. For all groups, debt burdens generally rose over time, driven almost entirely by the increases in borrowing levels reported above, since average earnings were relatively steady over this period – at least over the first three cohorts. Unfortunately, comparisons of the trends right through the 1995 cohort are confounded by a change in the earnings measure for the latest group – and one which would appear to have affected women's measured earnings more than men's.<sup>8</sup> Debt burdens have been generally higher for women than men, except at the Ph.D. level, as the similar borrowing levels by sex translate into higher burdens for women due to their generally lower

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<sup>8</sup> In the earlier cohorts, individuals were asked to report their earnings in terms of what they would receive were the job to last the full year whether or not that was the case. In 1997 (the 1995 cohort), individuals were asked to give their rate of pay in the manner they preferred (hourly, weekly, monthly, annually), with Statistics Canada then translating these amounts into annual values based on usual hours and weeks of work where appropriate.





earnings.

### **III.3 Payback Rates**

Average payback rates by the first interview, two years after graduation, are shown in Figure 4.<sup>9</sup> College and Bachelor's students graduates had paid back an average of two-fifths of the debt levels they had at graduation, the Master's group had repaid a little over one-half, and Ph.D. graduates slightly greater amounts. In virtually all cases, however, there were clear declines in the amounts which had been paid back for each succeeding cohort. The declines were, furthermore, mostly greater for women than men, and in some cases the changes were quite substantial (*e.g.*, from .56 to .38 percent for College Women and from .72 to .57 for Ph.D. Women).

These findings thus point to more recent graduates having significantly greater difficulty in repaying their student loans. They also reflect back on the nature of the increased borrowing over this period, suggesting that the increased loans were in fact generally "real", and not just held for the investment opportunities represented by the absence of any interest charged on student loans while the individual is in school (in which cases we would presumably expect such loans to be promptly paid back at graduation).

Interestingly, the gender differences in repayment rates do not generally correspond to their relative ability to pay as measured above. For the 1995 cohort, for example, female graduates' payback rates were either slightly greater than males' (at the Ph.D. level), equal (Master's), or at most 4 points lower (College and Bachelor's), while their debt-to-earnings ratios were previously seen to be mostly about 10 percent higher (except in the case of Ph.D. graduates, where they were slightly lower). In short, women have been generally repaying their loans at relatively similar or higher rates than men even though their borrowing seems to have represented a greater burden when related to their (lower) earnings levels.<sup>10</sup>

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<sup>9</sup> This information was not gathered for the 1982 graduates.

<sup>10</sup> Payback rates weighted by initial loan level are reported in Finnie [2000c]. In the majority of cases the weighted repayment rates are lower than the unweighted rates, indicating that those with less borrowing have typically been paying back their loans more quickly than those with more loans, but the differences are not all that great and the



### **III.4 Difficulties With Repayment**

The NGS databases do not include any information on student loan default, but for the 1990 and 1995 cohorts they include the responses to a simple question which asked individuals who still had outstanding loans as of the first interview if they had been encountering “difficulties” with repayment.<sup>11</sup> The results (Figure 5), indicate that among College, Bachelor’s, and Master’s graduates, 29-33 percent of those still owing on their loans reported such problems, while the rates were 21 and 23 percent for the male and female graduates at the Ph.D. level. In each case except for Ph.D. women, these rates were greater than those which held in 1990, in many cases rather substantially so.

These rates should, however, be placed in a broader context. Given that only between one-quarter and just under one-half of all graduates had loans upon graduation and 20 to 40 percent of those borrowers had repaid their debt entirely by the first interview (Finnie [2000c]), the proportion of all post-secondary graduates who reported repayment difficulties was 14 and 15 percent for College level males and females, 12 and 14 percent for those at the Bachelor’s level, 12 and 14 percent among Master’s graduates, and 11 and 10 percent for men and women at the Ph.D. level. These rates are considerably higher than those which held for the 1990 cohort, but are still fairly low – and probably much lower than many readers would have thought.

Female graduates generally had greater incidences of repayment problems than did men, which is consistent with the debt-to-earnings ratios seen earlier, but the gender differences are again not as great as the debt-to-earnings ratios might have suggested – as was the case with the repayment rates themselves. It is again not clear how to interpret these findings, but they remain interesting in terms of pointing to gender differences in behaviour and/or attitudes with respect to student debt, with potential implications beyond this.

The rates of difficulty were roughly similar for College graduates and those at the Bachelor’s and Master’s university levels – despite the differences in earnings levels and debt-to-earnings levels across

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opposite pattern holds for certain groups. The gender patterns prevail as in the unweighted calculations.

<sup>11</sup> See Finnie [2000c] for a discussion of the merits of such a self-assessment measure.



these groups. The lower rate of difficulty at the Ph.D. level is, on the other hand, hardly surprising given their higher earnings and lower debt levels.

It is particularly pertinent to the design of the government loan systems to know the characteristics of graduates who have been having problems with the repayment of their loans so that any appropriate assistance can be as precisely and efficiently targeted as possible. In this context, Table 1 reports the relationship between loan problems and labour market status (again for those who still owed money as of the first interview) for the 1990 and 1995 cohorts. The percentage of borrowers with full-time jobs who had repayment problems in the most recent cohort varies from 16 to 30 percent – fairly low, but by no means negligible and substantially higher than the earlier group. For part-time workers, the rates are higher, sometimes very much so (as high as 60 percent for Master's level females). Thus, while repayment problems have – not surprisingly – been most common for the unemployed, afflicting as many as two-thirds of this group, these results would suggest that relief for those with jobs but stuck at low earnings levels should probably accompany any assistance targeted on those with no jobs at all. In fact, recent changes in the CSLP have been doing precisely this.

It is also interesting to look at the incidence of repayment problems by income level, as shown in Table 2. These results show the expected general declines in the incidence of repayment problems at higher income levels. There are, however, fewer clear cut-points where problems are much more common for each sex-education group in the most recent cohort than for the 1990 graduates, and those which can be identified vary by education level. The precise design of loan assistance programmes based on income levels would, therefore, appear to offer something of a challenge to programme designers and any evaluation of such initiatives might have to accept that the benefits of such initiatives might not be as precisely targeted as might be wished for. On the other hand, it could be that the earnings measure available in the pre-1997 data (see above) was better at capturing the underlying ability to pay than the more recent one, suggesting that something of its type could be used for targeting assistance.

### **III.5 Summary of the Findings, Some Caveats, and More Recent Trends**

The major empirical findings may be summarized as follow:

- Student borrowing generally rose over the period covered by the data (1982, 1986, 1990, and



1995 graduates), such that for the last group, from one-quarter to just under one-half of all post-secondary graduates held student loans (the rates varying by sex-education group), these averaging around \$9,500 for College graduates and \$12,500 to \$14,000 at the Bachelor's, Master's, and Ph.D. university levels (1997 dollars).

- Average debt-to-earnings ratios decline with degree level among university graduates (Bachelor's, Master's, Ph.D.) while College graduates' lay in the middle range of these, but have uniformly risen over time.
- Average payback rates at two years following graduation declined over time, but ranged from 40 to 55 percent for the 1995 cohort.
- The incidence of self-reported repayment problems increased over time, and for the 1995 cohort varied between 21 and 33 percent of those who still owed money two years following graduation, the rates being generally (but not uniformly) lower at the higher degree levels. However, after taking into account the number of graduates with no loans at all and those who had paid their loans off completely, these figures indicate that just 10-15 percent of all post-secondary graduates in the most recent cohort reported difficulties with the repayment of their student loans – a perhaps surprisingly low number.
- Payback problems have been related to employment status, but are also found among those in part-time and even full-time jobs as well as the unemployed. Problems are also related to income levels.
- There have been relatively small gender differences in borrowing, greater differences in debt-to-earnings ratios (due to women's generally lower earnings levels), but perhaps rather surprisingly small differences in payback rates and reported payback problems between male and female graduates given those differences.

There are, however, a couple of very important caveats which need to be attached to these findings. First, these NGS data are limited to post-secondary students who successfully completed their programmes, and those who incurred loans but then dropped out of school might look quite different. In particular, while their borrowing levels are likely to be lower, they would generally not enjoy the higher earnings which post-secondary graduates typically enjoy and are thus likely to face greater problems in the payback years.





Secondly, the situation has presumably changed from the last set of graduates covered in this analysis, perhaps fairly significantly. For example, the 1994 increase in the lending limit from \$105 to \$165 has surely pushed borrowing levels up. If, for example, we (crudely) assume there has been a proportional increase in mean borrowing levels, this would point to average cumulative totals of about \$19,300 – rather than the approximately \$13,500 reported above – at the Bachelor's level among those who have faced these higher limits over their entire four years.<sup>12</sup> On the other hand, given that the eligibility criteria have not changed, there is no reason to assume that the proportion of graduates with loans has shifted. Applying the new estimated averages to the previously observed incidences (again at the Bachelor's level) results in estimates of just under \$9,000 when averaged across all graduates – still not a huge amount., but definitely higher than before and continuing the longer-term upward trends. Furthermore, provincial grant programmes were largely replaced with loans over this period (as discussed above), presumably driving borrowing levels up even further. On the other hand the Millennium Scholarships programme now provides up to \$3,000 of support for individuals in their first or second years which is meant to result in the substitution of grants for loans at the provincial level, thereby easing the pressures on borrowing.

Other factors of change are more related to payback. As mentioned above, under a 1995 agreement between the government and the participating financial institutions, the latter assumed the primary risk of default (which had not previously been the case) in return for a five percent premium paid up front to cover their liability at the overall level. This may have changed their treatment of student loans, perhaps making them more diligent in their management and more flexible in their payment arrangements, but there is no empirical evidence on this. At the same time, the CSLP has been expanding its aid to those experiencing problems with the repayment of their loans: interest relief was made available for those out of work or facing low earnings as well as the sick and disabled who were previously eligible, and debt forgiveness has been introduced on a limited scale (see below).

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<sup>12</sup> This number is arrived at by multiplying \$13,500 (approximately average borrowing among 1995 graduates) times 1.57 (the proportional increase in the maximum lending limit) and taking three-quarters of the resulting increase to allow for the fact that the 1995 graduates would have faced these greater limits for one of their four years. Actual increases might have been greater than this, especially given that tuition increases have been driving needs up significantly – or smaller, if students' borrowing needs are not generally as great at the margin (*i.e.*, they might have taken up the extra amounts offered at lower rates than before).



Additionally, there have been shifts in the labour markets faced by younger workers which have almost surely made things easier for many (especially those with the “right” diplomas), perhaps more difficult for others.

Overall, then, it might be expected that borrowing levels have increased, perhaps fairly substantially, since the 1995 graduates studied here, but that the true burden of a given level of debt may have decreased to the degree repayment schedules have become more flexible, the interest relief and debt reduction initiatives have proved effective, and labour market conditions have improved. In terms comparable to those used in the analysis reported above, borrowing levels have probably increased, debt-to-earnings ratios have likely risen as well, repayment rates would have changed, and at least some of those experiencing “difficulties” would have received succour. These are, however, only very rough conjectures, and it will of course be important to see what the actual data reveal as they become available.

#### **IV. POLICY IMPLICATIONS**

##### **IV.1 What the Findings Do and Don't Tell Us and the Need for More Research**

This analysis has revealed some useful findings regarding student borrowing. Borrowing from government loan programmes by post-secondary graduates has risen over time, but at least over the period covered by this analysis has not been as great as many may have thought. That said, debt burdens have risen and payback rates have fallen and there have been increases in the number of graduates who have experienced difficulties with their debt loads.

The analysis has, however, been unable to answer some of the most important questions regarding student borrowing, including those related to the very *raison d'être* of government loan programmes: to help provide access to the post-secondary education system for all those who merit the opportunity regardless of socio-economic background. It does not, for example, tell us the number of students that have actually been given the opportunity to pursue post-secondary studies through government loan programmes, since a simple counting of the number of graduates with loans is by no means an accurate measure of this critical performance indicator (*i.e.*, many of those who received loans might have



found other means to support themselves or simply got by with less). Nor does it tell us how many potential candidates have *not* been able to pursue their studies because borrowing limits have not been high enough or eligibility criteria too strict to provide the needed assistance. Finally, it doesn't tell us how many worthy and interested students have chosen not to pursue (or continue) their post-secondary studies because they were unwilling to take on the required debt loads (even though the loans were perhaps available).

The concept of "access" is, furthermore, a complex one, involving not just whether an individual goes to college or university or not, but also various related outcomes which could also depend on the costs of the schooling and the role loans play in helping individuals meet their associated financial needs: the specific programme chosen, the field of study, the institution attended, whether study is part-time or – full-time and the often related decision regarding outside work, the decision to go on to graduate school, and so on. How much has the loan system opened up opportunities for needy students in these regards and to what degree has it fallen short and could do better? The answers to these questions are again not found here either.

Addressing these issues would require not only another research undertaking, but also one based on new and different data which allowed us to compare those who were pursuing their post-secondary studies versus those who were not and analyse the various underlying factors, including the role of student loan programmes. All the other outcomes just mentioned – institution, programme, discipline, part-time versus full-time, *etc.* – could be studied in a similar framework. Such information would allow the current system to be improved upon in terms of all of its basic parameters: borrowing eligibility rules, lending limits, assistance in the payback period.<sup>13</sup>

Also of great use would be a more up-to-date tracking of borrowing and accumulated debt on as

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<sup>13</sup> Statistics Canada is in the process of mounting a very elaborate survey which should be extremely rich in this respect: the "YITS" – Youth in Transition Survey. The YITS will follow a sample of adolescents through their formative/transitional years, thus allowing an analyst to relate who goes on to post-secondary education to underlying factors such as family background, earlier educational experiences, and other environmental and personal attributes, and (hopefully) the student loan system. In the meantime, Statistics Canada is planning a supplement to their standard Labour Force Survey which will attempt to provide at least some information on the access issue.



current and thorough a basis as possible.<sup>14</sup> Administrative data would seem to offer particularly interesting opportunities in this regard. The federal-provincial Harmonization agreement currently being negotiated between the provinces and the CSLP could, for example, lead to some interesting initiatives in this regard, with the draft forms of that agreement also calling for standardized evaluations of student aid programmes at the provincial and national levels.<sup>15</sup>

#### **IV.2 Changes in the Canada Student Loans Program: More Help for Those With Difficulty**

The analysis presented above suggests that whereas most graduates have been able to handle their government loans without too much difficulty, a smallish number have had problems and there has been a rise in such cases of late. Not surprisingly, such problems have been much more common among the un- or under-employed and those with relatively low post-graduation earnings. Recent expansions of the interest relief available to these groups (Finnie and Schwartz [1996]) should, therefore, be applauded, and further extensions are probably worth considering. These could take into account the results presented above, such as how graduates' self-reported repayment difficulties vary by income level, in order to fine-tune the eligibility rules for this kind of assistance.

Another even more recent development is the introduction of debt reduction – that is, forgiving at least part of the loan principal under certain conditions. Since 1998, individuals who have been receiving interest rate assistance for at least thirty months and who finished their studies at least five years previously have been eligible to apply for debt reduction of fifty cents on the dollar up to a maximum of \$10,000. The relief could, therefore, be fairly substantial, even as the requisite conditions reduce the “moral hazard” problem, meaning that individuals are not likely to adjust their behaviour in order to seek these benefits. In short, this initiative seems likely to provide helpful support to chronically debt-burdened individuals in an efficient manner and if evaluations are positive extensions might well be desirable.

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<sup>14</sup> CSLP administrators do not currently EVEN know how many individuals take out loans in a given year or for what amount. While they of course track the number and value of loan certificates issued, they are not informed by the institutions how many of those are actually exercised or the value of the loans thus obtained.

<sup>15</sup> One scenario would be for the provinces to organise their data in a standardized fashion, to send those data to a single place (Statistics Canada would be the natural choice), and to commission the appropriate research in a joint





The interest relief and debt relief programmes thus offer a significant amount of relief to graduates who encounter repayment problems after leaving school. In addition, though, they also provide a very important insurance element to student borrowing – and, *pari passu*, the cost of a post-secondary education. That is, individuals who expected to profit from a post-secondary education but who hesitated to go this route out of fear that they could be stuck with unmanageable debt loads if things don't work out might indeed go ahead if they knew that assistance would be there for those who needed it, thus cutting the risk of the undertaking.

This “insurance element” should, furthermore, be of most value to students from lower income families, since such individuals would presumably have greater concerns about taking on substantial levels of debt in order to finance their studies.<sup>16</sup> The interest relief and debt reduction programmes should, therefore, be considered as having very desirable properties on both efficiency and equity grounds: encouraging more able individuals to pursue their studies even when loan-financing is required, providing greater peace of mind to virtually all those who do borrow, and being of greatest assistance to those from lower-income families.<sup>17</sup>

Interestingly, these insurance elements take the Canadian student loan system part of the way towards providing one of the important elements (*i.e.*, the insurance component) which typically characterise “income contingent repayment” loan programmes – without the need to need to generally re-engineer the loan system to take that whole explicit form. Indeed, with the basic loan assistance structures in place, the system could be taken a considerable distance in this respect, effectively making payments a function of students’ debt levels and post-schooling incomes from the very beginning of the repayment

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manner.

<sup>16</sup> Such elevated concerns might stem, first, from a different subjective attitude towards debt based on a lack of family-level experience in successfully funding major investments out of borrowing. Secondly, the objective situations would often be different, as students from lower income families would not generally be able to count on as much financial support from their parents or others in the face of financial hardship (*i.e.*, an unexpectedly high debt burden) as those from higher income families.

<sup>17</sup> Certain more marginally able (or less confident) students who feared they might not make it through the programme – and thus be stuck with the debts, but not the benefits, of post-secondary studies – might be encouraged to attend in a similar manner. The relief available is, however, not so generous that those who had relatively little confidence of getting through would likely attend. That is, the efficiency properties of the relief programmes are such that they should only encourage reasonably “good” candidates to pursue their studies.



period to the degree wished.<sup>18</sup>

By reducing the effective burden of a given amount of debt, an enhanced loan relief system could also be an important instrument for shifting more of the costs of post-secondary education to students, a move which is often suggested on the grounds that the system is heavily subsidized even though the primary beneficiaries – college and university graduates – tend to come from higher income families and go on to higher incomes themselves, in large part precisely due to the benefits of that system. One related application of this principle is discussed below.<sup>19</sup>

### **IV.3 The Case for Raising Loan Limits**

Another implication of these findings is that loan limits should be raised, even if we do not know to exactly what levels. In some sense, this is a “no brainer”. The current limits were set in 1994 and costs have risen significantly since then, even considering just tuition rates alone (which have approximately doubled – increasing by something like \$1,500 – since the early nineties for the benchmark arts and letters programmes); if limits were appropriate then, they must be too low now. Furthermore, the evidence presented here shows that as limits were raised in the past, borrowing did in fact increase, thus indicating that students’ borrowing was supply constrained and that they wanted more loans when they could get them. Furthermore, the evidence on payback rates suggests that this additional borrowing was going to meet real needs, rather than representing short-term investments based on the interest-free nature of the loans while the individual is in school, since the greater borrowing was paid back more slowly (not immediately after graduation).

Raising limits should, furthermore, again assist those from lower income families the most due to their greater dependence on government loan programmes to finance their studies. Higher loan limits should, therefore, again help on both efficiency and equity grounds, giving qualified candidates the

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<sup>18</sup> See Finnie and Schwartz [1996] for an extended discussion of income contingent repayment systems and the ways in which the Canadian system has been (implicitly) evolving in this direction in recent years.

<sup>19</sup> Finnie and Schwartz [1996] include a discussion of the arguments for higher versus lower tuition fees (see especially Appendix B) as well as an elaboration of the income contingent repayment approach which is so often central to such debates.



chance to pursue their studies while providing the greatest support for those from relatively disadvantaged backgrounds.

#### **IV.4 An Important Policy Option: Why Grants are Better than Loans**

Provincial grants for post-secondary students were largely eliminated in the early 1990s, generally replaced with expanded loan programmes.<sup>20</sup> Many, including student groups (of course) and those concerned with access to the post-secondary system, have called for the reinstatement and expansion of grant programmes, but this is probably not the best way to spend the funds available for financial assistance, even in terms of increasing access for individuals from lower socio-economic backgrounds.

Grants obviously provide direct assistance to those who receive them, thus presumably allowing many recipients to pursue their studies and thereby increasing access to the post-secondary system for individuals from the lower income families upon who they are usually targeted. This is clearly a desirable outcome. Such assistance might, furthermore, also have important attitudinal effects by encouraging lower-income individuals to think more positively about attending college or university in the years leading up to their decisions to go or not in ways that loan programmes do not.

It is, however, inevitable that some grants go to those who do not really need the funds a great deal in the first place, since no selection criteria are perfect. Probably even more importantly, though, many other grants go to individuals who go on to do quite well after graduation and who would, therefore, be able to pay back loans which could been given in their stead. Grants thus represent a relatively blunt instrument for ensuring access to the post-secondary system and providing assistance to individuals while they are in school in comparison to an expanded loans system, especially one possessing further expanded "insurance" aspects of insurance and relief and debt reduction (as discussed above).

That is, a dollar spent on grants could instead be used to provide loans valued at several multiples of that amount since the long-term costs of a given amount of loanable funds are obviously much lower than those of money freely given (*i.e.*, the money is paid back in most cases). A given amount of loans

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<sup>20</sup> See Finnie and Schwartz [1996], Appendix A for details.



should thus provide more assistance to more students than an equal amount of grant money, even as a loan system with an extensive set of insurance attributes should make the aid go further and target any pure transfers on the more *truly* needy – individuals who faced high debt loads and/or low earnings levels in their post-schooling years. This is basically due to the fact that grants assess need in an *ex ante* fashion more focussed on family background (within the broad class of individuals who might be eligible for any such assistance), while a loan system with measures to help those facing more onerous debt burdens in the post-schooling period does it *ex post* and thus targets the aid on those individuals who need it more in a longer-term perspective.

Think of it this way: a good student from a lower income family who seemed likely to make it through college or university and then find a decent job might need relatively little “moral” encouragement to pursue his or her studies and would likely be able to pay any borrowed funds out of future earnings. A grant would, therefore, largely be a “waste” of those funds in efficiency terms as long as the individual was provided with enough funds in the form of a loan to attend, and would arguably represent a regressive transfer if that person did indeed go on to the anticipated higher earnings levels. Instead, better to use that money to help a greater number of deserving/needy students get into and through school, while helping those who really need it after leaving school and providing a hedge against the possibility of debt repayment problems for all borrowers. A well-designed loan system should thus serve both efficiency and equity goals better than a grant system.

On the other hand, perhaps the greatest danger to this policy option is that grants are cut without the money being channelled into more loans and more support for those who need it in the post-graduation years. Such a shift – in which the substitution of loans for grants was primarily a cost-cutting exercise rather the means of spending a given mount of aid funding in a better way – could clearly leave needier students worse off and reduce access in an important way. Intelligent and responsible policy making is the guarantee against this down-side scenario.

In the end, though, the issue is also an empirical one. *If* for example, students from lower income families stubbornly insist on behaving in a manner contrary to what economists suggest they should and thus don't see the benefits of a post-secondary education funded out of loans as clearly as one funded





out of grants (even though the differences should generally be quite small), or if the actual benefit/cost ratios of those undertakings do in fact change enough to deter individuals from pursuing their studies in a sufficiently large number of cases, then grants might in fact represent an important element of an overall student aid package. But we should hope this is not the case – and reason would seem to be on the side of the optimist in this case.<sup>21</sup>

#### **IV.5 A Social Contract to Revitalise the Canadian Post-Secondary System**

The Canadian post-secondary education system is in crisis. Government operating grants have declined sharply and substantially increased tuition fees have not offset these cuts. Meanwhile, enrolments have been rising and costs have continued to increase. The result has been a substantial decline in the quality of education, seen in innumerable forms: larger class sizes, an almost complete moratorium on the hiring of new – young, energetic, dynamic, cutting-edge – faculty, the replacement of regular professors by sessional lecturers and teaching assistants, the substitution of term papers and essay questions on exams with machine-readable assignments and tests, reductions in course offerings and programmes available, the required new buildings not being constructed, equipment running out of date and into disrepair, peeling paint and a general dowdiness...and on and on. The irony is that this deterioration is occurring at a time when there is a general agreement that college and university graduates are an absolutely critical element of the nation's human resources and are fundamental for us to compete in the new "Knowledge Based"/"Global" economy.

Furthermore, little is being done to remedy the situation, with creative ideas and real leadership, especially at the political level, not terribly abundant on this file – while each day's wait runs the system further down, incurring losses whose consequences will be suffered for many years to come: faculty departed and not coming back, students deprived of the programmes they want and need, graduates being stuck with lower quality education at a time when excellence is so critical, a general malaise which saps the morale of those committed to offering the best post-secondary education they can.

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<sup>21</sup> The reason that the loans versus grants issue has little effect on the benefit-cost ratio of an education is that that the greatest cost of a year of schooling is the opportunity cost of the foregone earnings, while the monetary benefits (the higher earnings due to the schooling) are of course unaffected.



I propose a Post-Secondary Education Revitalisation Social Contract (the “social contract” notion stemming from its drawing on contributions from all principal parties involved). It is expressed in the context of universities, but would be equally applicable at the College level. The basic idea is that everyone puts in (say) \$1,000 – students, provincial governments, the feds – the money to go straight to universities’ operating grants or otherwise directly into the educational front line. At current enrolment levels (somewhere in the 700,000 range) this would cost the federal government a little under three-quarters of a billion dollars – not an insufferably great sum, especially in these halcyon days of budget surpluses. The total provincial bill would be the same, obviously distributed according to the number of students across the various jurisdictions. Students would see an increase in their fees to the tune of the \$1,000 amount.

If this money were to go to straight into universities’ operating budgets, average spending per student would increase by somewhere around 25 percent from the current \$12,000-\$13,000 levels (although precise, well-defined spending estimates of this type are difficult to arrive at ) – a very substantial increase which could represent the cornerstone of the massive and extended revitalisation which is so badly needed.

Let’s start with the student perspective of the proposal. Students have been complaining that while tuition fees have risen significantly over the last decade (although they appear to just now be getting now back to the real levels of the 1960s and are still significantly lower than the levels which held in the years before that), the quality of education they have been paying for has been in decline: that is, they have been paying more for less as governments have been de-investing in the system. Offered the alternative scenario of an increase in tuition which comprised an ante which was matched twice over by public funds, thus resulting in a substantial increase in the quality of schooling, their attitude might well be much more positive. Students should not wish for a bargain basement educational system, and such an arrangement might be the ticket off the down escalator which they have been riding in this regard for the last ten to fifteen years.

One key additional element of this proposal, however – and the one linking it directly to this study – is that the loan system should take the proposed fee increases into account. Simple logic would suggest



increases in borrowing limits equal to the proposed \$1,000 tuition increases. Again, the analysis presented above suggests that debt levels have not, on average, been unmanageably high to date and an extra \$4,000 over a full undergraduate career – the absolute maximum for any particular individual and probably lower (perhaps considerably) in most cases – should not *in general* be unbearable. The initiative should, however, also ensure that there are associated increases in the funds pegged for loan relief for those who do in fact experience difficulties in the payback period as discussed above, as there will certainly be at least *some* increase in these.

As for the two levels of government, this proposal should seem like a similarly good deal: although they would be spending more money, it would be in an area of tremendous social value – as they all seem to agree when it is a matter of rhetoric – and in a context where each of the other parties (from each point of view) would be putting in twice that amount. The precise forms of those investments would, of course, need to be worked out and some of the related mechanics could be rather complicated. For example, how would the federal funds be provided in the context of post-secondary education being a provincial matter – even as the federal government currently provides funds in the form of block transfers and other funding targeted specifically on post-secondary spending (the granting agencies, the CSLP itself, the new Millennium Scholarship programme, *etc.*)? But surely these could be resolved – especially in the context of such a “win-win” proposition.

The proposition is clearly of a “back-of-an-envelope” type – and not even a very large envelope at that. The amounts could of course be adjusted, the mechanics are certainly to be worked out, and so on. But the basic idea seems worth considering. The basic health of our post-secondary system is at stake and something must be done or we will be paying the costs of the sharp and continuing disinvestments of the last decade or so for many years to come – with the difficulties and costs of revitalising the system steadily increasing the further we let it slide.



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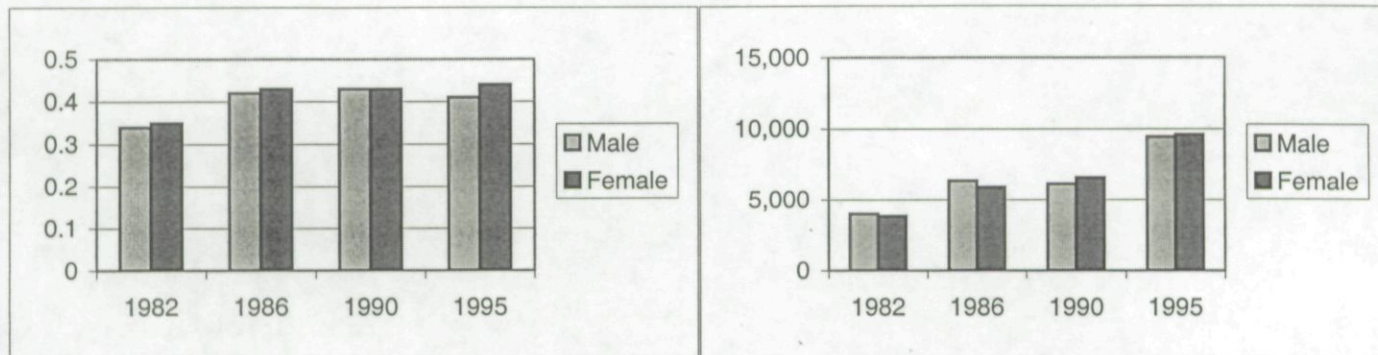
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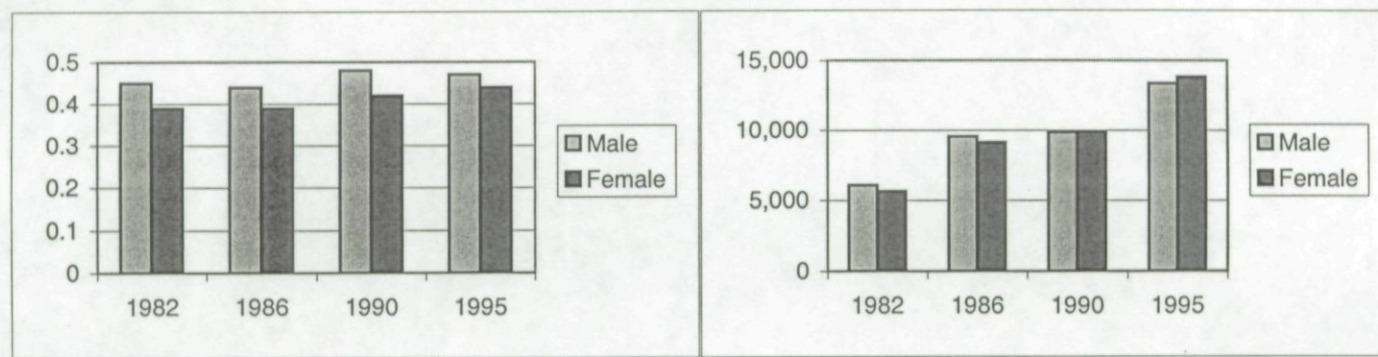


Figure 1: Incidence of Borrowing and Mean Amounts

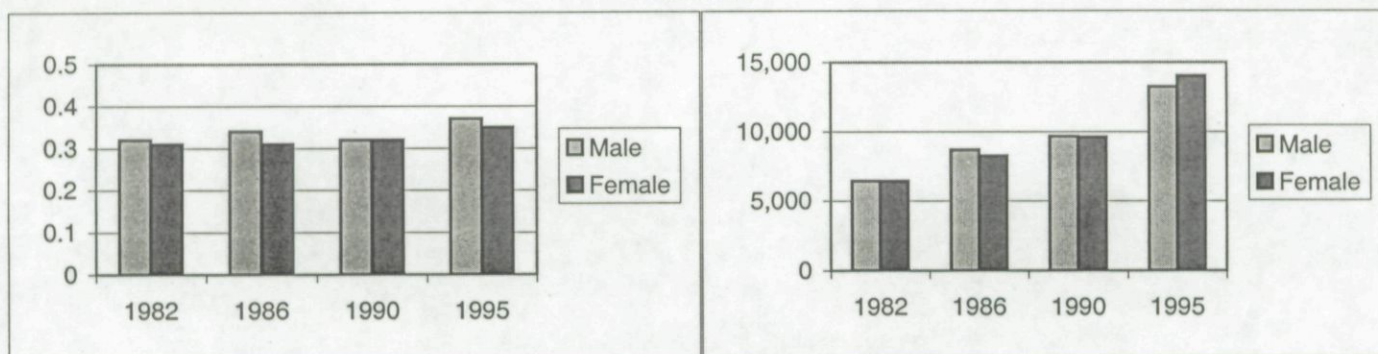
College



Bachelor's



Master's



Doctorate's

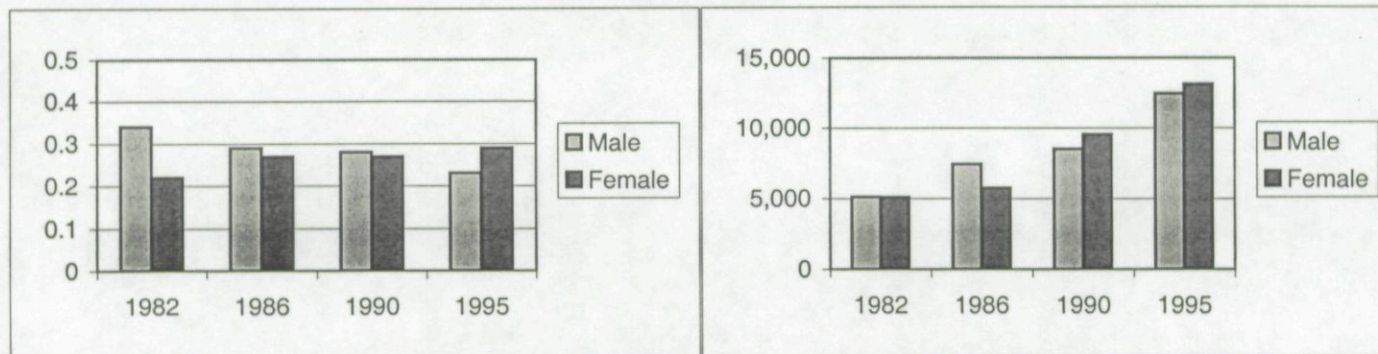
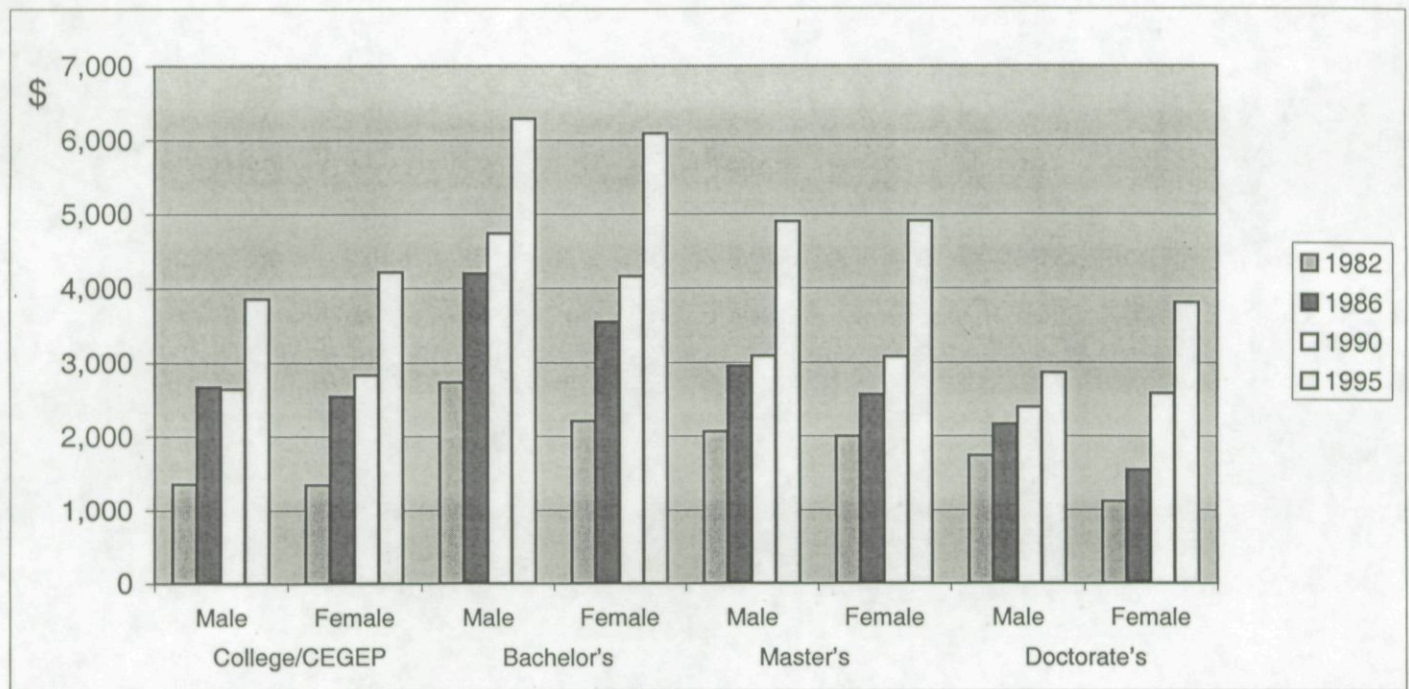




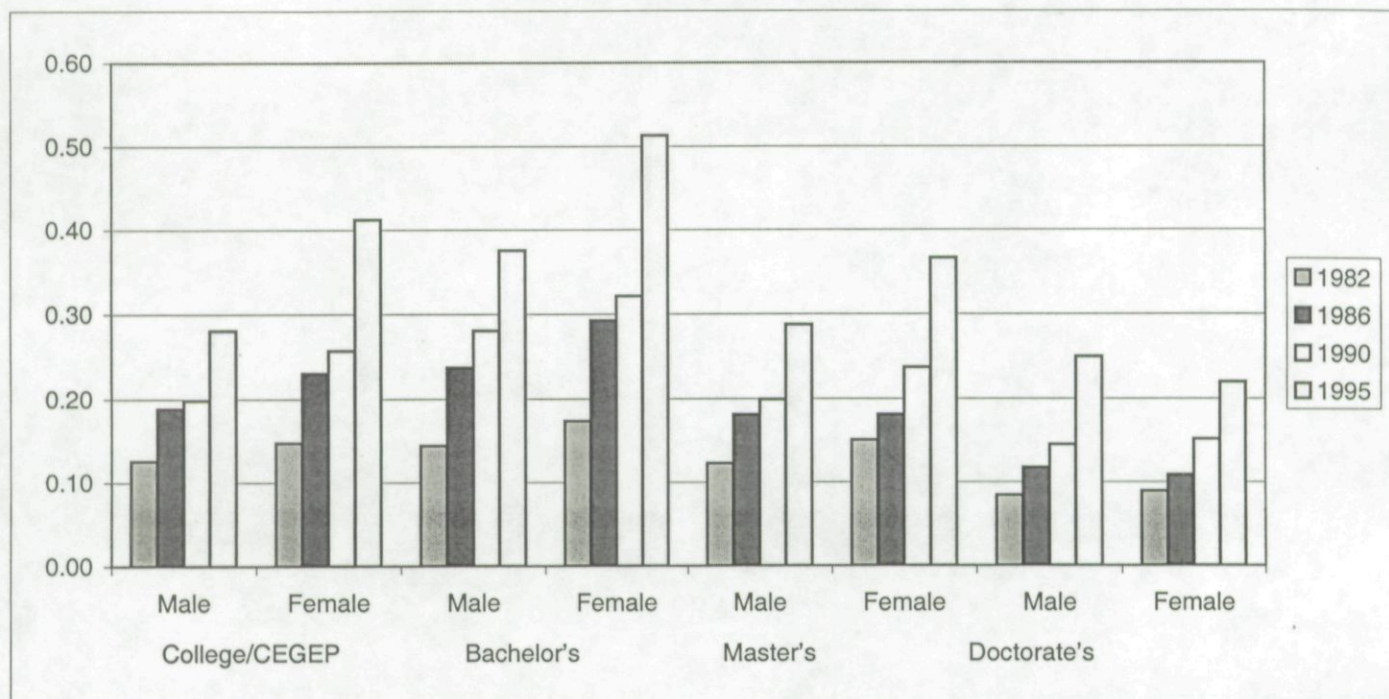
Figure 2: Overall Borrowing - Incidence Times Mean Amount







**Figure 3: Median Debt-to-Earnings Ratios\***



\* Due to a change in the earnings measure in the National Graduate Survey, the 1995 figures are not directly comparable to those of previous cohorts.





Figure 4: Proportion of Debt Repaid Two Years After Graduation

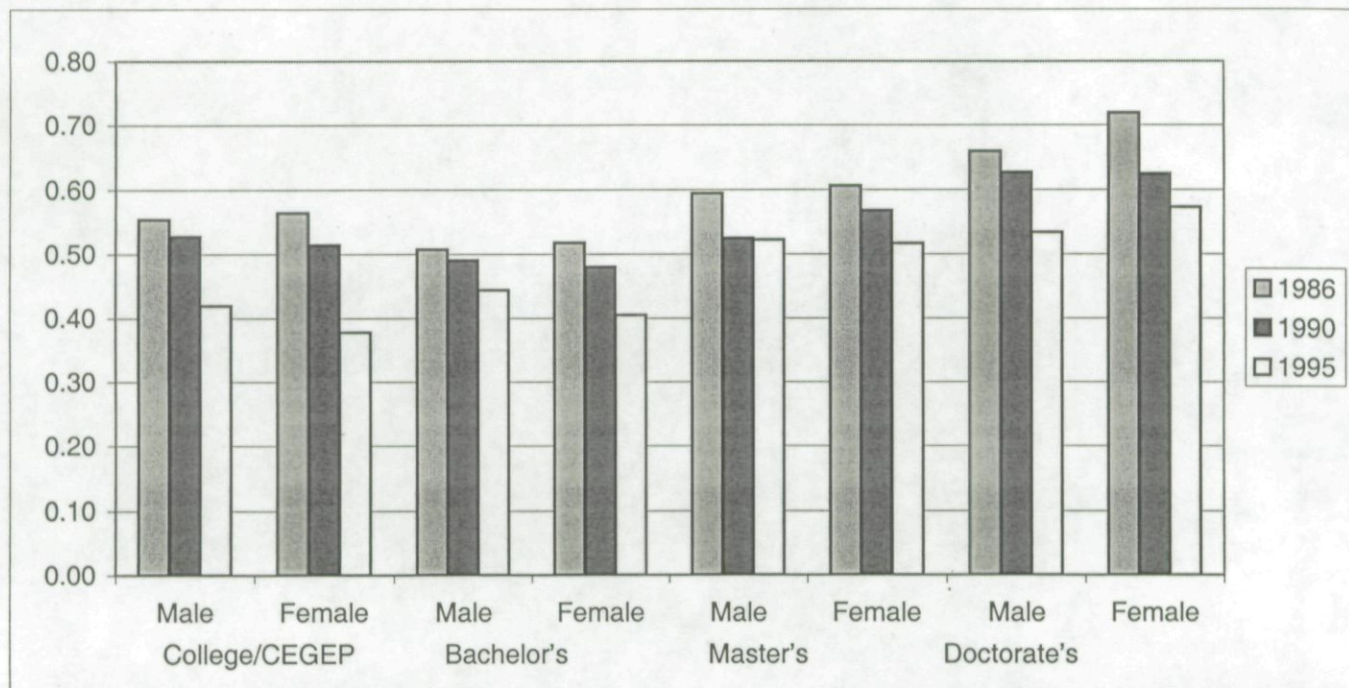
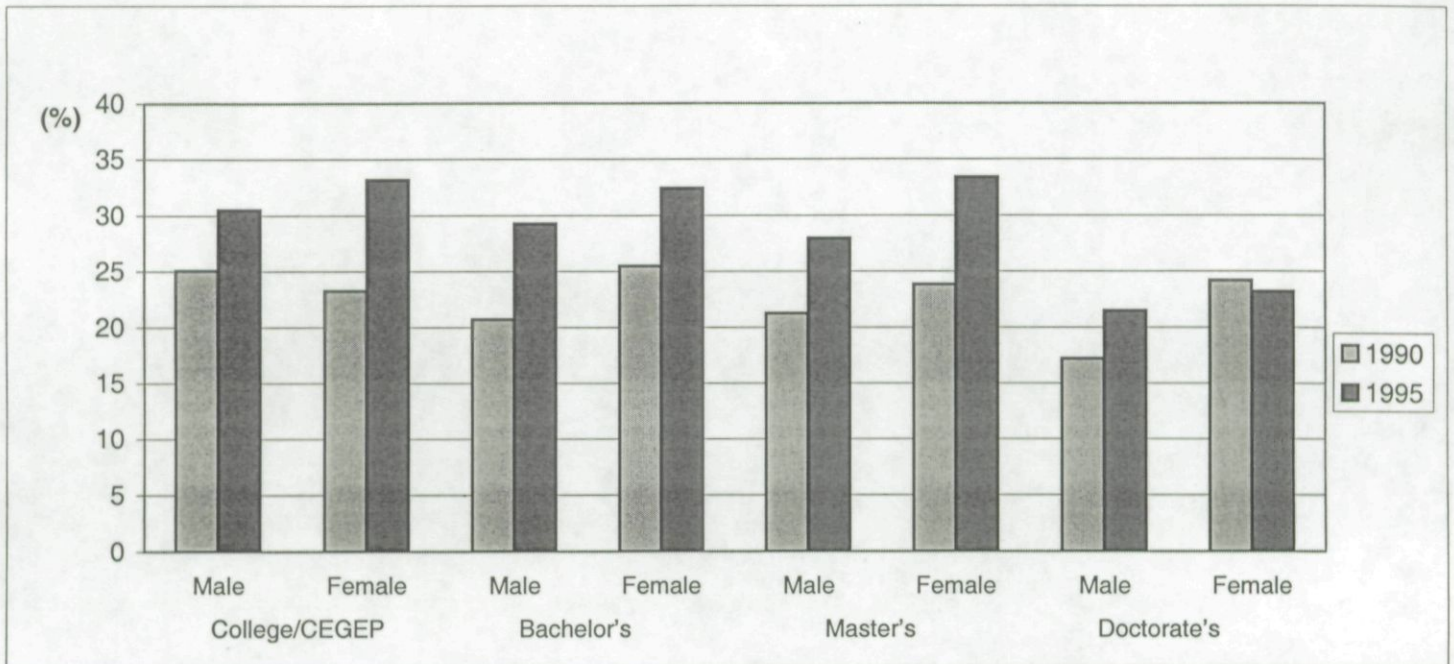




Figure 5: Incidence of Difficulty With Repayment





**Table 1: Incidence of Repayment Difficulty by Labor Force Status**

**1995 Graduates**

Education Group	Sex	1995			
		Full-Time	Part-Time	UN	NLF
College/CEGEP	Male	0.27	0.28	0.66	-
	Female	0.29	0.38	0.62	0.36
Bachelor's	Male	0.27	0.42	0.43	-
	Female	0.30	0.35	0.48	0.32
Master's	Male	0.25	0.40	-	-
	Female	0.24	0.60	0.67	-
Doctorate	Male	0.18	-	-	-
	Female	0.16	-	-	-

**1990 Graduates**

Education Group	Sex	1990			
		Full-Time	Part-Time	UN	NLF
College/CEGEP	Male	0.20	0.44	0.47	-
	Female	0.18	0.38	0.35	0.52
Bachelor's	Male	0.18	0.30	0.35	-
	Female	0.22	0.29	0.43	0.43
Master's	Male	0.16	0.27	0.59	-
	Female	0.20	0.35	0.35	-
Doctorate	Male	0.13	-	-	-
	Female	0.19	-	-	-



**Table 2: Incidence of Repayment Difficulty by Income Class**

**1995 Graduates**

Education Group	Sex	Less Than \$15,000	\$15,000 to \$20,000	\$20,000 to \$25,000	\$25,000 to \$30,000	\$30,000 to \$35,000	\$35,000 to \$45,000	\$45,000 to \$60,000	\$60,000 and more
College/CEGEP	Male	0.52	0.32	0.22	0.24	0.22	0.13	0.21	-
	Female	0.46	0.26	0.21	0.20	0.28	0.32	-	-
Bachelor's	Male	0.49	0.31	0.26	0.41	0.26	0.11	0.06	-
	Female	0.46	0.45	0.27	0.30	0.17	0.22	0.10	-
Master's	Male	0.45	0.57	0.47	0.31	0.33	0.14	0.06	0.02
	Female	0.61	0.48	0.42	0.41	0.35	0.14	0.16	-
Doctorate	Male	-	-	-	-	-	0.20	0.13	-
	Female	-	-	-	-	-	-	-	-

**1990 Graduates**

Education Group	Sex	Less Than \$15,000	\$15,000 to \$20,000	\$20,000 to \$25,000	\$25,000 to \$30,000	\$30,000 to \$35,000	\$35,000 to \$45,000	\$45,000 to \$60,000	\$60,000 and more
College/CEGEP	Male	0.59	0.34	0.21	0.11	0.09	0.13	0.00	-
	Female	0.36	0.22	0.22	0.18	0.11	0.16	-	-
Bachelor's	Male	0.41	0.30	0.26	0.16	0.18	0.13	0.11	0.19
	Female	0.45	0.40	0.28	0.22	0.15	0.10	0.30	0.26
Master's	Male	0.53	0.50	0.40	0.28	0.20	0.13	0.12	0.08
	Female	0.53	0.30	0.21	0.28	0.16	0.22	0.13	-
Doctorate	Male	-	-	-	-	-	0.22	0.05	-
	Female	-	-	-	-	-	-	-	-

