

Impact of Canada Millennium Scholarship Foundation Bursaries on Postsecondary Education Persistence, Completion and Debt Levels

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Final Report



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Executive Summary

This paper attempts to measure the persistence and completion of PSE through enrolment, participation, persistence and completion statistics from 1996-97 to the most recent year possible. Using the data available from various sources, including the Survey of Labour Income Dynamics (SLID), the Labour Force Survey (LFS), the Canada Student Loans Program (CSLP) administrative database, and the linkage of the Longitudinal Administrative Data (LAD) to the CSLP data, we were unable to discern any measurable influence the CMSF bursaries may have on enrolment, participation, persistence, completion and debt load of PSE students. The relationship between CMSF bursaries and provincial bursaries and grants differ from province to province. More specifically, however, we note that the PSE systems in each province are different and respond to major economic variables, such as interest rates, unemployment rate, supply of places in PSE institutions, and return to education, in different ways.

The only sure way of measuring the impact of CMSF, or for that matter, any government or institutional program, is to measure specifically the relationship of the program to persistence and other measures, before and after the program's introduction. Another way of evaluating the impact of CMSF bursaries on the PSE system would be to conduct an exhaustive questionnaire that would include CMSF questions. The resulting data could allow us to separate the effects of having or not a CMSF bursary. Time is running out and CMSF sunset provisions do not allow us to go in this direction. In the absence of such data, we can only speculate about the impact of CMSF on a selected set of variables.

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1 Introduction

When provincial and federal governments, particularly ministers of education, get together to discuss education policies, including the management and outcomes of their educational system, the need for comparable data and definitions is essential. In preparation for such meetings, bureaucrats are asked for the most up-to-date numbers touching a wide array of issues: how many people attend high school or postsecondary institutions; how much does this education cost; the level of debt that students have to bear if they persist in their studies; and what labour market opportunities are reserved for students. These are but some of the questions raised, but they point to the problems administrators may face in presenting consistent figures that are both relevant and exact.

To add to the challenge, numbers differ depending on one's perspective. Numbers concerning postsecondary education (PSE) such as enrolment, persistence and completion differ by province or territory, urban/rural origin, family status, family income, parental education and socio-economic scores (SES), institution type, gender and age. Governments and the private sector can affect such numbers by assisting students financially (e.g., student loans, interest rates, Canada Millennium Scholarship Foundation (CMSF) bursaries and grants, educational savings grants, bank loans). Institutions also play a role by limiting or opening up places for students and professors within their walls. Finally, young people make decisions to enrol and continue their studies in reaction to present and future employment and unemployment situations in the field they wish to enter, and they also take into account the general economic conditions they face or will face when they join the labour market.

It is within this context that this paper is written. The paper also wishes to investigate the impact of a particular public policy choice on postsecondary education, specifically the impact of the Canada Millennium Scholarship Foundation (CMSF) bursaries. Have the CMSF bursaries been responsible for a greater or lesser number of enrolments and completions and have the CMSF bursaries had any influence on PSE persistence?

1.2 Background

The Canada Millennium Scholarship Foundation (the Foundation or CMSF), a non-governmental and independent organization, was created by an act of Parliament in 1998. With an endowment of \$2.5 billion dollars, the Foundation distributes some \$325 million in bursaries and scholarships to approximately 100,000 students from all provinces and territories in Canada each year. Close to 85 percent of the endowments take the form of bursaries. Two types of bursaries are offered: a Millennium bursary and an access bursary. The expected sunset of the Foundation is set for 2009 when the majority of the funds will have been exhausted.

The primary purpose of the Foundation, as stated in its various publications, is to improve access to postsecondary education in Canada, particularly for those facing economic and other barriers. A second objective, as stated when it was created, was to reduce the debt load of students. Yet another goal was to encourage a high level of academic achievement. Thus, the Foundation has several levers that it can apply depending on the particular circumstances of students, be they in financial need (need-based), facing a debt problem or high achievers (merit-based).

The Foundation concluded several agreements with provincial governments to pursue its objectives. It is quite apparent in reading CMSF documents that several of these agreements have had the effect of replacing existing provincial programs, even though the stated objectives of the CMSF included complementing provincial programs and avoiding duplication. In some provinces, the Foundations' bursaries have been used to reduce student loan debt, whereas in others, the funds have served to replace provincial debt remissions by cash grants. Because provinces experience certain savings due to CMSF bursaries, they have been asked to reinvest these savings into related policy areas, typically in student financial assistance and postsecondary education. CMSF bursaries and grants are thus to be seen as conditional transfers to the provinces.

1.2 Study Objective

The objective of this paper is to measure the persistence and completion of PSE through enrolment, participation, persistence and completion statistics, over the academic years

of 1996-97 or earlier to the most recent year possible. Furthermore, we attempt to discern any influence the CMSF may have on persistence and completion of postsecondary education (PSE) by illuminating differences, if any, in the statistics of enrolment, participation, persistence and completion before and after its start-up in 1999. These statistics and trends are produced by province, for Canada as a whole and by various socio-economic indicators. Where possible, all statistics are examined using the Survey of Labour Income Dynamics (SLID), the Labour Force Survey (LFS), the administrative data files from the Canada Student Loans Program (CSLP), and the linkage of the Longitudinal Administrative Data (LAD) to the CSLP data, at minimum.

2 Enrolments

In this paper, we will use the term enrolment as the presence of PSE students in PSE institutions. Enrolment can be affected by a number of variables, such as the province in which students are enrolled, whether students come from an urban or rural setting, the education, occupation or income of the parents as well as family composition and background.

2.1 *Data Availability*

Enrolment rates are not directly obtained by the available data but must be calculated. Furthermore, different data sources use different weighting schemes¹. These limitations in the data produce variations in overall enrolment trends according to the source of data being used.

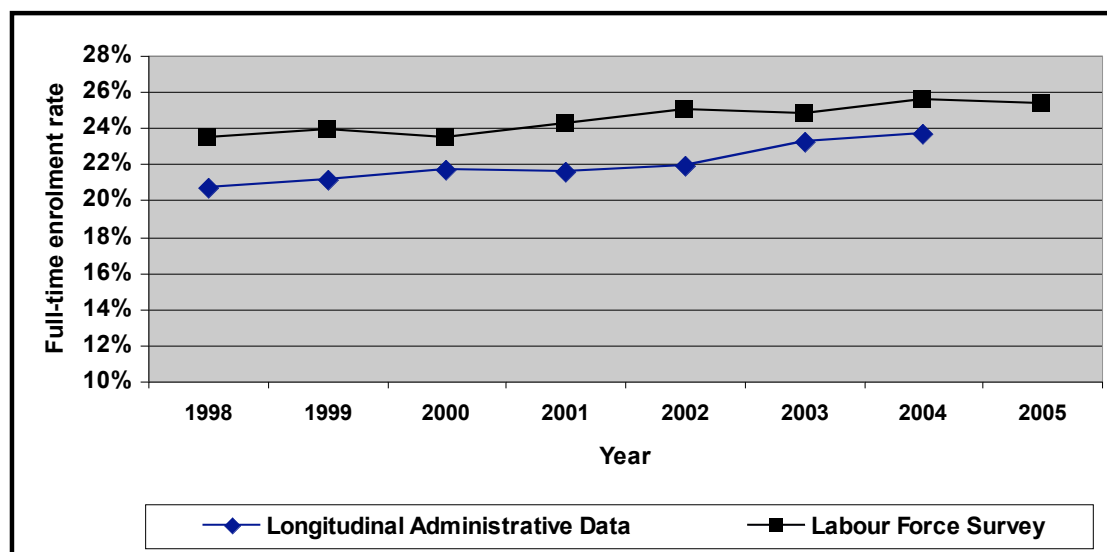
2.2 *Overall trends*

In the figure 2.1 below, it is quite apparent that as of 1998, both the Longitudinal Administrative files and the Labour Force Survey public use files show a similar pattern of enrolment, with a difference of about two percentage points. Prior to 1998, we suspect that a large number of people did not enter education deductions on their tax forms and that the enrolment rates using LAD would largely underestimate the number of people enrolled full-time in PSE institutions.

The LFS data includes people registered in short-term programs and illegal immigrants. The data, however, excludes people from territories and from the armed forces. Thus, the numbers between the different sources are likely to be different.

¹ Such schemes allow rebasing survey samples to population totals by different factors. Such factors could, in some cases, include gender, province, and occupation, while in another case include gender, educational attainment, etc.

Figure 2.1 – Full-Time Postsecondary Enrolment Rates, 18-24 Years of Age, Canada, 1998-2005



Source: Statistics Canada, Longitudinal Administrative Data files and Public Use files of the Labour Force Survey, tabulation by the authors. See also Appendix tables A2.1A and A2.1B. LFS rates are for the 17-24 year olds.

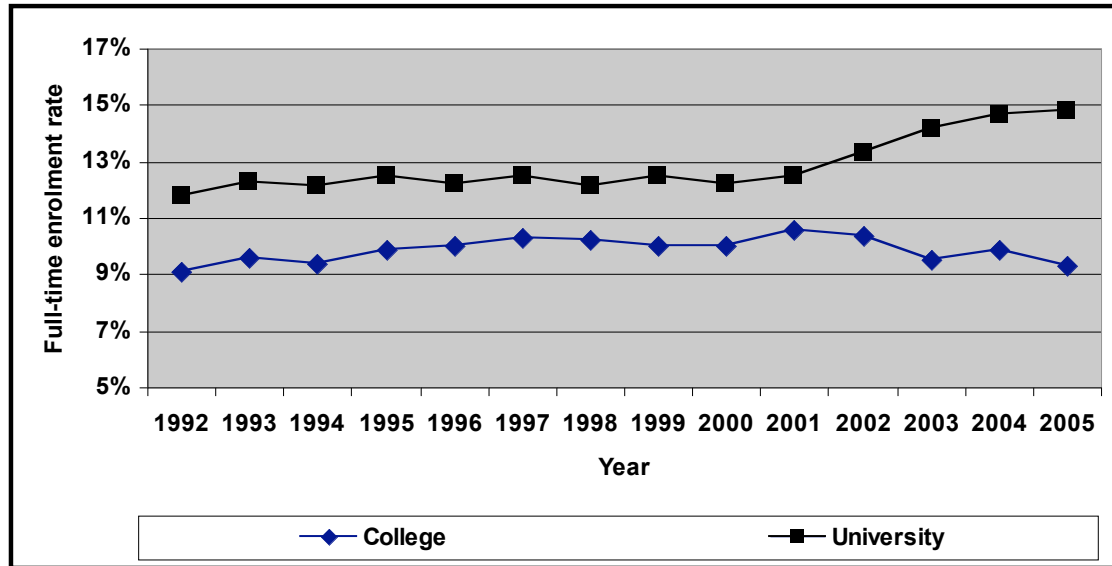
To calculate full-time enrolment rates using the Longitudinal Administrative Data files of Statistics Canada, we selected individuals who reported or whose parents reported (on their behalf) full-time education deductions as the numerator and all youth aged 18 to 24 years of age as the denominator.

To obtain enrolment estimates using the Labour Force Survey, we used a variable identifying what the educational status of the individual was in October of the survey year. As some individuals may have been enrolled in PSE institutions in months other than October², some of these individuals may have been excluded. However, we believe that we have included the majority of those enrolled.

Using the LAD files, we were unable to distinguish the students' PSE program (college, university, etc.). However, the Labour Force Survey allows us to identify the enrolment rates of college and university students separately. Figure 2.2 below shows the differences in college and university enrolment rates.

² This applies, for example, to students in cooperative programs who would be doing work placements in the autumn trimester and studying in the winter and summer semesters.

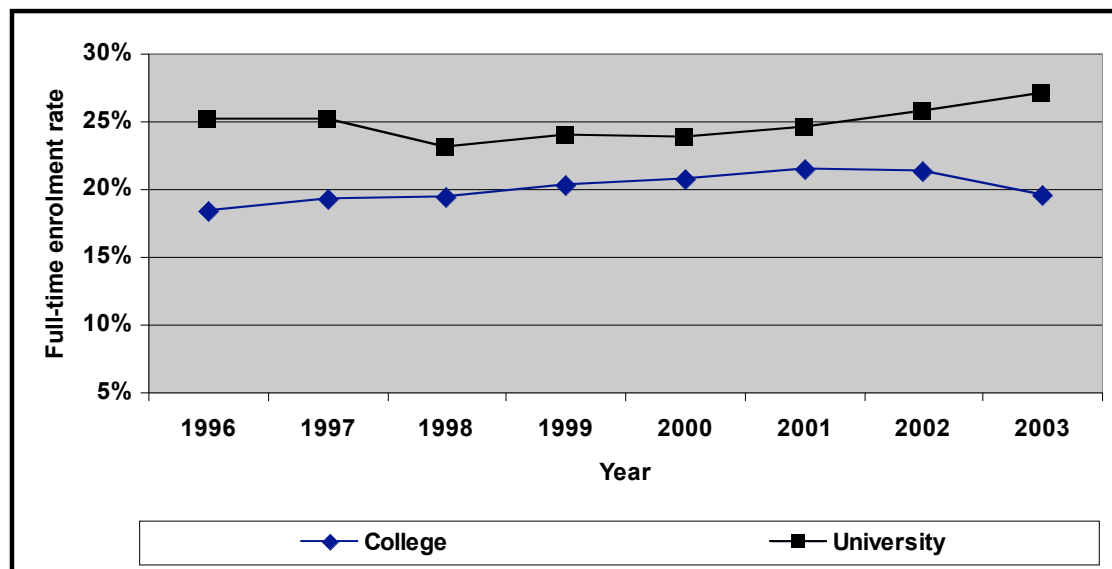
Figure 2.2 – Full-Time Enrolment Rates of 17-24 Years of Age, by Institution Type, Canada, 1992-2005



Source: Statistics Canada, Labour Force Survey, tabulation by the authors. See also Appendix Table A2.2 for additional details.

Although the percentages in the next graph are different, the enrolment rates are, as in the previous graph, fairly constant. The upswing in 2003 could be the result of Ontario giving some of its college students a university status. Thus, the college enrolment rates would decrease by approximately the same factor.

Figure 2.3 – Full-Time Enrolment Rates of 18-24 Years of Age, by Institution Type, Canada, 1996-2003

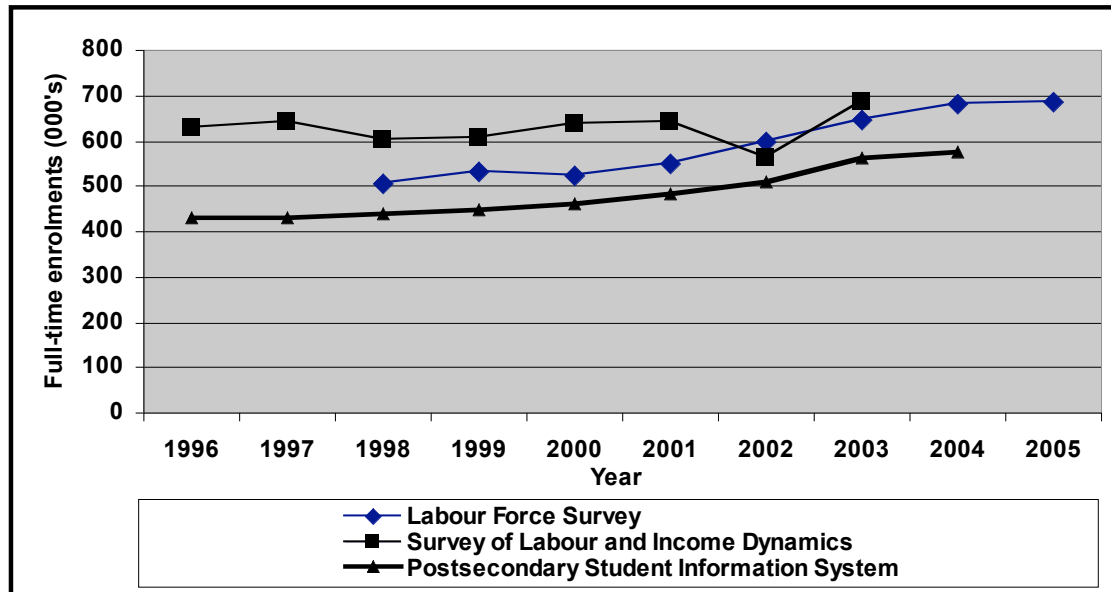


Source: Statistics Canada, Survey of Labour and Income Dynamics, tabulation by the authors. See also Appendix Table A2.3 for more details.

These numbers concur largely with Corak et al. (2003) who assert that university participation rates during the 1990's were flat while college participation rates increased over that period. Rahman et al. (2005) also assert that the participation rates between 1998 and 2001 remained unchanged. Neill (2007) points to the noticeable increase in university enrolment after 2001 that coincides remarkably well with the introduction of the CMSF bursary program. She suggests that the bursaries may account for some of the change but that other variables may also play a role. She concludes that it is impossible to pinpoint the cause for the increased rate of enrolment with the available data sources.

The above figure appears to indicate that as of 2001 there has been a small shift from college to university enrolment. Differences are more noticeable at the provincial level. The numbers also point out the fact that the numerators used in calculating enrolment rates differ from one data collection instrument to another. In the chart below, we looked solely at university enrolments.

Figure 2.4 – Full-Time University Enrolments, Canada, 1996-2005



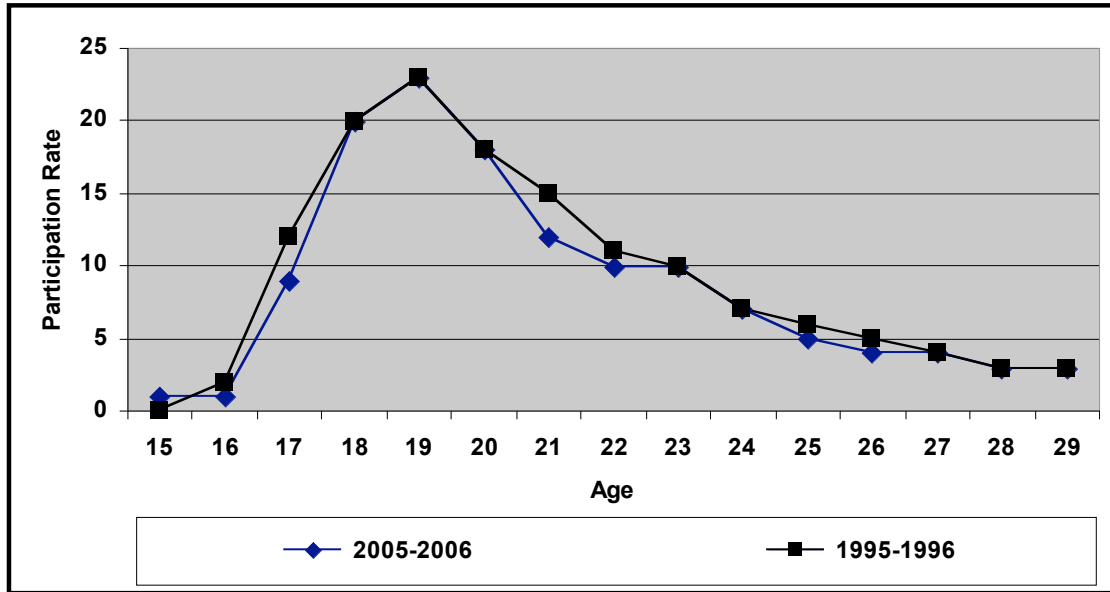
Source: Statistics Canada, various surveys, tabulation by the authors. Note: PSIS data include foreign students. See Appendix tables A2.1A to A2.4F for greater details.

Depending on the manner in which the data was collected and the caveats and weighting schemes applied to the collection methods, the different data collection instruments generate different estimates of full-time students enrolled in Canadian universities. However, the various collection instruments provided fairly consistent trends.

2.3 Age Distribution

The following graph shows that the participation rate in colleges peaks at 19 years of age and that participation rate is at least 10 percent between the ages of 17 and 23.

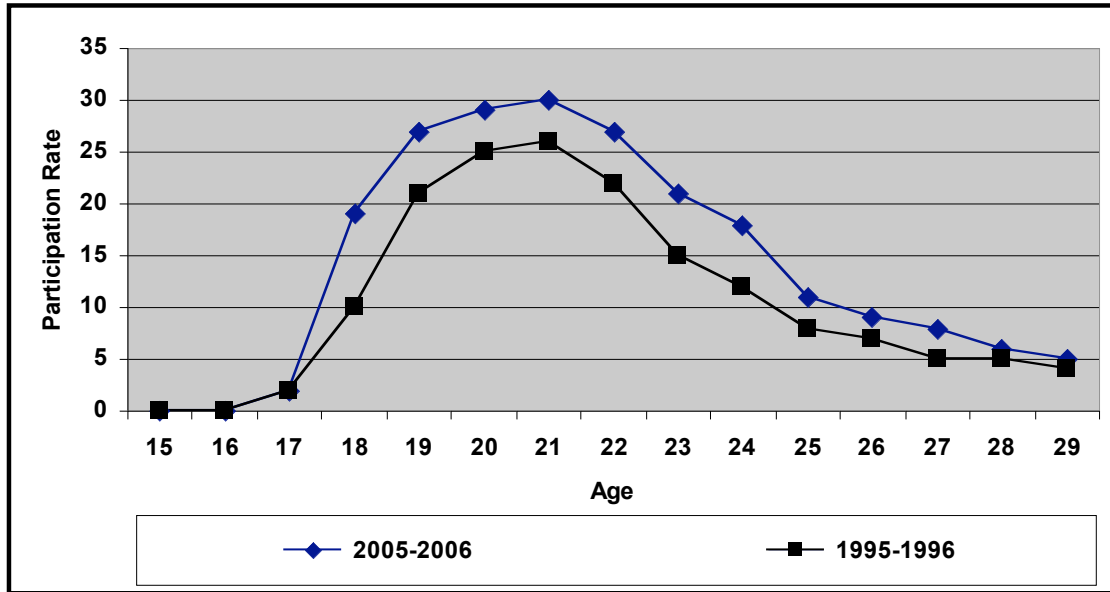
Figure 2.5 –Participation Rate at the College Level, Canada, 1995-1996 and 2005-2006



Source: Statistics Canada and Council of Ministers of Education, Canada. 2005. Education indicators in Canada: Report of the Pan-Canadian Education Indicators Program. Catalogue no. 81-582-XIE. Ottawa.

In the following diagram, participation at university peaks at 21 years of age and is at least to 10 percent for the 18 to 24 years old.

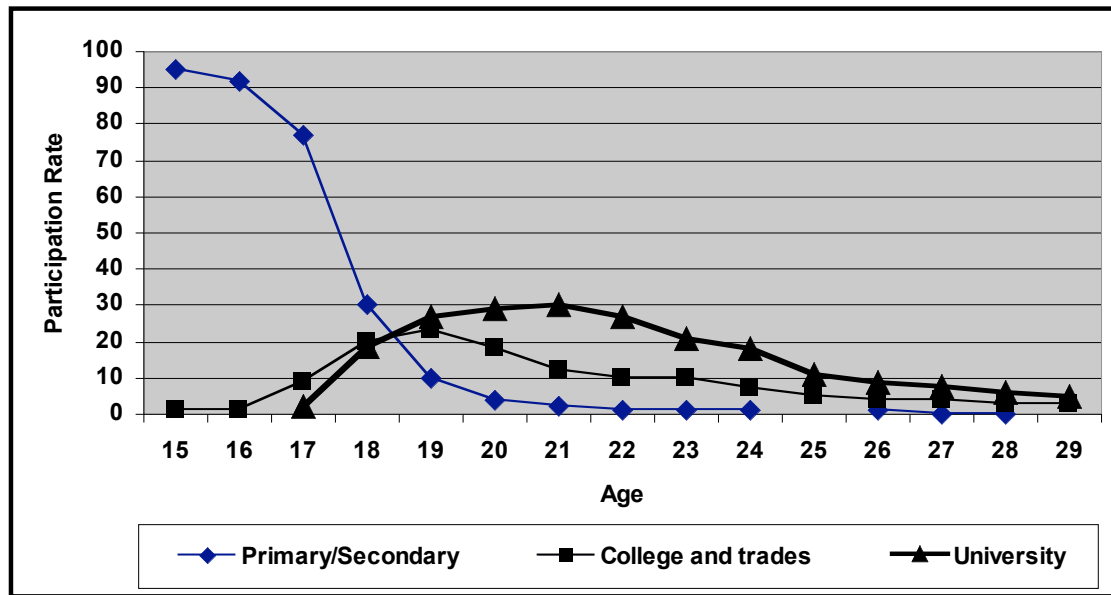
Figure 2.6 –Participation Rate at the University Level, Canada, 1995-1996 and 2005-2006



Source: Statistics Canada and Council of Ministers of Education, Canada. 2005. Education indicators in Canada: Report of the Pan-Canadian Education Indicators Program. Catalogue no. 81-582-XIE. Ottawa.

The following graph shows how the population of university participants is distributed by their level of educational attainment. Entrants to college and university occur at about the same age (17 to 18 years of age) and most primary/secondary students have graduated by the age of 18.

Figure 2.7 –Participation Rate by Age and Educational Attainment, Canada, 2005-2006



Source: Statistics Canada and Council of Ministers of Education, Canada. 2005. Education indicators in Canada: Report of the Pan-Canadian Education Indicators Program. Catalogue no. 81-582-XIE. Ottawa. The participation rate is based on a monthly average of the Labour Force Survey from September to April.

2.4 Provincial Trends

Enrolment rates vary significantly from one province to another. Several characteristics contribute to the variation: different provinces have different PSE institutions; students enter PSE after different number of years in high school; and institutions limit the entry of students. The Table 2.1 below shows the relative increase in the number of students enrolled in college and university by province. Overall in 2005, the index of the number of students enrolled in university is substantially greater than for college students. In particular, British Columbia (BC), Ontario, Prince Edward Island (PEI), and Saskatchewan show very substantial increases in university enrolments in 2005. Close to 62 percent of all Canadian university students are enrolled in these four provinces.

Neill (2007) again notes a marked increase in the rates of enrolment, this time in Ontario among youth aged 20 to 24 during the period from 2002 to 2007, which coincides with the introduction of the CMSF bursaries. She points out that by focusing on this older subsection of youth, the effect of the double cohort is eliminated. Thus she asserts that the visible increases in enrolment cannot be attributable to a single cause such as the Ontario double cohort.

The number of students enrolled at the college level decreased in the provinces of Nova Scotia, Québec and Saskatchewan. These students represented close to 38 percent of all students enrolled in colleges in Canada in 2005.

Table 2.1 – Index of Full-Time Enrolment by Institution Type and Province, 17-24 Years of Age, 1997-2005 (1992=100)

Province	1997	1998	1999	2000	2001	2002	2003	2004	2005
College									
Newfoundland	110.3	113.0	81.0	104.8	122.1	72.4	68.0	61.3	56.3
P.E.I	131.1	149.9	149.1	169.1	117.8	117.1	120.1	118.5	104.4
Nova Scotia	83.2	91.4	89.0	109.6	124.8	119.3	88.5	87.6	72.5
New Brunswick	126.3	111.5	112.7	117.0	127.9	86.2	94.2	128.5	108.0
Québec	107.3	108.9	104.4	100.8	108.3	111.6	95.0	99.3	91.2
Ontario	127.6	126.7	125.1	127.9	131.2	137.5	140.5	152.6	137.0
Manitoba	161.1	104.0	198.9	186.3	131.1	188.4	178.6	189.6	256.4
Saskatchewan	115.4	151.2	117.4	102.4	147.2	144.7	109.5	121.4	92.1
Alberta	120.7	117.2	113.1	98.0	165.2	163.5	139.0	137.4	144.6
B.C.	123.7	119.2	146.3	160.6	157.4	145.9	147.9	150.7	163.0
Canada	116.5	116.2	115.9	115.9	125.8	126.9	117.5	123.8	116.7
University									
Newfoundland	120.2	105.7	118.2	100.5	83.2	114.4	94.5	102.7	93.0
P.E.I	89.7	122.2	94.8	101.8	95.5	113.0	142.9	124.4	148.9
Nova Scotia	94.8	96.7	91.1	96.4	87.3	93.7	96.3	105.0	115.9
New Brunswick	108.1	87.0	95.0	98.8	97.6	99.7	114.1	125.9	109.7
Québec	105.4	99.9	100.6	104.6	107.1	107.4	115.2	113.1	117.4
Ontario	106.2	96.2	115.0	108.2	113.4	136.5	145.8	157.8	165.9
Manitoba	98.8	106.8	96.1	94.2	113.6	114.5	116.1	127.2	130.8
Saskatchewan	111.5	126.0	109.3	116.0	123.1	121.2	148.5	119.3	144.8
Alberta	105.8	112.3	101.5	115.8	124.8	120.6	147.9	119.5	124.6
B.C.	149.7	165.8	164.3	143.7	171.4	175.3	183.6	238.1	189.7
Canada	109.5	106.3	112.0	109.7	115.6	126.2	136.1	143.1	144.4

Source: Statistics Canada, Labour Force Survey, tabulation by the authors. See Appendix table A2.1 for more details.

According to Table 2.2, growth of full-time undergraduates has increased the most in Newfoundland and Labrador, British Columbia, Manitoba and Alberta over a ten year period. At the graduate level, full-time enrolments increased the most in Alberta, Newfoundland and Labrador and Québec. Manitoba experienced a decrease in enrolment of its full-time graduates between 1992-1993 and 2002-2003.

Table 2.2 –University Full- and Part-Time Enrolments by Registration Status and Province, 1992-1993, 1997-1998 and 2002-2003

Province	Undergraduate				Graduate			
	1992-1993	1997-1998	2002-2003	Growth 1992-2003	1992-1993	1997-1998	2002-2003	Growth 1992-2003
Full-Time								
Newfoundland and Labrador	6.5	8.9	9.2	40.7%	0.9	1.4	1.2	38.3%
Prince Edward Island	2.7	2.4	2.9	7.2%	0.0	0.0	0.1	---
Nova Scotia	25.5	26.7	29.9	17.5%	2.4	2.2	2.9	21.2%
New Brunswick	17.7	16.7	18.0	1.9%	1.0	0.9	1.2	18.0%
Québec	111.1	104.7	119.6	7.6%	21.2	22.6	29.0	36.7%
Ontario	199.9	195.5	237.2	18.7%	27.0	27.9	34.5	27.8%
Manitoba	17.7	17.9	22.4	26.5%	2.6	2.4	2.1	-23.0%
Saskatchewan	19.9	20.8	22.7	14.2%	1.6	1.7	2.0	27.5%
Alberta	43.3	45.5	53.4	23.3%	5.9	6.2	8.2	38.0%
British Columbia	36.1	42.1	48.6	34.6%	9.1	10.0	11.5	26.7%
Canada	480.3	481.1	563.8	17.4%	71.7	75.4	92.7	29.2%
Part-Time								
Newfoundland and Labrador	1.5	1.2	1.3	-16.3%	0.5	0.6	0.7	34.6%
Prince Edward Island	0.8	0.4	0.3	-137%	---	---	0.1	---
Nova Scotia	3.7	3.6	4.0	7.0%	1.3	1.3	2.4	80.2%
New Brunswick	2.1	1.6	2.3	11.0%	0.6	0.6	0.7	5.0%
Québec	81.4	62.4	60.0	-35.8%	18.1	18.4	19.8	9.5%
Ontario	66.5	47.7	53.1	-25.2%	11.3	9.3	10.1	-11.7%
Manitoba	13.6	7.4	7.3	-85.6%	1.2	0.9	0.9	-39.8%
Saskatchewan	4.8	3.6	4.8	0.5%	1.0	1.2	0.9	-9.9%
Alberta	6.9	7.3	13.1	90.3%	2.2	2.9	4.1	85.7%
British Columbia	15.5	16.7	16.7	7.1%	1.5	2.1	2.8	82.2%
Canada	196.9	151.9	162.9	-20.9%	37.8	37.3	42.4	12.2%

Source: Statistics Canada and Council of Ministers of Education, Canada. 2005. Education indicators in Canada: Report of the Pan-Canadian Education Indicators Program. Catalogue no. 81-582-XIE. Ottawa. Statistics Canada, Enhanced Student Information System (ESIS).

According to Table 2.3, overall college enrolment decreased slightly between 1997 and 2005. Most provinces, except British Columbia, Manitoba and Alberta, experienced declines in college enrolment over this period. Over the same period, most provinces, except Newfoundland and Alberta, experienced an increase in university enrolment.

Table 2.3 –Full-Time Enrolment Rates by Institution Type and Province, 17-24 Years of Age, 1997-2005

Province	1997	1998	1999	2000	2001	2002	2003	2004	2005
College									
Newfoundland	9.0	9.6	7.1	9.4	11.3	6.8	6.4	5.9	5.7
P.E.I	6.2	7.1	7.3	8.3	5.5	5.4	5.5	5.4	4.8
Nova Scotia	4.8	5.3	5.2	6.5	7.5	7.1	5.3	5.1	4.1
New Brunswick	5.8	5.2	5.5	5.6	6.3	4.3	5.0	6.5	5.5
Québec	19.0	19.2	18.3	17.6	19.1	20.1	16.9	17.7	16.6
Ontario	9.6	9.5	9.2	9.5	9.4	9.6	9.5	10.2	9.0
Manitoba	3.9	2.6	5.2	4.6	3.1	4.5	4.2	4.4	6.1
Saskatchewan	3.8	5.0	4.1	3.8	5.1	4.9	3.7	4.2	3.2
Alberta	8.6	8.1	7.7	6.6	10.7	10.3	8.5	8.3	8.6
B.C.	8.5	8.3	9.9	11.1	10.4	9.5	9.5	9.7	10.1
Canada	11.0	10.9	10.8	10.8	11.5	11.5	10.4	10.9	10.3
University									
Newfoundland	19.6	18.4	20.8	18.1	15.3	21.5	17.9	19.9	19.0
P.E.I	14.5	19.7	15.5	16.4	15.2	17.8	22.5	19.5	23.1
Nova Scotia	18.1	18.5	17.5	18.6	16.8	17.9	18.3	20.0	22.0
New Brunswick	16.1	13.2	14.5	15.4	15.2	15.8	18.2	20.2	17.8
Québec	11.9	11.2	11.2	11.7	12.0	12.1	13.1	12.9	13.5
Ontario	13.7	12.3	14.4	13.2	13.5	16.0	16.9	18.0	18.6
Manitoba	14.5	15.5	13.8	13.5	16.1	16.3	16.2	17.5	18.0
Saskatchewan	14.0	15.9	13.8	14.6	15.6	15.4	18.9	15.1	18.6
Alberta	10.7	10.9	9.6	10.8	11.3	10.6	12.9	10.3	10.6
B.C.	12.2	13.4	13.1	11.3	13.3	13.3	13.7	17.7	13.8
Canada	13.2	12.7	13.2	12.8	13.3	14.4	15.4	16.0	16.1

Source: Statistics Canada, Labour Force Survey, tabulation by the authors. See Appendix table A2.3 for more details.

2.5 Parental Income

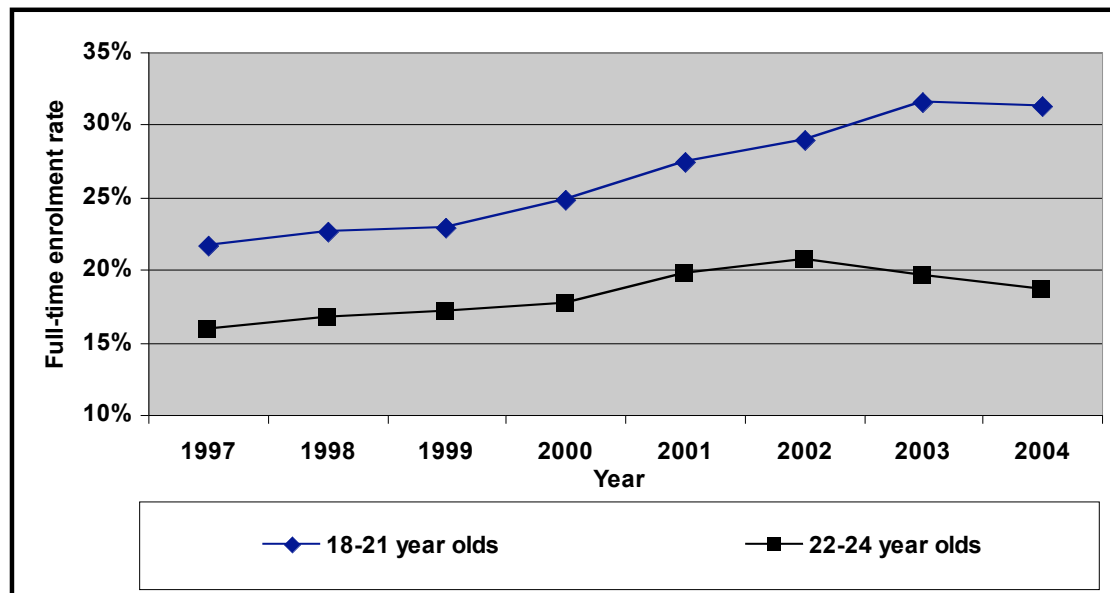
A considerable number of recent papers have been written on the subject of the impact of parental or family income on PSE enrolment or participation. Most vary in terms of approach, data used, whether or not full- and part-time students are included and age groups considered in their analyses. Rahman et al. (2005) used the SLID after tax

income of the family for the 18 to 21 year olds of both full- and part-time participants³. Lin and Situ (2007) found a difference of 15 and 21 percentage points between the first and fourth income quartile of dependent students, for 1995 and 2000, respectively. The percentage point differences for the independent student population were significantly lower.

Focusing on youth between 18 to 24 years of age rather than 15 to 21, Figure 2.8 below paints a somewhat different picture for the decade from 1997 to 2004 using Longitudinal Administrative Data files. According to this data source the difference between the first and last quartile has been increasing over time for both 18-21 year olds and 22-24 year olds. Thus, even though the progression is small, enrolment has been increasing for the wealthiest families in comparison to the least fortunate, passing from 22.7 percent to 31.3 percent for the 18-21 year olds and from 15.9 percent to 18.7 percent for the 22-24 year olds during this period. Since 2002, the differential enrolment rates have started moving downwards, indicating that the enrolment rates of the poorest families have started to gain some ground relative to the wealthiest families.

³ Lavallée et al. (2001) produced similar figures for 1998, using the SLID. Data was available for the university population and revealed an approximate 20 percentage point difference in favour of the highest after-tax income quartile and the lowest. The difference for college participation was approximately 3 percentage points.

Figure 2.8 – Difference in Full-Time Enrolment Rates of Youth Aged 18-24 Years Between First (Poorest) and Last (Wealthiest) Income Quartiles, Canada, Excluding Québec, 1997-2004



Source: Statistics Canada, Longitudinal Administrative Data files, tabulation by the authors. For base numbers, see Appendix Table A2.8A. Appendix A2.8B presents alternate results based on incomes of those living with and without their parents. The percentages in the chart present the difference in enrolment rates of the wealthiest (quartile 4) and the poorest (quartile 1) parental incomes. An increasing difference indicate that enrolments favour increasingly the wealthiest parents.

One should also be reminded that independent students are more likely to study on a part-time basis. Nonetheless, the figures above for dependent students should be the focus of some concern for policy makers.

2.6 Other Variables

Enrolment can also be examined by a number of other dimensions, such as:

- Urban – rural origin,
- Large and small family size;
- Parents having or not having completed high school;
- Single- versus two-parent families;
- High versus low socio-economic scores (SES) of parents;
- High school performance of young people;

- First official language;
- Gender;
- Province;
- And finally, high or low parental literacy rates.

In terms of these dimensions, Frenette (2003) showed, using the SLID, that youth who grew up beyond a commuting distance to a university had a much lower probability of attending the university than one who grew up within a commuting distance to the university. Both Lavallée et al. (2001) and Rahman et al. (2005), using the SLID, showed that among other things, PSE participation was lower for single-parent families (as opposed to two-parent families), significantly lower if the parents had not completed their high school (or had low educational attainment), and lower yet if the single parent was a male. Neill (2007) demonstrated, using LFS master files, that enrolment rates differ substantially by parental education level, passing from about 12.5 percent for children of parents with high school education or less to 42 percent for children whose parents completed university.

3 Persistence

The notion of persistence when it applies to PSE may mean different things to different people. For some, persistence refers to the fact of continuing in any kind of PSE. For others, persistence is associated with the probability of continuing in a particular program (for instance, the number of years in a bachelors program of a given duration) or staying within a given institution. For the purposes of this report we define persistence as continuing in any form of PSE.

There are a few places where one can get data on persistence. The first source is the LAD-CSLP data files which include a field on length of program and the program year for the student. The problem with this data is that it includes only participants in student loan programs. Thus, we are unable to compare student loan recipients with those not receiving student loans.

Neill (2007) attempted to estimate persistence using existing Statistics Canada sources, particularly the Longitudinal Administrative Data (LAD) and the Survey of Labour and Income Dynamics (SLID) files. The first source is not consistent over time as it is based on tax credits one claims at income tax time. The problem is that the motivation or incentive for requesting such tax credits may vary over time. Some people may in one year claim such credits while in other years not claim despite being entitled. SLID is not a reliable source essentially because the population of 18-24 year olds is very limited and the survey tracks individuals over too short a period.

Barr-Telford et al. (2003), using the results of the Postsecondary Education Participation Survey (PEPS), found that three-quarters of PSE students of September 2000 were still pursuing their studies 18 months later. Unfortunately, we do not have any results for more recent years.

Another source of persistence data is the Youth in Transition Survey (YITS) which does not have longitudinal data over a long enough time period, i.e. for 10 years. Thus, if we wish to examine the relationship between persistence and CMSF, this source is also inadequate for the purpose of this report.

Probably the only sources that provide answers to the issues of persistence and CMSF bursaries come from the work McElroy (2004a and 2004b) did in Manitoba and B.C. While restricting her analysis to merit-based scholarships, she finds that those who received CMSF bursaries were more likely to reach the final year of their program (particularly those in two-year programs) than those who did not receive such bursaries. Despite finding a minimal difference in persistence rates between the two groups, we believe that there remains an issue of selection bias -- having given bursaries to those most likely to persist. She nonetheless concludes that the increased persistence comes from the fact of having a lower debt. In her B.C. study, she asserts that those more likely to reach their fourth year were those that benefited from a CMSF bursary. She also found, however, that for students entering longer (i.e. four-year instead of three-year) programs, the likelihood of persistence of those not receiving CMSF bursary was greater than for those who received it. The reason for this state of affairs, as she claims, is because students with unmet financial needs have to resort to other financial instruments. Thus, the only way that CMSF bursaries can have a positive effect on persistence is if the student is adequately financed or if his debt is small relative to his income.

Using LAD, Neill (2007) does not find any evidence of an increase in aggregate persistence at PSE after the introduction of CMSF. She cautions however against the validity of using the LAD for this analysis and suggests that McElroy's findings are more convincing.

3.1 Dropouts and Stayers

In Lavallée and Grignon (2006), the PSE population between two survey cycles was divided into entrants, stayers (defined as youth who remained inside the PSE universe over the two cycles), delayers (those who were outside the PSE universe in Cycle 1 and inside in Cycle 2) and dropouts (those who were inside the PSE universe in Cycle 1 and outside in Cycle 2 and who did not graduated from PSE in Cycle 1). These notions are similar, in many respects, to that of PSE persistence, remaining a PSE student between two periods.

Overall, 77 percent of stayers, 76 percent of delayers and 30 percent of dropouts provided an answer to the following question from the Cycle 2 YITS questionnaire:

“During the last two years, from which source did you receive the most funding?” (see Table 3.1 below).

Jobs, parents or family and loans were cited as the three most important financial sources by all three groups (stayers, delayers and dropouts). However, the individual importance assigned to each source varied between groups. Based on their answers to the YITS questionnaire, stayers relied primarily on jobs, on parents or family and, to a lesser extent, on loans (including student loans) to finance their PSE studies. Delayers relied primarily on parents or family, on loans and, to a lesser extent, on jobs to finance theirs. For their part, dropouts ranked parents or family as their third most important financial source, after jobs and loans.

Table 3.1– Number and Percentage of PSE Stayers, Dropouts and Delayers by Their Most Important Financial Source Between January 2000 and December 2001

Most Important Financial Source	Number (in 000's)				Percentage			
	Stayers	Dropouts	Delayers	Total	Stayers	Dropouts	Delayers	Total
Parents or family	151.2	11.2	23.8	223.1	31.1	27.1	30.8	30.9
Other people	4.3	0.2	4.3	8.7	0.9	0.5	5.6	1.2
Jobs since high school	177.6	14.7	19.7	241.4	36.6	35.6	25.5	33.5
Loans	111.0	12.5	21.9	179.7	22.9	30.3	28.4	24.9
Personal savings	11.4	0.6	2.3	16.3	2.3	1.5	3.0	2.3
Scholarships, awards or prizes	8.8	---	1.7	13.7	1.8	---	2.2	1.9
Grants and bursaries	9.3	---	1.0	13.0	1.9	---	1.3	1.8
Other source	11.9	1.7	4.9	25.5	2.5	4.1	6.3	3.5
Total (Respondents)	485.5	41.3	77.2	721.4	100.0	100.0	100.0	100.0

Source: Lavallée and Grignon (2006); data from Statistics Canada, Youth in Transition Survey. Note: Total includes entrants and outsiders (people outside the PSE universe in both cycles).

As can be seen from Table 3.2, between January 2000 and December 2001, the average stayer relied primarily on jobs, parents and to a lesser extent on grants and bursaries and student loans. Smaller proportions of delayers than of stayers financed their studies using money from parents or from jobs.

The substantially smaller percentages of dropouts having declared using financial instruments probably reflects the shorter periods of time during which they were in the PSE universe.

Table 3.2 – Number and Percentage of PSE Stayers, Dropouts and Delayers Having Used Each Type of Financial Instrument Between January 2000 and December 2001

Financial Instrument Used	Number (in 000's)				Percentage			
	Stayers	Dropouts	Delayers	Total	Stayers	Dropouts	Delayers	Total
Student loans	176.2	43.3	6.1	227.0	27.8	31.2	6.0	16.4
Bank loans	42.6	10.4	---	54.8	6.7	7.5	---	4.0
Family loans	19.6	4.4	---	24.5	3.1	3.2	---	1.8
Money from parents	417.9	76.4	12.0	507.3	65.9	55.1	11.7	36.7
Money from Jobs	427.8	86.0	16.8	531.6	67.5	61.9	16.5	38.5
Scholarships, awards or prizes	207.7	30.0	6.7	245.5	32.8	21.6	6.5	17.8
Grants and bursaries	90.6	15.2	---	108.7	14.3	11.0	---	7.9
Total	633.8	138.9	102.0	1381.0	100.0	100.0	100.0	100.0

Source: Lavallée and Grignon (2006); data from Statistics Canada, Youth in Transition Survey. Note: Total includes entrants and outsiders (people outside the PSE universe).

3.2 Average Financial Dependence

As of December 31st, 2001, the average stayer borrowed \$10,200, obtained \$3,900 from scholarships, awards or prizes and \$2,600 from grants and bursaries (see Table 3.3). At the time of the survey, the average stayer owed \$9,100. Given that the average stayer did not complete his PSE, the amounts cited above are undoubtedly higher at the end of his PSE.

The results, however, raise an important question; that of causality. Did students choose a particular path knowing that certain financial instruments were available to them or did they select a path unaware of the possibilities of obtaining financial assistance? Unfortunately, existing data cannot supply answers to this question.

Table 3.3 – Average Amount of Financing (in \$000) of PSE Stayers, Dropouts and Delayers, As of December 31st, 2001

PSE Pathway	Financial Instruments Used				
	Student Loan Amount Borrowed	Scholarship Amount Due	Bursary Amount Due	Amount Owning	Amount Received
Stayers	10.2	3.9*	2.6	9.1	3.7
Dropouts	9.5	1.9	2.0	5.8	2.1
Delayers	5.8	2.6	2.5*	6.4	3.0
Total	9.1	3.3	2.6	8.2	3.4

Source: Lavallée and Grignon (2006); data from Statistics Canada, Youth in Transition Survey. Note: Total includes PSE entrants. Amount received are the amounts obtained to fund the education, including those from government, family or directly from a bank (Question L_Q07).

Suppose, however, that we were to analyze persistence in a more direct fashion. For that purpose, we could select all students enrolled in a first year of a four year undergraduate program (denominator). We could then define persistence if such students were still enrolled in a four-year undergraduate program two years later (numerator). To measure how this persistence occurred, we would associate a number of explanatory variables to the probability of persisting in an undergraduate four-year program. Demographic variables such as gender, age, province, family status, urban/rural, etc. could be used. In addition to these variables we could add change variables such as changed province between the two dates, changed family status (including marital status), etc. Scholastic performance could also be considered. We would also add a number of financial variables as we believe that persistence is likely affected by financial variables such as student loans, work-related income, parental and bank loans, scholarships, awards, prizes, grants and bursaries. The better or worse the financial situation, the more likely a student will persist in a four-year undergraduate program.

With regards to student loans, grants and bursaries, we would have to include parental income, as it is a primary ingredient in calculating student needs, and thus the amount of student loan and/or grants and bursaries one would receive. Isolating this variable plus all the other explanatory variables in a regression would serve to explain which of

these variables positively or negatively affect persistence. Because bursaries are a very small part of student financing, we would not expect the coefficients of this variable to play an important role in explaining why students persist or not in a four-year undergraduate program. If we were to include CMSF bursaries, which are a subset of all bursaries, we expect the effect of this variable on persistence to be close to nil.

3.3 Preliminary Analysis

The table below shows that the best financial instruments to promote university persistence are student loans, money from jobs, scholarships, awards and prizes, and money from parents. Receiving a grant or bursary does not have an effect on persistence.

Table 3.4 –University Persistence Rates of Students Who Were in a PSE Institution in 2003 and 2004 Relative to 2002 by Financial Instruments Used and Not Used in 2002

Type of Financial Assistance Received in 2002	Received	Did not receive	Difference
Received money from parents (or partners) that need not be paid back	89.6%	82.7%	6.9%
Received money from other people that need not be paid back	87.9%	87.1%	0.8%
Used money from jobs since leaving high school	88.4%	80.8%	7.6%
Received loans from banks, family, and governments	86.4%	87.8%	-1.4%
Received government-sponsored student loans	87.9%	77.6%	10.3%
Other than student loans, received bank loans, line of credits, and family loans	80.5%	79.8%	0.7%
Used personal savings	86.9%	0.0%	86.9%
Received money from trust funds, RESPs and RRSPs	84.3%	87.9%	-3.6%
Received scholarships, awards or prizes	92.5%	85.0%	7.5%
Received grants or bursaries	87.2%	87.2%	0.0%

Source: Statistics Canada, Youth in Transition Survey, second and third cycles. Excluded from the analysis were students who had graduated in 2003 or in 2004.

3.4 CMSF Implications

From the above analysis on persistence, there is no apparent evidence to indicate that grants and bursaries may determine who stays or leaves the PSE universe between two periods of time (or cycles). In the case of CMSF bursaries, we want to know if replacing student loans with CMSF bursaries would influence persistence. This substitution is a

subset of all grants and bursaries and its effect on persistence can only be a subset of the effect of the totality of grants and bursaries on persistence – next to none⁴.

⁴ Using multivariate analysis, Lavallée and Grignon (2006) found that the probability for a young adult of being a stayer was higher if he did not come from a single-parent family, from Québec or from a urban background, if his parent(s) had a post-secondary education, and if he had worked less than 20 hours per week while in high school.

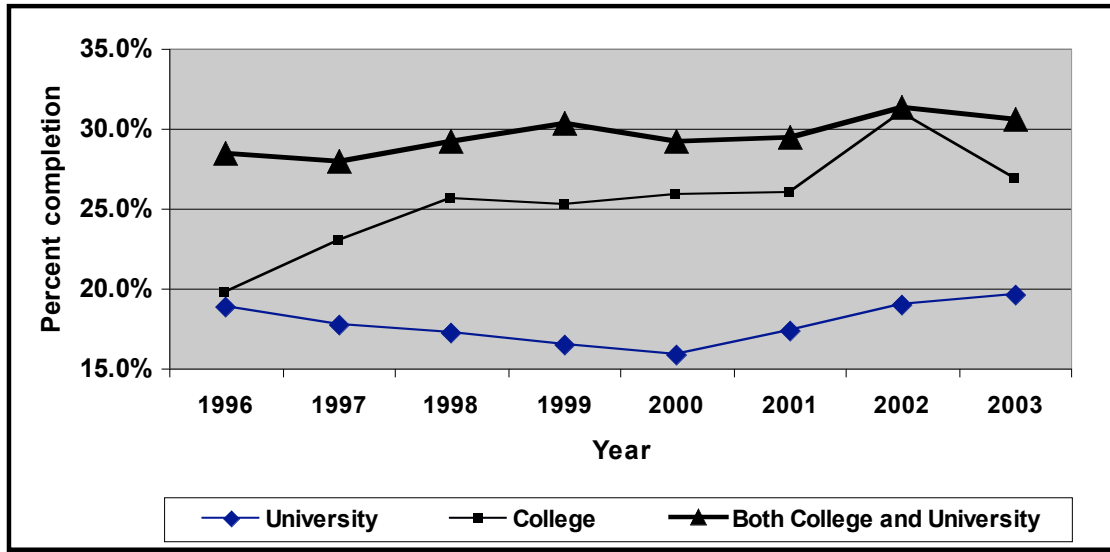
4 Completions

PSE completion refers to the number of people registered in a given year and having graduated from a PSE institution a given number of years later. The completion rate provides the percentage of the people who graduated from the total number of people attending a PSE institution some years earlier. The concept is similar to that of persistence, except that typically persistence is measured over the course of one student year in a program. The completion rate provides a rate of the number of people persisting to the end of the program and graduating.

4.1 Overall Trends

The figure below (Figure 4.1) shows that full-time college and university completion rates for the 18 to 24 year olds varied substantially from year to year during the period under study. College completion rates increased steadily over the 1996-2003 period, whereas university completion rates decreased significantly up to the year 2000 and then increased in 2002 and 2003.

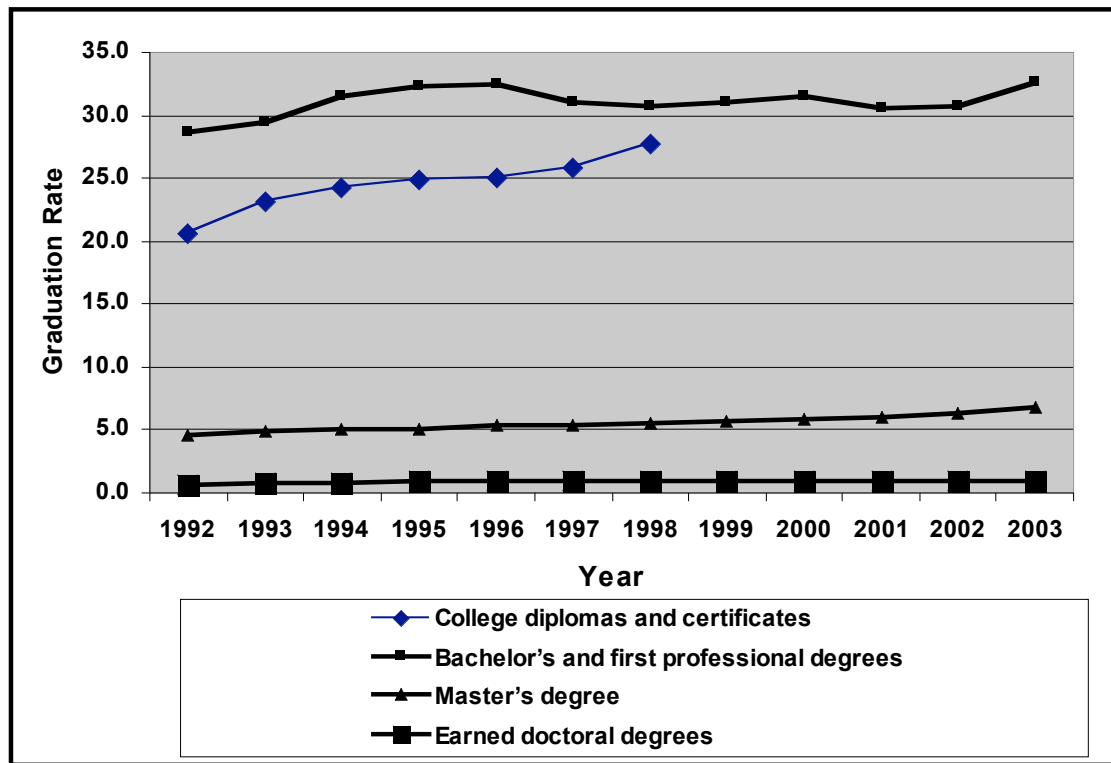
Figure 4.1 – Full-Time College and University Completion Rates, 18-24 Year Olds, Canada, 1996-2003



Source: Statistics Canada, Survey of Labour and Income Dynamics, tabulation by the authors. Note the denominator includes all full-time students enrolled in college or in university, respectively. The numerator includes all those full-time students enrolled in college (or in university) who received a college (or university) degree. See Appendix Tables A4.5A, A4.5B and A4.5C for details.

Figure 4.2 shows that the greatest variations in university graduation rates are for students studying at the undergraduate level, and for students pursuing their first degree. These are typically the students most likely affected by CMSF bursaries. It should be noted here that graduation rates were calculated by dividing the number of graduates by the student population at the typical age of graduation (age 21 for college diplomas, age 22 for undergraduate degrees, age 24 for master's degree, and age 27 for earned doctorates.)

Figure 4.2 – Graduation Rates by Level of Education, Canada, 1992-2003

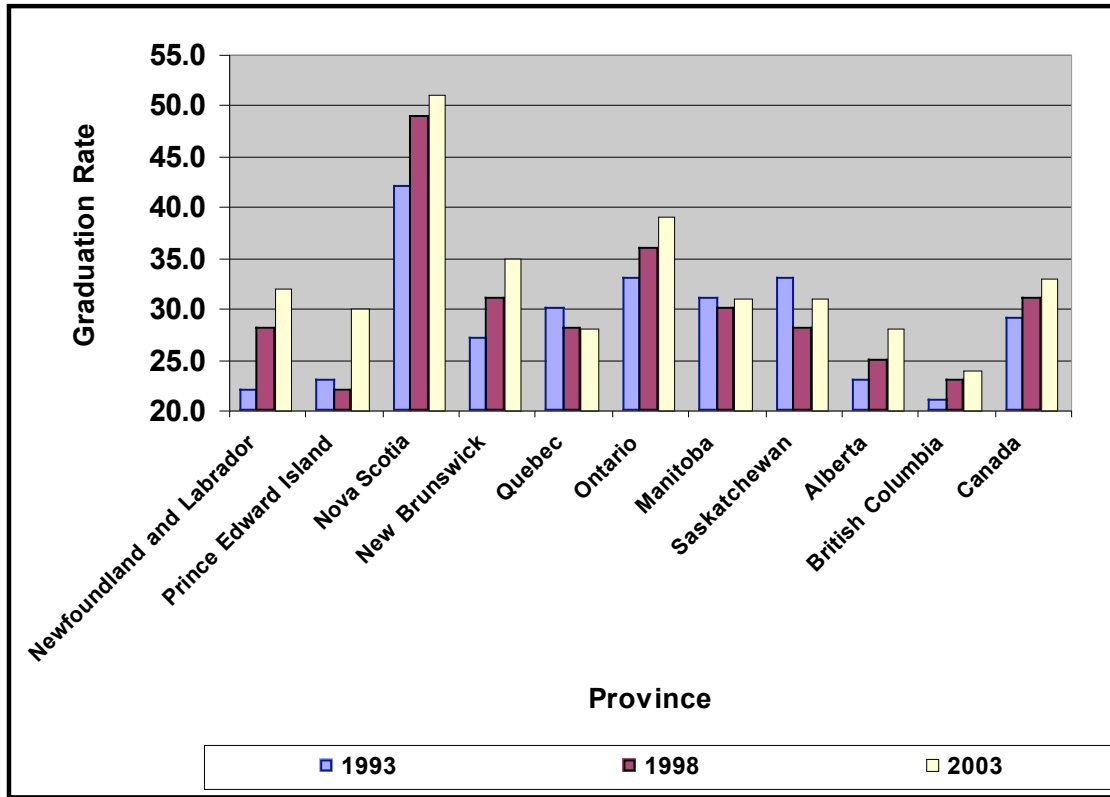


Source: Statistics Canada and Council of Ministers of Education, Canada. 2005. Education indicators in Canada: Report of the Pan-Canadian Education Indicators Program. Catalogue no. 81-582-XIE. Ottawa. Statistics Canada, National Enhanced Student Information System (ESIS), Community College Student Information System, University Student Information System. Graduation rates are based on jurisdiction of study. Rates were calculated by dividing the number of graduates by the population at the typical age of graduation (age 21 for college diplomas, age 22 for undergraduate degrees, age 24 for master's degree, and age 27 for earned doctorates.)

4.2 Provincial Trends

Figure 4.3 shows that the highest graduation rates of students who are enrolled in undergraduate programs or are pursuing their first degree are highest in Nova Scotia and in Ontario and are lowest in British Columbia.

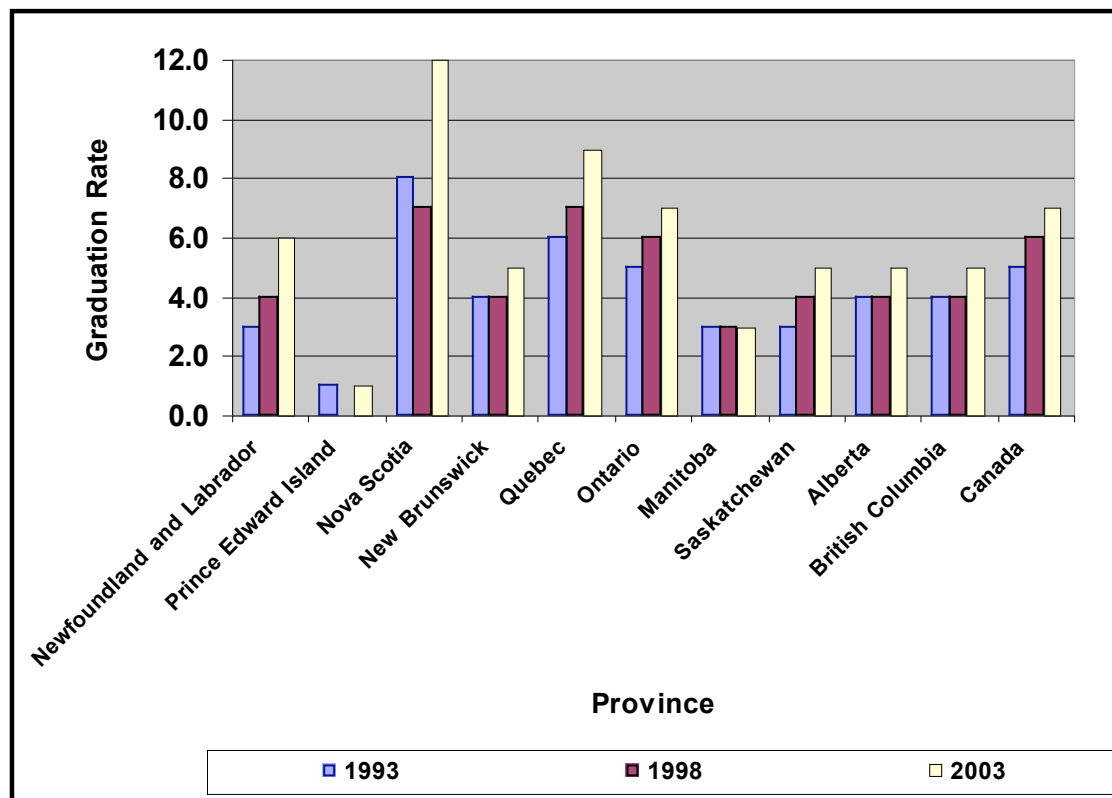
Figure 4.3 – Bachelor’s and First Professional Degree Graduation Rates, Canada and the Provinces, 1993, 1998 and 2003



Source: Statistics Canada and Council of Ministers of Education, Canada. 2005. Education indicators in Canada: Report of the Pan-Canadian Education Indicators Program. Catalogue no. 81-582-XIE. Ottawa. Statistics Canada, National Enhanced Student Information System (ESIS), Community College Student Information System, University Student Information System. Graduation rates are based on jurisdiction of study. Rates were calculated by dividing the number of graduates by the population at the typical age of graduation (age 22 for undergraduate degrees.)

Figure 4.4 also shows that the graduation rates for graduate students are the highest in Nova Scotia. They are also high in Québec and in Ontario, and are low in Prince Edward Island and Manitoba. These data show provincial trends, but it is impossible to associate such trends to what was happening in the CMSF universe.

Figure 4.4 – Master’s Degree Graduation Rates, Canada and the Provinces, 1993, 1998 and 2003



Source: Statistics Canada and Council of Ministers of Education, Canada. 2005. Education indicators in Canada: Report of the Pan-Canadian Education Indicators Program. Catalogue no. 81-582-XIE. Ottawa. Statistics Canada, National Enhanced Student Information System (ESIS), Community College Student Information System, University Student Information System. Graduation rates are based on jurisdiction of study. Rates were calculated by dividing the number of graduates by the population at the typical age of graduation (age 24 for master’s degree.)

4.3 Fields of Study

Table 4.1 shows that the number of university graduates in Canada are the highest in *Business, Management and Public Administration, Social and Behavioural Sciences, Law* and in *Education*. In a number of provinces, *Social and Behavioural Sciences, and Law* are the most popular fields of study.

Table 4.1 – Number (in 000's) of University Degrees Granted by Field of Study, Canada and Provinces, 2002

	Cda	N.L.	P.E.I.	N.S.	N.B.	Que.	Ont.	Man.	Sask.	Alta.	B.C.
Education	23.58	0.45	0.10	0.85	0.63	5.85	8.95	0.97	1.01	2.66	2.15
Visual and Performing Arts, and Communications Technologies	5.95	0.06	---	0.20	0.09	2.11	2.26	0.15	0.14	0.45	0.50
Humanities	20.65	0.30	0.08	0.82	0.48	4.37	8.48	0.97	0.45	1.55	3.19
Social and Behavioural Sciences, and Law	36.89	0.54	0.10	1.45	0.82	8.83	16.64	0.81	0.91	2.42	4.39
Physical and Life Sciences, and Technologies	14.29	0.29	0.06	0.66	0.30	3.03	6.03	0.54	0.32	1.41	1.67
Mathematics, Computer and Information Sciences	9.75	0.13	0.02	0.35	0.25	2.53	4.43	0.17	0.31	0.66	0.92
Architecture, Engineering and Related Technologies	14.97	0.22	0.02	0.63	0.25	4.42	6.25	0.41	0.44	1.39	0.98
Agriculture, Natural Resources and Conservation	3.63	0.04	---	0.24	0.10	0.73	1.12	0.24	0.33	0.44	0.42
Business, Management and Public Administration	37.96	0.50	0.10	1.68	0.99	16.93	10.50	0.64	1.20	3.23	2.20
Health, Parks, Recreation and Fitness	17.23	0.40	0.10	0.98	0.48	4.31	5.97	0.68	0.65	2.11	1.57
Total	186.1	2.90	0.56	7.85	4.40	54.01	70.75	5.58	5.74	16.35	18.00
Percentage											
Education	12.7	15.4	18.0	10.8	14.2	10.8	12.6	17.3	17.6	16.2	11.9
Visual and Performing Arts, and Communications Technologies	3.2	2.1	---	2.5	2.0	3.9	3.2	2.6	2.4	2.8	2.8
Humanities	11.1	10.2	13.5	10.4	10.8	8.1	12.0	17.4	7.8	9.5	17.7
Social and Behavioural Sciences, and Law	19.8	18.5	17.1	18.4	18.7	16.3	23.5	14.5	15.9	14.8	24.4
Physical and Life Sciences, and Technologies	7.7	10.0	9.9	8.4	6.7	5.6	8.5	9.7	5.6	8.6	9.3
Mathematics, Computer and Information Sciences	5.2	4.5	2.7	4.5	5.7	4.7	6.3	3.0	5.4	4.0	5.1
Architecture, Engineering and Related Technologies	8.0	7.4	2.7	8.0	5.6	8.2	8.8	7.3	7.6	8.5	5.4
Agriculture, Natural Resources and Conservation	1.9	1.2	---	3.1	2.2	1.3	1.6	4.2	5.7	2.7	2.3
Business, Management and Public Administration	20.4	17.3	18.0	21.3	22.5	31.3	14.8	11.5	20.8	19.7	12.2
Health, Parks, Recreation and Fitness	9.3	13.8	17.1	12.5	10.8	8.0	8.4	12.2	11.3	12.9	8.7
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

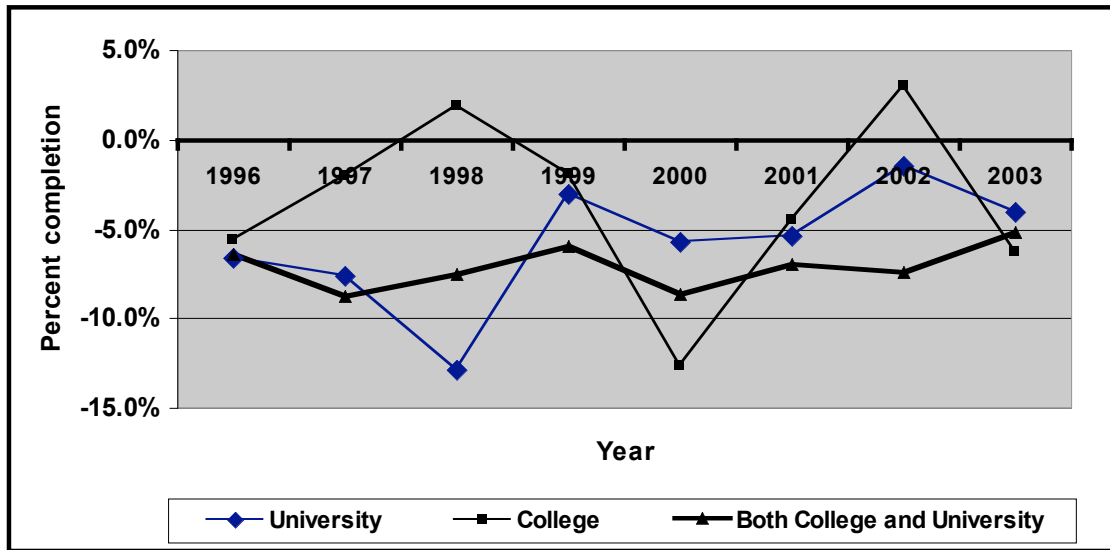
Source: Statistics Canada and Council of Ministers of Education, Canada. 2005. Education indicators in Canada: Report of the Pan-Canadian Education Indicators Program. Catalogue no. 81-582-XIE. Ottawa. Statistics Canada, National Enhanced Student Information System (ESIS), Community College Student Information System, University Student Information System. Graduation rates are based on jurisdiction of study. Rates were calculated by dividing the number of graduates by the population at the typical age of graduation (age 21 for college diplomas, age 22 for undergraduate degrees, age 24 for master's degree, and age 27 for earned doctorates.)

4.4 Parental Income

According to the figure below, students from wealthier backgrounds complete their college and university at a slightly lower rate than students from less well to do origins. The diagram below shows that the difference in completion rates between full-time students whose parents have incomes within the first quartile and full-time students whose parents have incomes within the fourth quartile ranges from -15 and +5 percent.

One may expect that students from wealthier backgrounds to have higher completion rates than those from poorer backgrounds, but we suspect that students from wealthy origins stay at college and university longer than those from poorer backgrounds because they are more able to finance their stay in school⁵.

Figure 4.5 – Difference Between First and Last Income Quartiles of Completion Rates of Full-Time College and University Students, 18-24 Year Olds, Canada, 1996-2003



Source: Statistics Canada Survey of Labour and Income Dynamics, tabulation by the authors. See also Appendix Tables A4.5A, A4.5B and A4.5C for more details. Note the denominator includes all full-time students enrolled in college or in university, respectively. The numerator includes all full-time students enrolled in college (or in university) who received a college (or university) degree.

4.5 CMSF Possible Influence

Figure 4.5 suggests no apparent effect of the CMSF on completion rates for university and college students. Moreover, the rates in 2003 returned to pre-2000 rates. There are obviously several variables other than CMSF bursary uptake that were affecting completion rates both positively and negatively.

⁵ A word of caution is needed. Income in a number of cases, particularly for the older students may not include earnings of parents. Older students would thus be included in the lower quartiles, as their incomes are more likely to be low. We suspect that students who are independent of their parents' fortune are more likely to complete their studies than those living with their parents. Moreover, these latter student may enjoy more latitude in delaying (and in not completing) their PSE studies.

5 Debt Load and Student PSE Financing

Debt load refers to the amount of debt students have at a given point in time. In Section 3, we discussed the possible relationship between persistence and debt load. Discussions on student debt load often rely on data for one year only. It is then difficult to associate a phenomenon that occurred in a given year with other variables that occurred over time. Certainly persistence and completion would be affected by the amount of debt students have to bear over time.

5.1 Overall situation

Table 5.1 below, taken from Lavallée and Usher (2006), illustrates the types of financing sources most commonly used by students. Older students (from Cycle 2 of the Youth in Transition Survey) rely more on bank and family loans than their younger cohort. The percentage of student loans is, however, comparable between the two cycles. This highlights the importance of student loans in starting the PSE process and that, as students grow older or increase the number of years of postsecondary education, their debt levels increase substantially. While the percentage of students who are continuing their studies and receiving student loans and money from parents remain somewhat constant between the two cycles (from 29.1 percent to 30.2 percent for student loans and from 64.6 percent to 62.4 percent for financing from parents), the same cannot be said of those receiving bank and family loans. Students continuing their studies and receiving bank loans and family loans increase significantly between the two age cohorts going from 6.9 percent to 39.7 percent for bank loans and from 3.1 percent to 13.8 percent for family loans. The increases in the number of students continuing their education between the two cycles who earn money from jobs are not surprising (from 67.2 percent to 83.9 percent).

Table 5.1 – Counts and Percentage of Students by PSE Financial Instrument Used and by PSE Type, Cycle 1 (18 to 20 Year Olds) and Cycle 2 (20 to 22 Year Olds)

	PSE Financial Instrument Used*							Total Number of PSE Students
	Student loan	Bank loan	Family loan	Money from parents	Money from jobs	Scholarships, awards or prizes	Grants and bursaries	
Counts (in 000's)								
Cycle 1 (18 to 20 year olds)								
Continuers	160.8	38.3	17.1	356.2	370.8	182.1	81.0	551.7
Graduates	16.1	3.4	1.2	21.1	23.9	9.4	5.4	44.0
Leavers	16.0	4.6	1.3	29.4	36.4	11.4	5.2	57.8
Total	192.8	46.2	19.6	406.7	431.2	203.0	91.6	653.6
Cycle 2 (20 to 22 year olds)								
Continuers	162.7	213.6	74.2	335.9	451.7	124.3	102.1	538.3
Graduates	42.3	54.9	20.1	65.1	94.4	19.7	20.3	166.8
Leavers	25.1	33.0	10.9	36.5	58.3	9.9	11.6	120.3
Total	230.2	301.5	105.1	437.5	604.4	153.9	134.0	825.4
Either in Cycle 1 or in Cycle 2								
Continuers	184.7	216.9	81.3	390.0	472.0	212.5	140.7	538.3
Graduates	63.9	60.3	23.7	99.1	127.6	42.3	32.9	166.8
Leavers	42.1	36.9	13.2	67.0	88.7	25.2	20.3	120.3
Total	290.6	314.1	118.1	556.1	688.3	280.0	193.9	825.4
Percent								
Cycle 1 (18 to 20 year olds)								
Continuers	29.1	6.9	3.1	64.6	67.2	33.0	14.7	100.0
Graduates	36.6	7.7	2.7	48.0	54.4	21.4	12.3	100.0
Leavers	27.6	8.0	2.3	50.8	63.0	19.7	8.9	100.0
Total	29.5	7.1	3.0	62.2	66.0	31.1	14.0	100.0
Cycle 2 (20 to 22 year olds)								
Continuers	30.2	39.7	13.8	62.4	83.9	23.1	19.0	100.0
Graduates	25.4	32.9	12.0	39.0	56.6	11.8	12.2	100.0
Leavers	20.9	27.4	9.0	30.4	48.5	8.3	9.6	100.0
Total	27.9	36.5	12.7	53.0	73.2	18.6	16.2	100.0
Either in Cycle 1 or in Cycle 2								
Continuers	34.3	40.3	15.1	72.4	87.7	39.5	26.1	100.0
Graduates	38.3	36.1	14.2	59.4	76.5	25.3	19.7	100.0
Leavers	35.0	30.7	10.9	55.7	73.7	21.0	16.9	100.0
Total	35.2	38.1	14.3	67.4	83.4	33.9	23.5	100.0

Source: Lavallée and Usher (2006); data from Statistics Canada, Youth in Transition Survey.

The next table (Table 5.2), also taken from Lavallée and Usher (2006) provides average amounts of funds received by students carrying on with their studies. Accepting the caveats highlighted by the authors, we observe that on average Cycle 1 students borrow

\$5,800 (rounded to the nearest \$100) for their studies, whereas those of Cycle 2 will have borrowed \$9,300 since leaving high school. Consistent with the Canada Student Loan Program criteria, students having received money from their parents receive less money in student loan than otherwise. The opposite result is found for students having received money from scholarships, awards or prizes and from grants and bursaries.

Table 5.2 – Average Amount of Financing (in \$000) for PSE Students Continuing their Education by Financial Instrument Used, Cycle 1 (18 to 20 Year Olds) and Cycle 2 (20 to 22 Year Olds)

	Cycle 1 (18 to 20 year olds)							Cycle 2 (20 to 22 year olds)				
	Student Loan Amount Borrowed	Bank Loan Amount Due	Family Loan Amount Due	Scholarship Amount Due	Bursary Amount Due	Amount Owing	Amount Received	Student Loan Amount Borrowed	Scholarship Amount Due	Bursary Amount Due	Amount Owing	Amount Received
Received a government-sponsored student loan												
No	0.0	4.7	4.5*	2.4	1.1	4.8	2.5	7.7	3.3	2.4	6.7	3.4
Yes	5.8	3.7	2.4	2.1	1.5	6.0	2.4	9.4	2.5	2.5	9.9	3.1
Received a bank loan												
No	5.9	0.0	3.3	2.3	1.3	5.7	2.4	0.0	3.4	2.1	4.1	3.4
Yes	4.9	4.3	---	---	---	6.3	2.5*	9.3	2.6	2.6	9.5	3.2
Received a family loan												
No	5.8	4.4	0.0	2.3	1.3	5.8	2.4	9.4	3.1	2.5	8.3	3.3
Yes	4.3	---	3.5	1.6	1.2*	6.1	---	9.2	2.6	2.6	10.4	3.2
Received money from parents												
No	6.4	4.3	4.3*	2.5	1.4	6.3	2.6	10.0	3.4	2.5	9.7	3.5
Yes	5.0	4.4	2.4	2.2	1.2	5.2	2.3	8.6	2.9	2.5	8.3	3.1
Received money from jobs												
No	6.0	4.2	4.5*	2.4	1.5	5.9	2.5	9.6	4.7*	2.9	9.4	4.5
Yes	5.6	4.4	3.2	2.3	1.2	5.8	2.4	9.3	2.8	2.4	9.0	3.1
Received money from scholarships, awards or prizes												
No	5.4	4.1	3.6*	0.0	1.5	5.5	1.5	8.8	0.0	2.7	8.5	2.7
Yes	6.4	4.8	---	2.3	1.1	6.3	2.6	10.9	3.0	2.0	10.5	3.6
Received money from grants and bursaries												
No	5.3	4.2	3.4	2.3	0.0	5.5	2.3	8.7	3.1	0.0	8.2	3.1
Yes	7.3	4.6	4.9*	2.3	1.3	7.0	2.7	10.2	3.0	2.5	10.6	3.4
Overall Funding												
Total	5.8	4.3	3.5	2.3	1.3	5.8	2.4	9.3	3.0	2.5	9.0	3.3

Source: Lavallée and Usher (2006); data from Statistics Canada, Youth in Transition Survey.

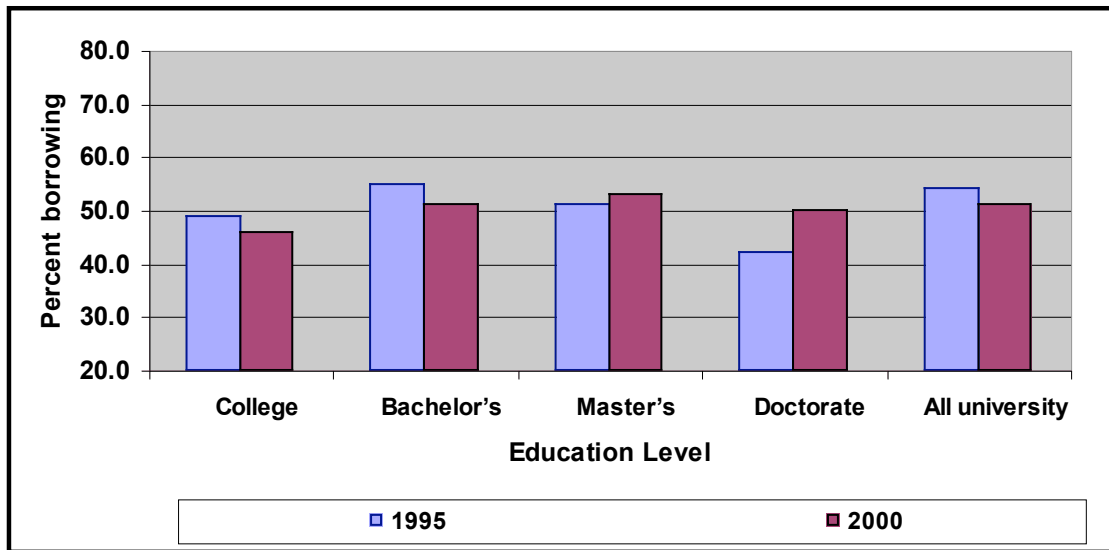
5.2 Time trends

While the two previous tables show the type of financial instruments that students use (and the debt loads that students bear), they show situations at two points in time. What we need to know at this point is how the debt situation has changed over time. Berger et al. (2006), using the National Graduate Survey and the Graduating Student Surveys, claim that the university undergraduate debt, after having more than doubled in the 1990's, has now stabilized, increasing by about 3 percent per year. Some 60 percent of the university student body has a debt load of approximately \$24, 000.

5.3 Percent Borrowing

According to Figure 5.1, approximately 50 percent of university and college graduates borrow for their education.

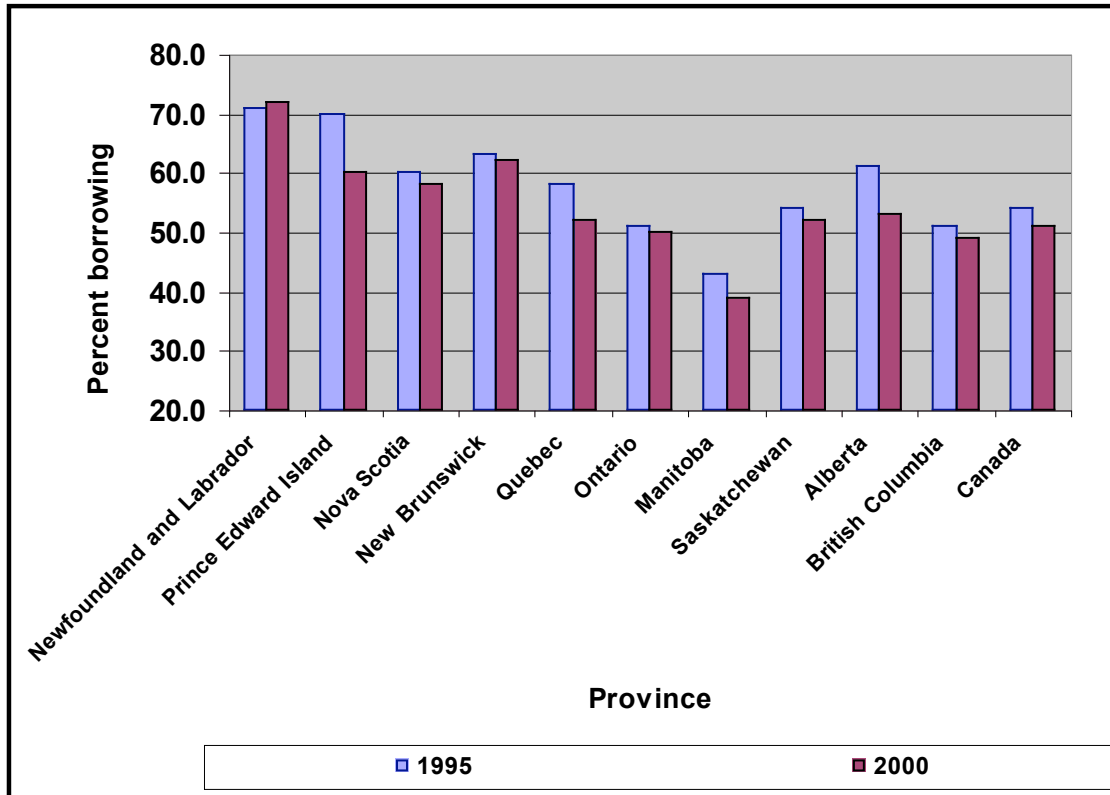
Figure 5.1 – Percentage of Graduates Borrowing, 1990 and 1995 Graduates, by Educational Level



Source: Statistics Canada and Council of Ministers of Education, Canada. 2005. Education indicators in Canada: Report of the Pan-Canadian Education Indicators Program. Catalogue no. 81-582-XIE. Ottawa. Statistics Canada, National Graduate Survey.

Students borrow the most in the Maritime provinces and to a lesser degree in Alberta, Québec, Saskatchewan and Ontario (See Figure 5.2).

Figure 5.2 – Percentage of Graduates Borrowing, 1990 and 1995 Graduates, Canada and the provinces

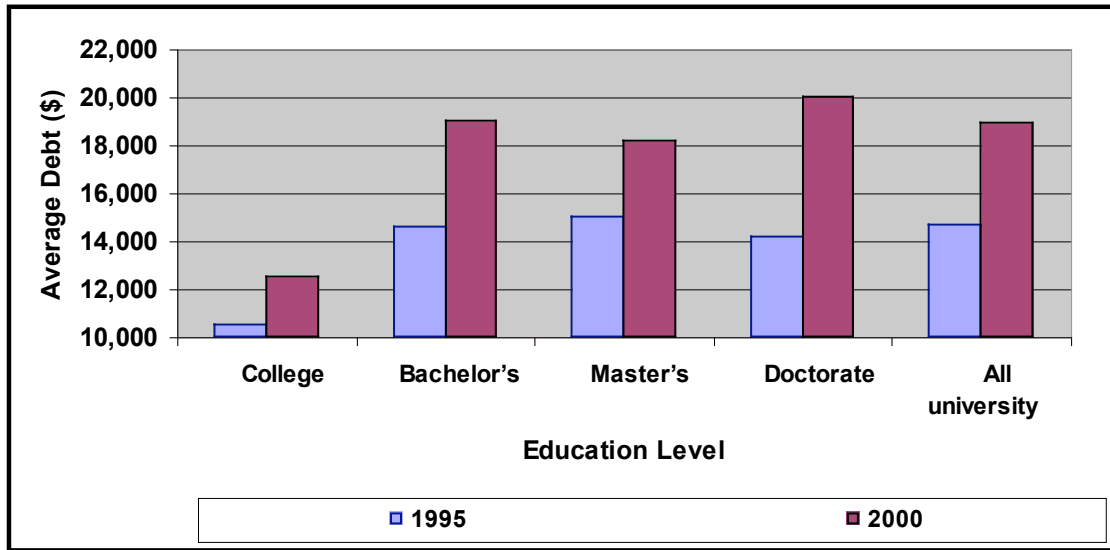


Source: Statistics Canada and Council of Ministers of Education, Canada. 2005. Education indicators in Canada: Report of the Pan-Canadian Education Indicators Program. Catalogue no. 81-582-XIE. Ottawa. Statistics Canada, National Graduate Survey.

5.4 Debt Levels

Five years after graduation, in 2000, doctorate students had a debt of approximately \$20,000, master's student of approximately \$18,000 and undergraduate students of \$19,000 (see Figure 5.3). The figure below also shows that the average debt levels increased substantially from 1995 to 2000. Part of this increase undoubtedly is attributable to inflation.

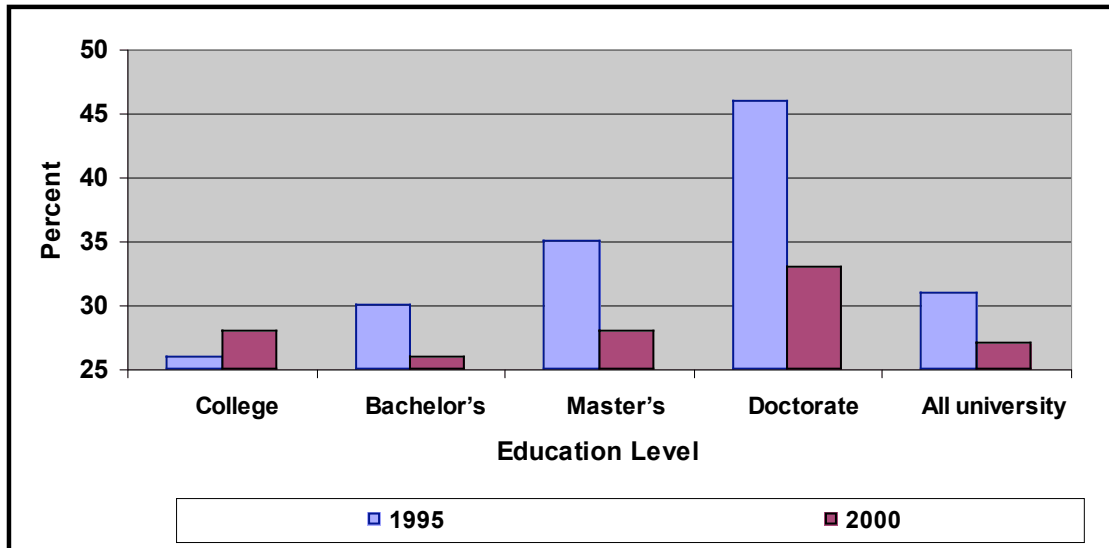
Figure 5.3 – Average Debt Five Years After Graduation, 1990 and 1995 Graduates, by Educational Level (in 1995 Dollars)



Source: Statistics Canada and Council of Ministers of Education, Canada. 2005. Education indicators in Canada: Report of the Pan-Canadian Education Indicators Program. Catalogue no. 81-582-XIE. Ottawa. Statistics Canada, National Graduate Survey.

Figure 5.4 shows that the percent of debt repaid after graduation decreased by four percentage points, with the greatest decrease occurring at the doctorate and master's levels. The approximate 13 percentage point difference between 1995 and 2000 for doctorate graduates should certainly be of concern, particularly if the level of debt remains high over time.

Figure 5.4 – Percentage of Debt Repaid Two Years After Graduation, 1990 and 1995 Graduates, by Educational Level

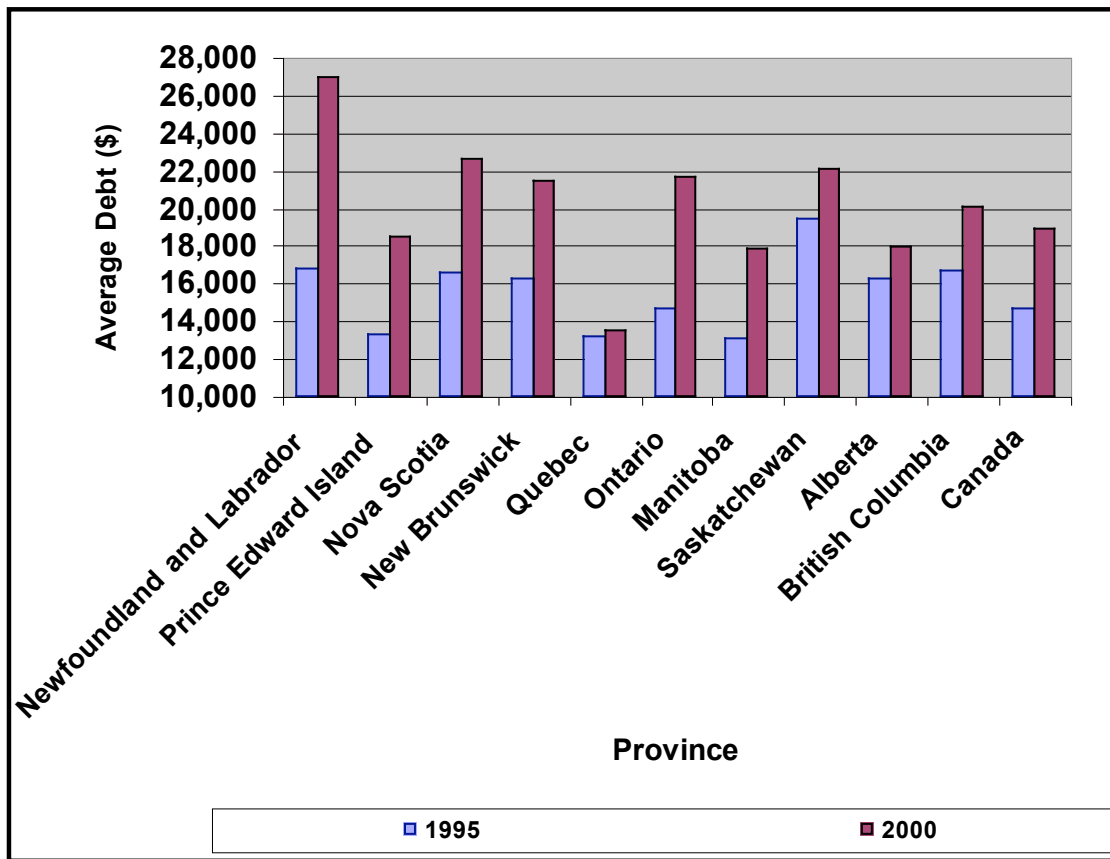


Source: Statistics Canada and Council of Ministers of Education, Canada. 2005. Education indicators in Canada: Report of the Pan-Canadian Education Indicators Program. Catalogue no. 81-582-XIE. Ottawa. Statistics Canada, National Graduate Survey.

5.5 Provincial Debt Levels

Figure 5.5 shows that the debt levels five years after graduation are the highest in Newfoundland and Labrador, Nova Scotia, Saskatchewan, Ontario and New Brunswick and substantially the lowest in Québec. Again, part of the increase in the debt load can certainly be attributed to inflation. However, the large increase in the debt load in Newfoundland and Labrador, Nova Scotia, New Brunswick and Ontario should be of concern to education authorities.

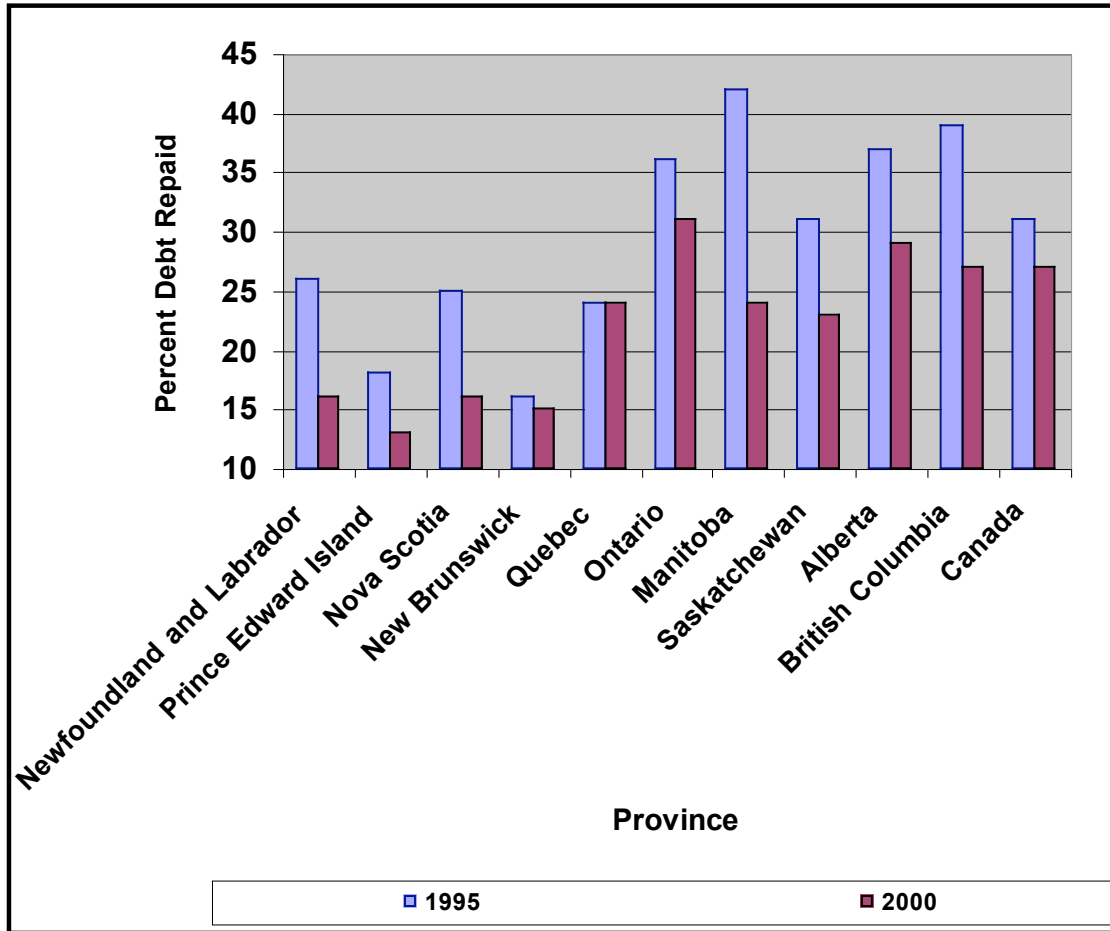
Figure 5.5 – Average Debt Five Years After Graduation, 1990 and 1995 Graduates, Canada and the Provinces (in 1995 Dollars)



Source: Statistics Canada and Council of Ministers of Education, Canada. 2005. Education indicators in Canada: Report of the Pan-Canadian Education Indicators Program. Catalogue no. 81-582-XIE. Ottawa. Statistics Canada, National Graduate Survey.

According to Figure 5.5, repayment of loans is the lowest in the Maritime provinces. As such, this situation should preoccupy educational authorities as to measures to be undertaken to ease the debt repayment problems they face.

Figure 5.6 – Percent of Debt Repaid Two Years After Graduation, 1990 and 1995 Graduates, Canada and the Provinces

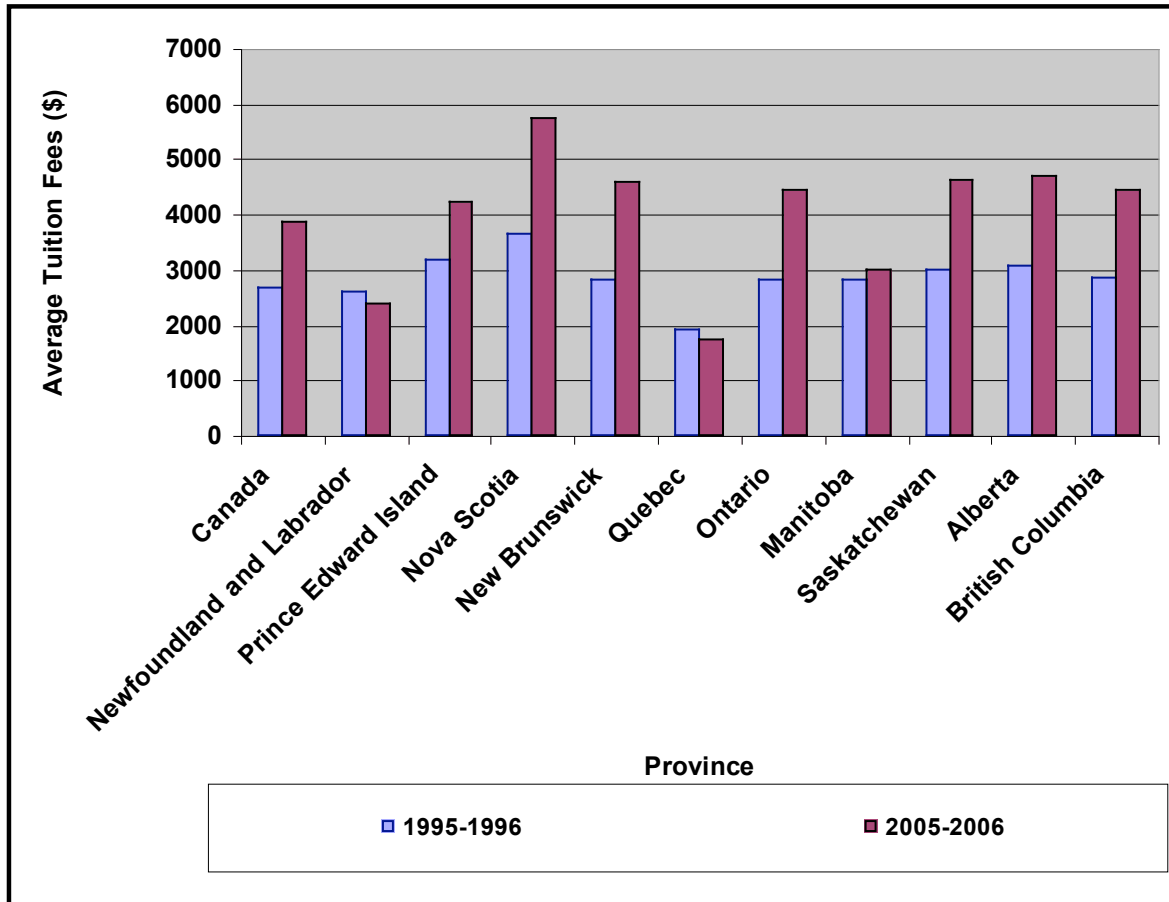


Source: Statistics Canada and Council of Ministers of Education, Canada. 2005. Education indicators in Canada: Report of the Pan-Canadian Education Indicators Program. Catalogue no. 81-582-XIE. Ottawa. Statistics Canada, National Graduate Survey.

5.6 Tuition Fees

Tuition fees are the highest in Nova Scotia, New Brunswick, Alberta, Saskatchewan, British Columbia and Ontario and the least in Québec (See Figure 5.7). Tuition fees in most provinces have increased over the last ten years, except for Québec and Newfoundland and Labrador where such fees decreased. The decrease is compounded by the effect of inflation (cost of living).

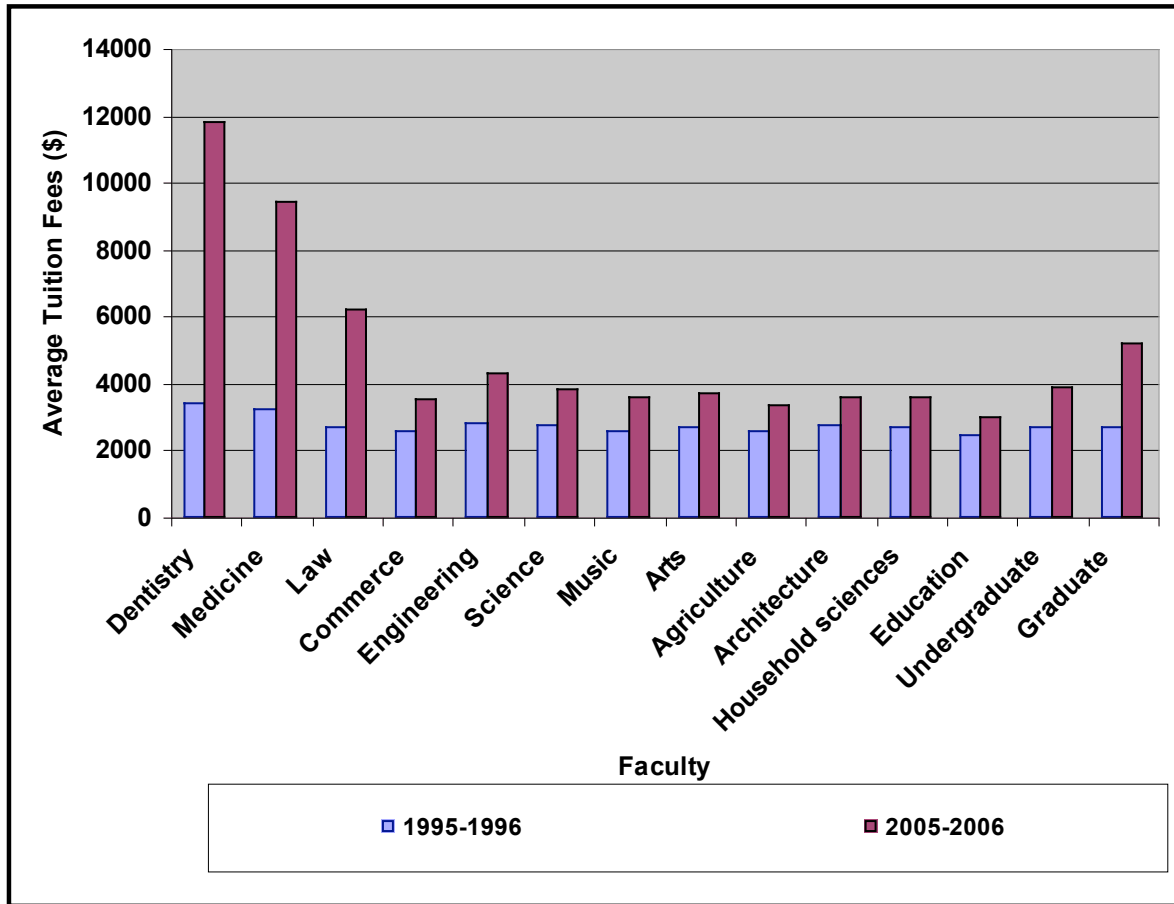
Figure 5.7 – Average Undergraduate University Tuition Fees by Province and Canada, 1995-1996 and 2005-2006 (in 2001 Constant Dollars)



Source: Statistics Canada and Council of Ministers of Education, Canada. 2005. Education indicators in Canada: Report of the Pan-Canadian Education Indicators Program. Catalogue no. 81-582-XIE. Ottawa. Survey of Tuition and Living Accommodation Costs for Full-time Students, Statistics Canada.

The highest tuition fees, according to Figure 5.8, are in dentistry, medicine and law. Moreover, such fees are higher for graduate students than they are for undergraduate students.

Figure 5.8 – Average Undergraduate University Tuition Fees by Faculty, 1995-1996 and 2005-2006 (in 2001 Constant Dollars)



Source: Statistics Canada and Council of Ministers of Education, Canada. 2005. Education indicators in Canada: Report of the Pan-Canadian Education Indicators Program. Catalogue no. 81-582-XIE. Ottawa. Survey of Tuition and Living Accommodation Costs for Full-time Students, Statistics Canada.

5.7 Student Loans

The table below (Table 5.3) shows the number of student loan recipients by province, excluding Québec, for 1997-1998 to 2004-2005 periods. In general, we can say there are some 340,000 students receiving a student loan in Canada, excluding Québec. Close to half of the student loans are in Ontario.

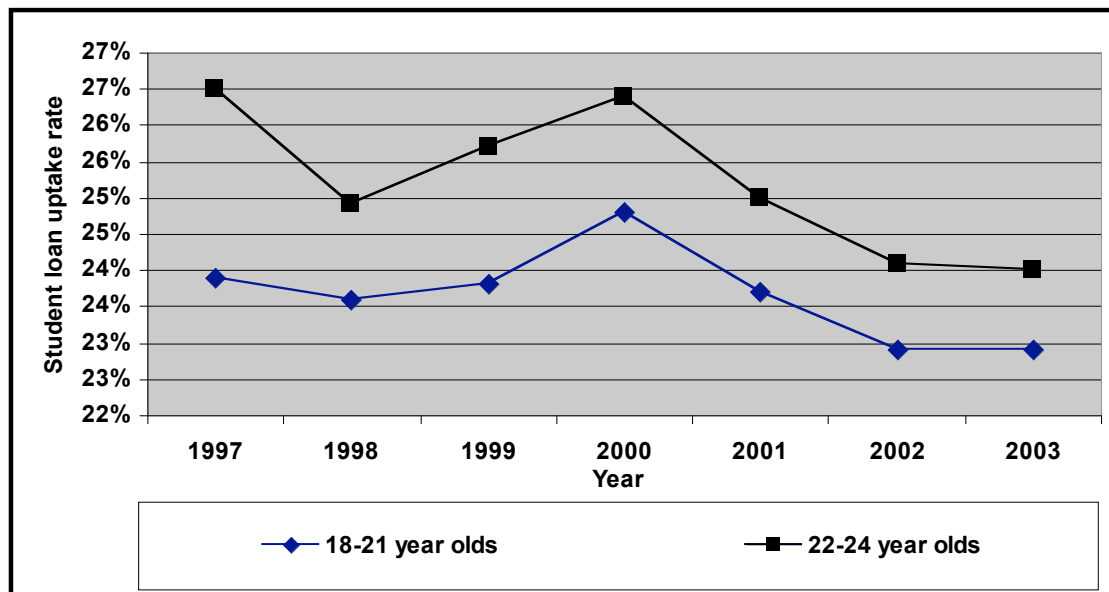
Table 5.3 – Student Loan Recipients (in 000's) by Province, Excluding Québec, 1997-2005

Province	1997-1998	1998-1999	1999-2000	2000-2001	2001-2002	2002-2003	2003-2004	2004-2005
Newfoundland	16.3	17.6	14.8	16.0	13.9	12.6	11.6	10.5
P.E.I.	2.5	2.6	2.3	3.0	3.1	3.2	3.4	3.3
Nova Scotia	17.6	17.5	16.6	16.9	17.2	17.0	16.8	16.2
New Brunswick	13.8	14.5	13.9	15.7	15.6	15.5	15.9	15.4
Ontario	188.5	177.6	170.0	157.8	144.5	148.0	159.6	167.2
Manitoba	9.9	10.0	10.6	10.8	10.2	10.0	9.7	9.2
Saskatchewan	13.6	13.9	15.2	16.4	16.2	15.5	15.3	14.2
Alberta	37.2	36.3	39.7	43.1	41.7	41.8	42.1	41.1
B.C.	45.1	46.4	51.9	62.7	63.6	64.7	65.7	59.3
Canada, Excl. Qc.	344.8	336.6	335.2	342.7	326.1	328.7	340.4	336.6

Source: Statistics Canada, Longitudinal Administrative Data – Student Loan Administrative files, tabulation by the authors. See also Appendix Table A5.3.

For 18-24 year olds enrolled in a PSE institution, Figure 5.9 below shows that student loan uptake (i.e. the number of students contracting a student loan), has decreased progressively over time for both 18-21 and 22-24 year old students.

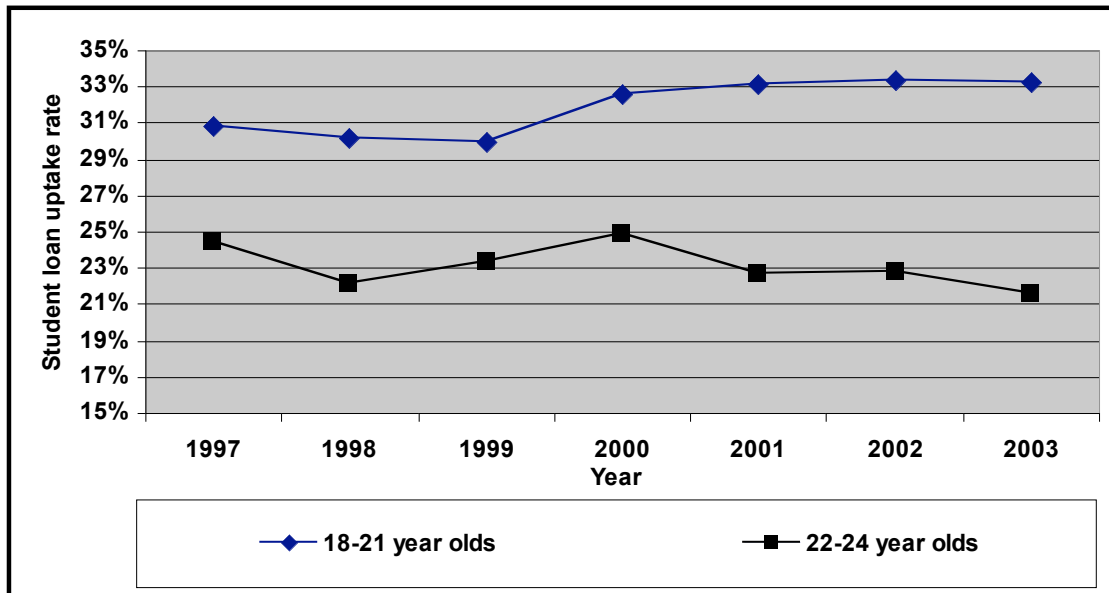
Figure 5.9 – Student Loan Uptake, 18-24 Years of Age, Canada, Excluding Québec, 1997-2003



Source: Statistics Canada, Longitudinal Administrative Data – Student Loan Administrative files, tabulation by the authors. For base numbers, see Appendix Table A5.9A. Appendix A5.9B presents alternate results based on incomes of those living with and without their parents.

Figure 5.10 below shows that the differential rate of student loan uptake between the first and last income quartiles is increasing slightly in favour of 18-21 year old students whose parents have the lowest incomes, passing from 30.8 percent in 1997 to 33.1 percent in 2003. On the other hand, the differential rate decreased slightly for the 22-24 year old students going from 24.4 percent in 1997 to 21.6 percent in 2003.

Figure 5.10 – Difference in Rates of Student Loan Uptake Between First (Poorest) and Last (Wealthiest) Income Quartiles for 18-24 Years of Age, Canada, Excluding Québec, 1997-2003



Source: Statistics Canada, Longitudinal Administrative Data – Student Loan Administrative files, tabulation by the authors. For base numbers, see Appendix Table A5.9A. Appendix A5.9B presents alternate results based on incomes of those living with and without their parents. The trend lines indicate that the difference in student loan uptake is higher for the poorest (quartile 1) than the richest (quartile 4) parents. An increasing difference simply means that relative to rich parents more students from poorer parents are getting student loans.

5.8 CMSF Uptake

Every year, approximately ninety-four thousand (94,000) students receive a CMSF bursary. According to Table 5.4 below, the provincial distribution has remained fairly constant since the year 2000.

Table 5.4 – CMSF Bursary Recipients (in 000's) by Province, 2000-2005

Province/Territory	2000-2001	2001-2002	2002-2003	2003-2004	2004-2005	2005-2006
	Counts					
Atlantic Provinces	8.4	8.0	7.9	8.7	7.9	8.3
Quebec	18.7	20.4	18.2	21.4	21.7	17.9
Ontario	35.4	33.0	35.0	35.6	37.5	36.3
Manitoba and Saskatchewan	7.5	6.9	6.6	6.9	5.9	6.5
Alberta	9.0	10.5	9.2	10.5	10.9	10.8
British Columbia	10.2	10.8	11.2	10.9	10.7	13.6
Canada including Territories	89.8	90.2	88.8	94.6	95.2	94.0
	Percentage					
Atlantic Provinces	9.3%	8.9%	8.9%	9.2%	8.3%	8.9%
Quebec	20.9%	22.6%	20.5%	22.7%	22.8%	19.0%
Ontario	39.4%	36.6%	39.4%	37.6%	39.4%	38.6%
Manitoba and Saskatchewan	8.3%	7.6%	7.4%	7.2%	6.2%	6.9%
Alberta	10.0%	11.6%	10.4%	11.1%	11.4%	11.5%
British Columbia	11.4%	12.0%	12.7%	11.5%	11.2%	14.5%
Canada including Territories	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Source: CMSF Administrative Data, tabulation by the authors.

In general, we can say, from Table 5.5 below, that CMSF bursary recipients are more likely to have weekly assessed needs of \$300 or more than the student loan recipients are. This is not unexpected, as assisting students with high financial need is one of the Foundation's primary objectives.

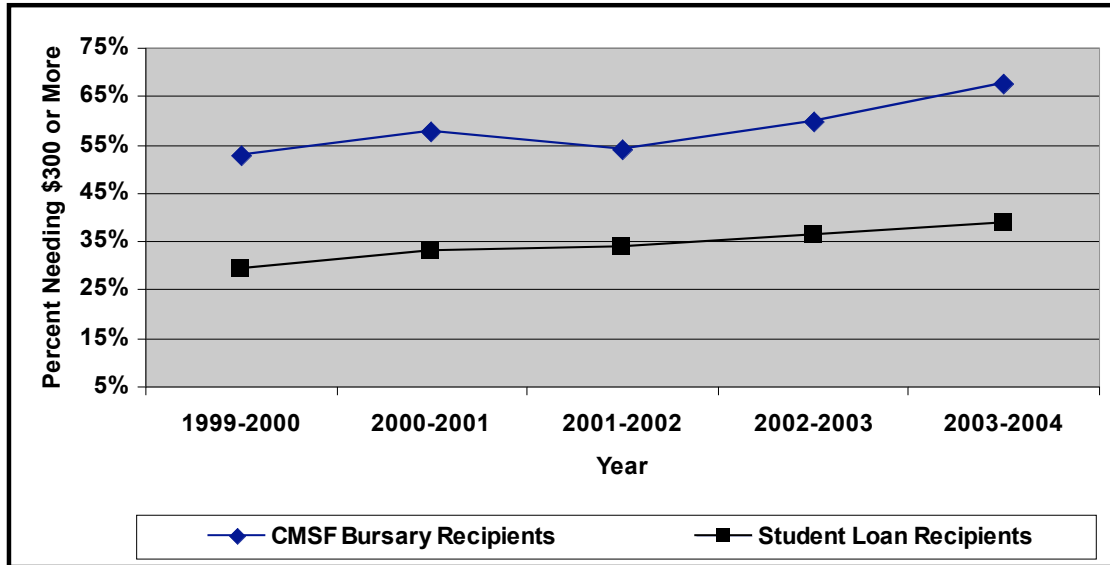
Table 5.5 – Percentage of CMSF Bursary and Student Loan Recipients Having an Assessed Need of \$300 or More per Week, by Province, Excluding Québec, 1999-2004

Province	CMSF Bursary Recipients					Student Loan Recipients				
	1999-2000	2000-2001	2001-2002	2002-2003	2003-2004	1999-2000	2000-2001	2001-2002	2002-2003	2003-2004
Newfoundland	83.2%	89.7%	78.1%	64.6%	56.2%	43.9%	41.4%	37.1%	37.8%	33.5%
P.E.I.	41.7%	42.3%	39.3%	40.6%	47.4%	17.3%	18.7%	17.2%	16.9%	23.4%
Nova Scotia	57.7%	91.6%	95.0%	88.7%	2.0%	32.6%	34.6%	35.3%	38.1%	4.9%
New Brunswick	76.0%	85.5%	91.4%	91.1%	90.3%	33.0%	31.9%	35.2%	37.0%	41.3%
Ontario	52.2%	53.9%	48.5%	57.5%	73.0%	26.0%	29.2%	31.2%	31.9%	37.3%
Manitoba	38.4%	41.6%	36.2%	34.5%	41.4%	28.5%	26.5%	23.4%	23.9%	25.7%
Saskatchewan	25.5%	62.6%	67.1%	72.4%	86.4%	10.1%	34.0%	35.3%	37.5%	42.9%
Alberta	51.8%	58.7%	61.7%	65.5%	75.6%	25.0%	28.6%	27.9%	31.8%	35.1%
B.C.	50.5%	49.9%	44.9%	55.7%	62.9%	43.4%	44.5%	44.4%	49.8%	55.4%
Canada, Excl. Qc.	51.7%	57.7%	54.4%	60.8%	68.2%	29.3%	33.0%	33.8%	36.1%	38.7%

Source: Statistics Canada, Longitudinal Administrative Data – Student Loan Administrative files, tabulation by the authors. Note that assessed needs have been adjusted to 2003-2004 dollar value using a yearly 2 percent inflation rate. See Appendix table A2.8A for details.

Figure 5.11 compares the percentage of CMSF recipients and the student loan recipients having an assessed need of \$300 or more per week. It is no surprise that CMSF recipients are more likely to have such a need than the student loan recipients. What is more noticeable, however, is that the percentage for both groups is fairly constant over time.

Figure 5.11 – Percentage of CMSF Bursary and Student Loan Recipients Having an Assessed Need of \$300 or More per Week, 1999-2004



Source: Statistics Canada, Longitudinal Administrative Data – Student Loan Administrative files, tabulation by the authors. Note that assessed needs have been adjusted to 2003-2004 dollar value using a yearly 2 percent inflation rate.

In general, from the table below (Table 5.6), we can safely say that those that received a CMSF bursary were more likely to have had a higher federal student loan than those who did not receive a CMSF bursary.

Table 5.6 – Average Amount of Federal Student Loan (in \$000) for CMSF Bursary and Non-CMSF Bursary Recipients, by Province, Excluding Québec, 1999-200 to 2003-2004

Province	1999-2000		2000-2001		2001-2002		2002-2003		2003-2004	
	CMSF bursary		CMSF bursary		CMSF bursary		CMSF bursary		CMSF bursary	
	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
Newfoundland	4.7	3.7	5.7	4.2	5.7	4.2	2.9	3.0	6.7	4.3
P.E.I.	5.6	4.9	6.0	4.9	5.9	5.4	6.1	5.3	5.9	5.2
Nova Scotia	6.2	5.4	6.7	5.6	6.6	5.7	6.3	5.7	6.1	5.8
New Brunswick	5.9	4.5	6.1	4.8	6.2	4.8	5.9	4.9	6.0	4.7
Ontario	5.7	4.0	5.6	4.1	5.7	4.3	5.9	4.3	5.7	4.4
Manitoba	5.3	3.8	5.6	4.0	5.6	3.9	5.4	3.9	5.8	4.1
Saskatchewan	5.2	4.0	5.9	4.4	6.1	4.4	5.3	4.2	5.6	4.9
Alberta	5.8	4.3	5.8	4.3	5.9	4.3	5.9	4.7	6.0	5.0
B.C.	5.2	4.4	5.5	4.5	5.5	4.7	6.1	4.9	5.8	5.0
Canada, Excl. Qc.	5.6	4.1	5.7	4.4	5.7	4.5	5.7	4.5	5.9	4.8

Source: Statistics Canada, Longitudinal Administrative Data – Student Loan Administrative files, tabulation by the authors. See Appendix table A2.8A for details.

We arrive at a similar conclusion for provincial student loans (see Table 5.7). Thus, students with higher student loans are more likely to receive CMSF bursaries. This situation may not be all that problematic, as unmet needs may be higher for those who receive higher student loan amounts.

Table 5.7 – Average Amount of Provincial Student Loan (in \$000) for CMSF Bursary and Non-CMSF Bursary Recipients, by Province, Excluding Québec, 1999-2000 to 2003-2004

Province	1999-2000		2000-2001		2001-2002		2002-2003		2003-2004	
	CMSF bursary		CMSF bursary		CMSF bursary		CMSF bursary		CMSF bursary	
	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
Newfoundland	3.1	2.5	3.8	2.8	3.8	2.8	1.9	1.8	4.4	2.7
P.E.I.	3.7	3.1	4.0	3.2	3.7	3.0	4.0	3.1	4.5	3.4
Nova Scotia	3.9	2.5	4.6	2.4	4.8	2.5	4.7	2.5	4.6	1.5
New Brunswick	4.0	3.0	4.1	3.2	4.1	3.2	3.8	3.3	4.1	3.0
Ontario	4.9	2.5	4.9	3.2	4.8	3.4	4.9	3.2	4.4	2.8
Manitoba	3.3	2.5	3.4	2.3	3.3	2.1	3.0	2.1	3.5	2.1
Saskatchewan	4.6	3.5	5.0	3.9	5.1	4.0	4.3	3.4	4.6	4.1
Alberta	1.6	2.3	2.5	2.6	2.9	1.6	2.7	1.9	2.8	1.3
B.C.	0.3	2.5	0.4	1.7	0.4	1.7	0.7	2.8	0.4	2.6
Canada, Excl. Qc.	3.5	2.5	3.6	2.6	3.4	2.5	3.5	2.8	3.5	2.7

Source: Statistics Canada, Longitudinal Administrative Data – Student Loan Administrative files, tabulation by the authors. See Appendix table A2.8A for details.

Table 5.8 below shows that CMSF bursary recipients generally have a greater weekly assessed need than those that are non-recipients. In a number of cases the difference is very small.

Table 5.8 – Average Amount of Assessed Weekly Need for CMSF Bursary and Non-CMSF Bursary Recipients, by Province, Excluding Québec, 1999-200 to 2003-2004

Province	1999-2000		2000-2001		2001-2002		2002-2003		2003-2004	
	CMSF bursary		CMSF bursary		CMSF bursary		CMSF bursary		CMSF bursary	
	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
Newfoundland	300	288	311	292	320	303	313	295	313	301
P.E.I.	297	255	307	255	318	261	358	251	329	267
Nova Scotia	306	286	324	320	336	337	333	330	233	372
New Brunswick	313	277	288	265	328	281	338	270	307	288
Ontario	269	297	288	296	306	299	294	313	352	386
Manitoba	298	282	306	288	309	294	316	261	328	292
Saskatchewan	216	238	309	291	317	297	329	306	334	346
Alberta	307	282	319	276	322	280	329	276	342	323
B.C.	295	277	302	289	297	299	317	299	308	306
Canada, Excl. Qc.	277	279	297	288	306	297	307	298	316	344

Source: Statistics Canada, Longitudinal Administrative Data – Student Loan Administrative files, tabulation by the authors.

According to the Table 5.9 below, the average CMSF bursary remains the same (about \$3,100) over its life. Some provinces receive more than others, but such situations may be the result of arrangements set between the provinces and CMSF authorities.

Table 5.9 – Average Amount of CMSF Bursaries (in \$000) for CMSF Bursary Recipients, by Province, Excluding Québec, 1999-200 to 2003-2004

Province	1999-2000	2000-2001	2001-2002	2002-2003	2003-2004
Newfoundland	3.5	4.2	4.1	2.3	2.6
P.E.I	2.8	3.2	3.0	3.4	3.5
Nova Scotia	2.9	3.1	3.2	2.4	3.0
New Brunswick	2.9	2.9	2.8	2.8	2.8
Ontario	3.0	3.0	3.0	3.0	3.0
Manitoba	3.2	3.6	3.7	3.8	3.7
Saskatchewan	2.7	2.6	2.7	2.8	3.0
Alberta	3.3	2.5	2.4	2.5	2.5
B.C.	3.3	3.3	3.3	3.5	3.5
Canada, Excl. Qc.	3.1	3.1	3.1	3.0	3.1

Source: Statistics Canada, Longitudinal Administrative Data – Student Loan Administrative files, tabulation by the authors. See Appendix table A2.8A for details.

Table 5.10 shows that the percentage of the amount of CMSF bursaries to total student loan amounts for students 18 to 24 years of age has been fairly constant over time, across age groups and across provinces (about 6.3 percent). If we restrict the percentage to those who are CMSF recipients, CMSF bursary amounts were about 21.6 percent of the total student loan amounts.

Table 5.10 – Percent Receiving CMSF Bursaries, 18-24 Year Old Students, by Year, Age Group and Province

	CMSF Bursaries (\$M)	All Student Loans					Student Loans of CMSF Recipients				
		Cda Stud. Loan (\$M)	Est. Prov. Stud. Loan (\$M)	Total Stud. Loan (\$M)	Count (000's)	Per-cent CMSF	Cda Stud. Loan (\$M)	Est. Prov. Stud. Loan (\$M)	Total Stud. Loan (\$M)	Count (000's)	Per-cent CMSF
Year											
1999-2000	73.4	701.5	467.7	1,169.1	109.2	6.28%	204.7	136.5	341.1	16.9	21.52%
2000-2001	79.6	762.1	508.0	1,270.1	118.0	6.26%	221.2	147.4	368.6	18.3	21.59%
2001-2002	77.3	734.8	489.9	1,224.7	114.5	6.31%	213.3	142.2	355.5	17.6	21.73%
2002-2003	78.7	744.2	496.1	1,240.3	115.2	6.34%	218.0	145.4	363.4	17.9	21.65%
2003-2004	78.8	743.8	495.9	1,239.6	115.8	6.36%	217.6	145.1	362.7	18.0	21.74%
2004-2005	83.0	786.6	524.4	1,311.0	122.1	6.33%	230.8	153.9	384.7	19.0	21.56%
Age Group											
18-21	265.0	2,510.5	1,673.7	4,184.2	389.7	6.33%	734.2	489.5	1,223.7	60.6	21.66%
22-24	207.4	1,979.5	1,319.7	3,299.2	307.8	6.29%	576.4	384.3	960.6	47.6	21.59%
Province											
NF	22.8	220.0	146.7	366.6	34.0	6.23%	63.5	42.3	105.8	3.8	21.60%
PE	5.2	46.9	31.3	78.2	7.3	6.68%	14.5	9.7	24.1	1.2	21.64%
NS	28.4	263.0	175.3	438.3	40.6	6.47%	78.6	52.4	131.0	7.9	21.65%
NB	23.6	223.8	149.2	373.0	34.6	6.34%	64.0	42.7	106.7	5.3	22.16%
ON	236.0	2,245.8	1,497.2	3,743.0	349.8	6.31%	655.8	437.2	1,093.0	54.1	21.59%
MB	13.1	125.6	83.7	209.3	19.4	6.24%	36.7	24.5	61.2	3.0	21.34%
SK	15.3	145.2	96.8	242.0	22.6	6.31%	41.8	27.8	69.6	3.5	21.93%
AB	55.3	528.3	352.2	880.5	82.2	6.28%	153.0	102.0	255.1	12.7	21.68%
BC	72.6	690.2	460.1	1,150.3	106.9	6.31%	202.4	134.9	337.3	16.6	21.53%
Total	472.3	4,488.8	2,992.5	7,481.3	697.3	6.31%	1,310.3	873.5	2,183.8	108.2	21.63%

Source: Statistics Canada, Student Loan Administrative files, tabulation by the authors. The data excludes Québec.

5.9 CMSF Determinants

Thus far we have seen that those who receive CMSF bursaries are those with the highest needs of those receiving a student loan and those with the highest federal and provincial student loans. What we do not know at this point is to what degree each variable contributes to receiving a CMSF bursary. Using a multinomial regression approach, we calculated the probability, expressed as a percentage, of obtaining a

CMSF bursary (See Table 5.11 below). Each variable was simulated separately keeping all other variables at their mean values. Moreover, to provide an easy way of comparing each variable to the overall probability, we added another column that provides a way of comparing each variable with others. Thus, in the table below, students having less than \$4,000 of federal student loan were about 17 percent less likely to have been awarded a CMSF bursary. Those with such a loan of \$4,000 or more were about 9 percent more likely to have received a bursary than the average. Equivalently, this could be interpreted as saying that those who received a federal student loan of \$4,000 or more were 26 percent (29 – 3 percent) more likely to obtain a CMSF bursary than those who received a federal student loan of less than \$4,000. Provincial student loans do not appear to be determinants.

Having an assessed need greater than \$300 per week is a strong determinant for receiving a CMSF bursary. Those in private institutions or institutions other than university or college are considerably less likely to receive such a bursary.

Although the regression is very simple and does not account for any autocorrelation issues, it points to the fact that CMSF bursaries, as intended, are directed towards those with the highest federal student loans and thus the greatest amount of unmet needs.

Table 5.11 – Determinants of Who Receives CMSF Bursaries Expressed as Percentages, Excluding Québec, 1999-2004

Variables	Percent Received CMSF Bursary	Difference from Overall Percent
Overall	20.2%	---
Federal student loan < \$4,000	3.4%	-16.8%
Federal student loan >= \$4,000	29.3%	9.1%
Provincial student loan < \$2,500	20.4%	0.2%
Provincial student loan >= \$2,500	20.1%	-0.1%
Assessed weekly need < \$300	14.9%	-5.3%
Assessed weekly need >= \$300	27.8%	7.7%
Year 1999-2000	20.8%	0.6%
Year 2000-2001	21.3%	1.1%
Year 2001-2002	20.5%	0.4%
Year 2002-2003	20.3%	0.2%
Year 2003-2004	18.3%	-1.9%
University	23.5%	3.4%
College	19.9%	-0.2%
Private or other institution	8.2%	-12.0%

Source: Statistics Canada, Longitudinal Administrative Data – Student Loan Administrative files, tabulation by the authors. See Appendix table A5.11 for regression details.

5.10 Other Variables

Lavallée et al. (2002) shows that the student loans for women are slightly higher than for men, that such loans are lower for students from a two-parent family than for students from other family origins (including single-family), that student loans are higher for students who performed well in high school and for those who did not work while in high school. Student loans were lower for students whose parents had a PSE degree as opposed to students whose parents did not have a PSE degree.

5.11 CMSF Possible Influence

The data on the debt situation of students, other than the analysis done by McElroy (2004a, 2004b) has no apparent relationship to the introduction of the CMSF bursary program. The multivariate analysis, however, confirms the criteria that CMSF regards when granting bursaries to students: having a higher than average assessed need and having a higher student loan (reflecting possibly the extent of unmet needs).

6 Conclusions

This paper attempted to measure the persistence and completion of PSE through enrolment, participation, persistence, completion, and debt statistics from 1996-97 to the most recent year possible. Using the data available from various sources, including the Survey of Labour Income Dynamics (SLID), the Labour Force Survey (LFS), and the linkage of the Longitudinal Administrative Data (LAD) to the Canada Student Loans Program data, we were unable to discern any influence the CMSF may have had on enrolment, participation, persistence, completion and debt load of PSE students. The relationship between CMSF bursaries and provincial bursaries and grants differ from province to province. More specifically, however, we note that the PSE systems in each province are different and respond to major economic variables, such as interest rates, unemployment rate, supply of places in PSE institutions, and return to education, in different ways.

The only sure way of measuring the impact of CMSF, or for that matter, any government or institutional program, is to measure specifically the relationship of the program to persistence and other measures, before and after the program's introduction. Another way of evaluating the impact of CMSF bursaries on the PSE system would be to conduct an exhaustive questionnaire that would include CMSF questions. The resulting data could allow us to separate the effects of receiving or not receiving a CMSF bursary. However, in the absence of such data, we can only speculate about the impact of CMSF on a selected set of variables.

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Appendix A: Additional Tables

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Table A2.1 Full-Time Enrolments (in 000's), by Province and by Student Status, 18-24 Years of Age, 1998-2005

Province	Student status	1998	1999	2000	2001	2002	2003	2004	2005
Newfoundland	University full-time	14.6	16.3	13.9	11.5	15.8	13.0	14.2	12.8
	College full-time	7.8	5.6	7.3	8.5	5.0	4.7	4.2	3.9
	Total full-time	23.5	22.5	21.8	20.6	21.4	18.0	18.9	17.3
	Population	87.4	84.7	82.2	80.1	80.3	76.7	76.2	71.7
Prince Edward Island	University full-time	3.7	2.9	3.1	2.9	3.5	4.4	3.8	4.6
	College full-time	1.4	1.4	1.5	1.1	1.1	1.1	1.1	0.9
	Total full-time	5.2	4.4	4.7	4.1	4.6	5.6	5.0	5.6
	Population	20.2	19.3	19.6	19.1	19.9	21.2	20.5	21.2
Nova Scotia	University full-time	22.6	21.3	22.6	20.4	21.9	22.5	24.6	27.1
	College full-time	6.5	6.3	7.8	8.9	8.5	6.3	6.2	5.2
	Total full-time	29.8	29.0	31.0	30.1	31.7	30.5	31.9	33.6
	Population	127.0	125.7	127.3	126.5	129.1	128.7	130.3	132.4
New Brunswick	University full-time	13.5	14.8	15.3	15.2	15.5	17.7	19.6	17.0
	College full-time	5.4	5.5	5.7	6.2	4.2	4.6	6.2	5.2
	Total full-time	19.6	21.5	22.1	21.5	20.5	22.9	26.2	23.3
	Population	101.3	102.2	102.0	100.7	99.8	101.8	104.5	100.4
Québec	University full-time	108.8	109.6	113.9	116.6	117.0	125.5	123.2	127.9
	College full-time	181.6	174.2	168.2	180.6	186.2	158.5	165.6	152.1
	Total full-time	314.0	311.6	309.9	317.2	329.3	308.5	312.5	307.5
	Population	1,097.0	1,100.0	1,099.2	1,108.3	1,116.6	1,090.4	1,083.9	1,066.2
Ontario	University full-time	181.7	217.3	204.4	214.2	257.9	275.5	298.2	313.4
	College full-time	139.9	138.2	141.3	145.0	151.8	155.2	168.6	151.3
	Total full-time	328.8	366.2	355.6	371.3	420.5	440.4	478.7	480.1
	Population	1,508.2	1,564.0	1,581.5	1,629.9	1,709.7	1,755.0	1,812.6	1,833.8
Manitoba	University full-time	22.8	20.5	20.1	24.3	24.4	24.8	27.2	27.9
	College full-time	3.7	7.1	6.6	4.7	6.7	6.4	6.7	9.1
	Total full-time	28.0	28.6	28.5	29.8	32.6	31.3	34.4	38.1
	Population	144.9	146.1	146.5	148.8	153.3	154.0	158.3	161.9
Saskatchewan	University full-time	22.3	19.4	20.6	21.8	21.5	26.3	21.1	25.6
	College full-time	7.1	5.5	4.8	6.9	6.8	5.1	5.7	4.3
	Total full-time	31.4	27.2	27.0	30.3	29.5	32.2	28.8	31.1
	Population	142.4	137.8	137.0	140.3	140.2	143.9	140.6	141.9
Alberta	University full-time	45.7	41.3	47.2	50.8	49.1	60.2	48.7	50.7
	College full-time	33.5	32.3	28.0	47.2	46.7	39.7	39.3	41.3
	Total full-time	83.0	76.2	81.0	100.5	100.5	102.2	91.7	95.1
	Population	415.3	417.9	432.4	462.6	472.2	480.1	473.7	482.7
British Columbia	University full-time	69.3	68.7	60.1	71.6	73.3	76.7	99.5	79.3
	College full-time	42.3	51.9	57.0	55.8	51.8	52.5	53.5	57.9
	Total full-time	118.5	127.8	122.0	133.4	132.8	134.9	154.2	142.8
	Population	528.6	542.4	542.0	564.4	574.8	586.4	612.0	608.9
Canada	University full-time	505.1	532.1	521.1	549.3	599.8	646.7	680.0	686.4
	College full-time	429.2	427.9	428.2	464.8	468.8	434.0	457.2	431.2
	Total full-time	981.9	1,015.1	1,003.7	1,058.8	1,123.4	1,126.5	1,182.2	1,174.5
	Full-time rate	23.5%	23.9%	23.5%	24.2%	25.0%	24.8%	25.6%	25.4%
	Population	4,172.2	4,240.2	4,269.7	4,380.8	4,495.9	4,538.0	4,612.6	4,621.0

Source: Statistics Canada, Labour Force Survey (LFS), tabulation by the authors. Note: "Total full-time" students includes "Other full-time" students.

Table A2.2A Full-Time Enrolment Rates and Base Population (in 000's), by Province, 18-24 Years of Age, 1996-2003

Province	1996	1997	1998	1999	2000	2001	2002	2003
College Enrolment Rates								
Newfoundland	12.3%	14.0%	16.7%	11.5%	13.4%	11.8%	17.1%	17.4%
P.E.I.	9.0%	13.6%	10.1%	8.7%	13.8%	4.9%	10.3%	7.7%
Nova Scotia	8.3%	9.1%	10.0%	10.3%	12.4%	12.4%	12.3%	8.7%
New Brunswick	10.1%	11.0%	11.5%	10.6%	9.4%	11.2%	13.3%	12.8%
Québec	26.1%	27.0%	25.1%	24.6%	23.7%	26.1%	24.0%	20.8%
Ontario	13.9%	12.9%	16.2%	17.5%	17.0%	15.6%	14.6%	14.6%
Manitoba	6.3%	10.0%	9.3%	9.4%	13.3%	11.3%	5.3%	5.8%
Saskatchewan	10.9%	11.6%	9.4%	5.2%	9.3%	11.3%	8.2%	7.5%
Alberta	12.7%	17.1%	14.1%	14.6%	17.9%	17.4%	15.0%	13.7%
B.C.	12.1%	14.3%	13.4%	13.8%	17.9%	19.1%	10.5%	14.5%
Canada	15.8%	16.6%	17.0%	17.1%	17.9%	18.1%	15.7%	15.2%
University Enrolment Rates								
Newfoundland	25.7%	24.3%	26.8%	28.6%	33.9%	33.0%	18.1%	27.8%
P.E.I.	29.8%	27.6%	34.0%	34.0%	30.6%	32.1%	23.4%	23.8%
Nova Scotia	30.0%	31.9%	23.4%	24.5%	24.8%	26.2%	21.5%	32.6%
New Brunswick	19.6%	25.3%	21.7%	27.3%	29.6%	26.5%	20.4%	27.9%
Québec	18.4%	18.5%	19.5%	20.7%	20.9%	21.1%	16.2%	17.9%
Ontario	27.4%	28.1%	24.2%	23.3%	22.8%	22.9%	21.2%	26.6%
Manitoba	23.0%	20.3%	20.7%	20.9%	20.2%	22.9%	23.1%	25.2%
Saskatchewan	21.7%	22.6%	20.9%	25.9%	24.1%	26.8%	21.4%	24.5%
Alberta	20.1%	19.4%	17.4%	17.8%	16.5%	17.4%	15.6%	20.1%
B.C.	19.5%	21.0%	21.4%	17.8%	20.3%	21.1%	18.5%	16.5%
Canada	22.9%	23.4%	21.7%	21.7%	22.1%	22.2%	19.2%	22.9%
Base Population (Denominator)								
Newfoundland	62.0	56.5	56.2	54.0	49.3	52.0	51.1	50.6
P.E.I.	13.0	13.8	12.6	11.9	12.5	13.0	13.1	13.4
Nova Scotia	83.6	85.3	86.3	86.2	82.8	84.6	83.8	82.3
New Brunswick	74.2	72.0	71.4	71.5	67.9	68.9	68.5	68.2
Québec	665.6	662.3	699.1	678.7	676.6	692.6	688.7	687.1
Ontario	1,003.4	1,026.0	1,014.0	1,027.9	1,076.5	1,089.1	1,105.3	1,142.9
Manitoba	104.6	100.3	101.0	102.9	101.8	99.9	107.4	109.0
Saskatchewan	96.1	94.1	96.6	96.3	93.4	93.8	95.0	97.7
Alberta	272.7	285.4	293.0	295.9	313.8	315.7	323.0	333.3
B.C.	360.0	351.1	350.5	357.6	369.1	375.5	379.0	388.1
Canada	2,735.2	2,746.9	2,780.7	2,791.0	2,869.5	2,903.6	2,936.2	2,997.4

Source: Statistics Canada, Survey of Labour and Income Dynamics (SLID), tabulation by the authors. Note: Canada total includes territorial totals.

Table A2.2B Full-Time Enrolments and Total Population (in 000's), by Province, 18-24 Years of Age, 1996-2003

Province	1996	1997	1998	1999	2000	2001	2002	2003
College Enrolments								
Newfoundland	38.5	34.8	31.8	32.4	26.0	28.7	33.1	27.7
P.E.I.	8.0	8.1	7.1	6.8	7.0	8.2	8.7	9.2
Nova Scotia	51.6	50.3	57.4	56.2	51.9	51.9	55.4	48.3
New Brunswick	52.2	45.9	47.7	44.4	41.4	42.9	45.5	40.4
Québec	369.1	361.1	387.4	371.1	374.5	365.6	411.4	421.3
Ontario	589.2	605.9	604.3	608.0	649.1	669.2	709.1	672.4
Manitoba	73.9	70.0	70.7	71.7	67.7	65.8	76.9	75.2
Saskatchewan	64.7	61.9	67.4	66.3	62.2	58.1	66.8	66.4
Alberta	183.3	181.3	200.8	200.0	206.0	206.1	224.1	220.6
B.C.	246.2	227.4	228.6	244.7	228.0	224.4	269.0	267.8
Canada	1676.8	1646.7	1703.0	1706.8	1720.7	1733.7	1910.1	1853.1
University Enrolments								
Newfoundland	7.6	7.9	9.4	6.2	6.6	6.1	8.8	8.8
P.E.I.	1.2	1.9	1.3	1.0	1.7	0.6	1.4	1.0
Nova Scotia	6.9	7.8	8.7	8.9	10.3	10.5	10.3	7.2
New Brunswick	7.5	7.9	8.2	7.5	6.4	7.7	9.1	8.7
Québec	173.7	178.8	175.5	167.1	160.5	181.0	165.5	143.1
Ontario	139.3	132.2	164.0	180.2	182.5	170.4	161.5	166.9
Manitoba	6.6	10.0	9.4	9.7	13.5	11.3	5.7	6.3
Saskatchewan	10.5	10.9	9.1	5.0	8.7	10.6	7.8	7.3
Alberta	34.6	48.8	41.2	43.3	56.1	54.8	48.4	45.8
B.C.	43.7	50.2	46.9	49.4	66.1	71.8	40.0	56.1
Canada	431.4	456.4	473.6	478.6	513.4	526.0	461.7	456.5
Base Population (Denominator)								
Newfoundland	62.0	56.5	56.2	56.2	98.6	52.0	51.1	50.6
P.E.I.	13.0	13.8	12.6	12.6	25.0	13.0	13.1	13.4
Nova Scotia	83.6	85.3	86.3	86.3	165.5	84.6	83.8	82.3
New Brunswick	74.2	72.0	71.4	71.4	135.8	68.9	68.5	68.2
Québec	665.6	662.3	699.1	699.1	1,353.3	692.6	688.7	687.1
Ontario	1,003.4	1,026.0	1,014.0	1,014.0	2,153.0	1,089.1	1,105.3	1,142.9
Manitoba	104.6	100.3	101.0	101.0	203.6	99.9	107.4	109.0
Saskatchewan	96.1	94.1	96.6	96.6	186.8	93.8	95.0	97.7
Alberta	272.7	285.4	293.0	293.0	627.6	315.7	323.0	333.3
B.C.	360.0	351.1	350.5	350.5	738.1	375.5	379.0	388.1
Canada	2,735.2	2,746.9	2,780.7	2,780.7	5,739.1	2,903.6	2,936.2	2,997.4

Source: Statistics Canada, Survey of Labour and Income Dynamics (SLID), tabulation by the authors. Note: Canada total includes territorial totals.

Table A2.3 Number of Students and Individuals (in 000's), 18-24 Years of Age by Income Quartile, 1996-2003

	1996	1997	1998	1999	2000	2001	2002	2003
Full-Time 18-24 College Students (Numerator)								
Quartile 1	137.3	139.8	140.8	131.5	129.5	153.9	128.7	145.4
Quartile 2	151.8	147.3	138.2	152.7	166.1	170.8	159.1	147.3
Quartile 3	105.7	127.7	149.8	136.3	153.4	152.1	105.7	114.0
Quartile 4	44.1	54.2	59.2	65.3	73.3	63.9	74.5	65.9
Total	438.9	468.9	488.0	485.8	522.3	540.8	468.0	472.5
18-24 Year Old Individuals (Denominator)								
Quartile 1	689.8	687.8	697.6	697.8	718.5	725.9	734.6	751.5
Quartile 2	684.8	689.4	694.7	698.2	720.2	726.5	736.5	748.2
Quartile 3	677.4	683.2	694.6	697.8	715.2	725.5	732.7	748.9
Quartile 4	683.2	686.5	693.8	697.2	715.7	725.7	732.5	748.9
Total	2,735.2	2,746.9	2,780.7	2,791.0	2,869.5	2,903.6	2,936.2	2,997.4
Percent								
Quartile 1	19.9%	20.3%	20.2%	18.8%	18.0%	21.2%	17.5%	19.3%
Quartile 2	22.2%	21.4%	19.9%	21.9%	23.1%	23.5%	21.6%	19.7%
Quartile 3	15.6%	18.7%	21.6%	19.5%	21.4%	21.0%	14.4%	15.2%
Quartile 4	6.5%	7.9%	8.5%	9.4%	10.2%	8.8%	10.2%	8.8%
Total	16.0%	17.1%	17.6%	17.4%	18.2%	18.6%	15.9%	15.8%
Quartile Limits (\$)								
Quartile 1	4,175	4,300	4,200	3,700	3,625	3,025	2,750	2,900
Quartile 2	9,200	9,250	9,225	8,675	8,275	7,550	6,875	6,775
Quartile 3	17,025	16,875	16,900	15,925	15,100	14,200	13,150	12,750
Full-Time 18-24 Year Old University Students (Numerator)								
Quartile 1	159.7	169.2	139.5	165.4	176.2	160.2	132.9	169.0
Quartile 2	231.6	208.0	209.6	198.0	205.4	220.0	192.7	224.2
Quartile 3	156.5	180.0	171.6	169.9	176.0	185.1	167.1	208.7
Quartile 4	79.3	86.6	83.4	72.4	77.9	78.6	71.7	86.0
Total	626.9	643.8	604.1	605.6	635.4	644.0	564.3	687.9
18-24 Year Old Individuals (Denominator)								
Quartile 1	689.8	687.8	697.6	697.8	718.5	725.9	734.6	751.5
Quartile 2	684.8	689.4	694.7	698.2	720.2	726.5	736.5	748.2
Quartile 3	677.4	683.2	694.6	697.8	715.2	725.5	732.7	748.9
Quartile 4	683.2	686.5	693.8	697.2	715.7	725.7	732.5	748.9
Total	2,735.2	2,746.9	2,780.7	2,791.0	2,869.5	2,903.6	2,936.2	2,997.4
Percent								
Quartile 1	23.1%	24.6%	20.0%	23.7%	24.5%	22.1%	18.1%	22.5%
Quartile 2	33.8%	30.2%	30.2%	28.4%	28.5%	30.3%	26.2%	30.0%
Quartile 3	23.1%	26.3%	24.7%	24.3%	24.6%	25.5%	22.8%	27.9%
Quartile 4	11.6%	12.6%	12.0%	10.4%	10.9%	10.8%	9.8%	11.5%
Total	22.9%	23.4%	21.7%	21.7%	22.1%	22.2%	19.2%	22.9%
Quartile Limits (\$)								
Quartile 1	4,175	4,300	4,200	3,700	3,625	3,025	2,750	2,900
Quartile 2	9,200	9,250	9,225	8,675	8,275	7,550	6,875	6,775
Quartile 3	17,025	16,875	16,900	15,925	15,100	14,200	13,150	12,750

Source: Statistics Canada, Longitudinal Administrative Data files, tabulation by the authors. Note: incomes are those of the student.

Table A2.4A University Full-Time Non-Foreign Enrolments (in 000's), Including Indices, by Province, 18-24 Years of Age, 1993-2004

Province	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Counts (000's)												
Newfoundland	10.7	10.9	10.3	10.7	10.6	10.6	11.0	11.0	11.0	11.3	11.5	11.6
P.E.I.	2.2	2.1	2.0	1.9	2.0	2.0	2.1	2.2	2.2	2.3	2.6	2.7
Nova Scotia	22.8	23.0	22.9	23.0	23.2	22.9	22.7	23.3	24.3	25.2	26.7	25.8
New Brunswick	16.1	16.1	16.1	15.6	15.3	15.1	14.6	15.1	15.3	15.2	15.8	15.3
Québec	88.6	89.5	88.6	88.0	87.6	88.6	90.6	92.1	93.6	97.1	99.4	99.9
Ontario	176.0	175.7	173.8	173.5	174.0	176.3	181.0	184.5	191.7	206.8	240.9	254.7
Manitoba	14.6	16.8	15.7	16.0	15.5	15.4	15.4	17.1	18.0	18.3	19.9	20.3
Saskatchewan	16.5	16.7	17.0	17.1	17.3	17.2	17.4	17.3	17.7	18.6	18.6	17.4
Alberta	35.1	35.5	37.0	37.5	37.6	38.2	38.6	40.1	42.0	43.7	44.7	45.2
B.C.	28.3	29.6	30.6	32.9	35.4	36.5	35.7	35.7	39.2	40.7	42.0	40.6
Canada	411.0	416.0	413.9	416.5	418.4	422.7	429.1	438.5	455.0	479.2	522.2	533.5
Index (1993 = 100)												
Newfoundland	100	102	95	100	98	98	102	102	103	105	107	108
P.E.I.	100	95	89	86	89	88	93	99	100	105	116	120
Nova Scotia	100	101	100	101	102	101	100	102	107	111	117	113
New Brunswick	100	100	100	97	95	94	91	94	95	94	98	95
Québec	100	101	100	99	99	100	102	104	106	110	112	113
Ontario	100	100	99	99	99	100	103	105	109	117	137	145
Manitoba	100	115	107	110	106	105	105	117	123	125	136	139
Saskatchewan	100	101	103	104	105	104	105	105	107	113	113	106
Alberta	100	101	105	107	107	109	110	114	120	125	127	129
B.C.	100	105	108	116	125	129	126	126	138	143	148	143
Canada	100	101	101	101	102	103	104	107	111	117	127	130

Source: Statistics Canada, Postsecondary Student Information System (PSIS), tabulation by the authors.

Table A2.4B University Graduate and Undergraduate Full-Time Non-Foreign Enrolments (in 000's), Including Indices, by Province, 18-24 Years of Age, 1993-2004

Province	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Counts (000's)												
Newfoundland	5.4	5.6	6.4	7.7	8.0	7.9	8.2	8.0	7.9	8.0	8.3	8.8
P.E.I.	2.2	2.1	2.0	1.9	2.0	1.9	2.0	2.2	2.2	2.3	2.6	2.6
Nova Scotia	21.7	22.3	22.0	22.2	22.4	22.2	21.8	22.5	23.7	24.6	26.1	25.4
New Brunswick	15.8	15.7	15.6	15.1	14.7	14.5	14.2	14.7	14.8	14.8	15.4	14.9
Québec	87.3	88.1	87.2	86.7	86.6	87.6	89.5	89.3	90.7	96.1	98.4	98.8
Ontario	173.8	173.8	171.9	171.6	171.9	174.3	179.2	182.6	190.1	205.2	238.9	253.0
Manitoba	14.5	16.4	15.3	15.6	14.9	14.9	15.0	16.8	17.6	17.8	19.4	19.8
Saskatchewan	15.7	16.0	16.3	16.5	16.6	16.4	16.4	16.5	16.7	17.8	17.9	16.8
Alberta	34.7	35.1	36.3	37.1	37.1	37.7	38.1	39.0	41.3	43.0	43.9	44.1
B.C.	28.2	29.4	30.4	32.6	35.0	36.2	35.4	35.4	38.0	39.7	41.3	39.9
Canada	399.3	404.5	403.4	407.1	409.1	413.6	419.9	427.0	443.0	469.3	512.2	524.1
Index (1993 = 100)												
Newfoundland	100	104	118	142	146	146	151	147	145	147	152	161
P.E.I.	100	95	89	86	89	85	93	100	100	105	117	121
Nova Scotia	100	102	101	102	103	102	100	104	109	113	120	117
New Brunswick	100	100	99	96	93	92	90	93	94	94	98	95
Québec	100	101	100	99	99	100	103	102	104	110	113	113
Ontario	100	100	99	99	99	100	103	105	109	118	137	146
Manitoba	100	113	106	108	103	103	104	116	122	123	134	137
Saskatchewan	100	102	104	105	106	104	104	105	106	113	114	107
Alberta	100	101	105	107	107	109	110	112	119	124	127	127
B.C.	100	104	108	116	124	128	126	126	135	141	146	142
Canada	100	101	101	102	102	104	105	107	111	118	128	131

Source: Statistics Canada, Postsecondary Student Information System (PSIS), tabulation by the authors.

Table A2.4C College Full-Time Enrolments (in 000's), Including Indices, by Province, 18-24 Years of Age, 1993-2004

Province	1993-1994	1994-1995	1995-1996	1996-1997	1997-1998	1998-1999	1999-2000
Newfoundland	3.8	4.0	3.9	4.0	4.2	4.4	3.4
P.E.I.	0.5	0.5	0.6	0.8	1.1	0.0	0.0
Nova Scotia	2.2	1.9	4.4	4.6	4.7	4.6	4.5
New Brunswick	0.3	0.3	2.4	3.3	3.7	3.9	2.8
Québec	117.1	120.4	121.5	120.8	121.7	123.5	---
Ontario	89.9	93.6	98.9	87.9	106.1	106.8	89.7
Manitoba	2.4	2.5	2.5	2.5	2.7	2.8	2.9
Saskatchewan	2.2	2.1	2.1	1.9	2.2	2.0	1.7
Alberta	19.1	19.7	20.6	21.6	22.2	23.7	18.8
B.C.	0.3	23.0	23.3	21.3	25.9	26.8	0.2
Canada	237.7	268.0	280.3	268.8	294.5	298.5	124.1

Source: Statistics Canada, Community College Student Information System (CCSIS), tabulation by the authors.

Table A2.4D University Full-Time Enrolments (in 000's), Including Indices, by Primary Field of Study, 18-24 Years of Age, 1993-2004

Province	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Agriculture, Natural Resources and Conservation	7.6	8.6	9.1	9.5	10.0	9.9	9.8	9.2	8.6	8.2	8.3	8.1
Architecture, Engineering and Related Technologies	37.9	39.9	39.0	40.0	41.1	42.9	44.4	46.2	49.1	52.9	55.9	55.7
Business, Management and Public Administration	54.4	52.9	52.8	55.1	56.8	58.6	59.8	60.6	64.8	71.2	78.8	81.8
Education	26.8	27.0	26.1	26.8	26.6	27.0	26.3	25.7	26.3	26.2	27.2	26.8
Health, Parks, Recreation and Fitness	36.6	37.0	36.7	37.5	38.4	38.3	38.6	38.4	42.5	44.1	48.7	51.8
Humanities	78.5	76.6	81.0	77.3	75.8	75.5	70.3	73.5	77.0	82.4	93.2	91.9
Mathematics, Computer and Information Sciences	16.9	16.9	16.9	17.3	18.3	20.2	22.2	23.3	24.8	25.1	25.6	23.1
Physical and Life Sciences, and Technologies	51.3	53.4	54.5	54.3	54.6	53.7	57.2	57.2	57.9	60.2	67.6	70.6
Social and Behavioural Sciences, and Law	85.1	86.0	83.4	81.0	79.3	78.8	80.6	84.2	86.8	95.0	106.3	114.5
Visual and Performing Arts, and Com. Technologies	13.8	14.3	14.8	15.1	15.7	16.0	16.3	17.5	18.2	19.5	22.7	23.6
Other	16.4	16.8	12.2	16.0	16.0	18.0	23.5	25.3	25.8	26.1	26.2	27.3
Total	425.4	429.4	426.5	429.7	432.5	438.8	448.7	461.2	481.7	511.0	560.5	575.1
Index (1993 = 100)												
Agriculture, Natural Resources and Conservation	100	113	119	124	131	130	128	120	112	108	109	106
Architecture, Engineering and Related Technologies	100	105	103	106	108	113	117	122	130	140	148	147
Business, Management and Public Administration	100	97	97	101	104	108	110	111	119	131	145	150
Education	100	101	98	100	99	101	98	96	98	98	102	100
Health, Parks, Recreation and Fitness	100	101	100	102	105	105	105	105	116	121	133	142
Humanities	100	98	103	98	97	96	90	94	98	105	119	117
Mathematics, Computer and Information Sciences	100	100	100	102	108	119	131	138	146	148	151	136
Physical and Life Sciences, and Technologies	100	104	106	106	106	105	111	112	113	117	132	137
Social and Behavioural Sciences, and Law	100	101	98	95	93	93	95	99	102	112	125	134
Visual and Performing Arts, and Com. Technologies	100	103	107	109	113	116	117	127	131	141	164	170
Other	100	103	74	98	97	110	143	154	157	159	160	167
Total	100	101	100	101	102	103	105	108	113	120	132	135

Source: Statistics Canada, Postsecondary Student Information System (PSIS), tabulation by the authors.

Table A2.4E University Foreign Full-Time Enrolments (in 000's), Including Percent of Total Full-Time Enrolments, by Primary Field of Study, 18-24 Years of Age, 1993-2004

Province	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Agriculture, Natural Resources and Conservation	0.2	0.2	0.2	0.1	0.1	0.2	0.2	0.3	0.3	0.4	0.4	0.5
Architecture, Engineering and Related Technologies	1.9	1.9	1.8	1.8	2.0	2.1	2.5	2.9	3.5	4.2	4.9	5.4
Business, Management and Public Administration	3.0	2.7	2.6	2.7	2.8	3.1	3.4	3.9	4.8	6.5	8.5	9.6
Education	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.3	0.2
Health, Parks, Recreation and Fitness	0.3	0.2	0.2	0.3	0.3	0.3	0.4	0.5	0.5	0.6	0.7	0.7
Humanities	1.7	1.6	1.5	1.4	1.5	2.0	2.6	2.9	3.2	4.0	5.1	5.0
Mathematics, Computer and Information Sciences	1.9	1.5	1.2	1.1	1.1	1.2	1.6	2.1	2.9	3.4	3.9	3.8
Physical and Life Sciences, and Technologies	1.5	1.2	1.1	1.1	1.1	1.3	1.7	1.9	2.3	2.6	3.2	3.7
Social and Behavioural Sciences, and Law	2.4	2.2	2.1	1.9	2.0	2.3	2.8	3.3	3.7	4.7	5.8	6.4
Visual and Performing Arts, and Com. Technologies	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.6	0.6	0.8	1.0	1.1
Other	1.3	1.6	1.6	2.4	2.9	3.1	3.6	4.2	4.6	4.3	4.4	5.3
Percent Foreign												
Total	2.1	1.7	1.7	1.5	1.4	1.8	2.4	3.0	3.7	4.4	5.2	5.7
Agriculture, Natural Resources and Conservation	5.0	4.7	4.7	4.6	4.8	5.0	5.7	6.3	7.1	7.9	8.7	9.6
Architecture, Engineering and Related Technologies	5.5	5.1	4.9	5.0	4.9	5.3	5.7	6.5	7.4	9.1	10.9	11.8
Business, Management and Public Administration	0.3	0.3	0.2	0.3	0.5	0.5	0.8	0.7	0.8	0.8	1.0	0.9
Education	0.7	0.7	0.6	0.7	0.8	0.9	1.2	1.2	1.3	1.4	1.5	1.4
Health, Parks, Recreation and Fitness	2.2	2.0	1.9	1.8	2.0	2.6	3.7	3.9	4.1	4.9	5.5	5.5
Humanities	11.0	8.7	6.9	6.1	5.8	6.1	7.4	9.1	11.7	13.6	15.4	16.3
Mathematics, Computer and Information Sciences	2.9	2.3	2.1	1.9	2.0	2.4	3.0	3.3	4.0	4.4	4.7	5.2
Physical and Life Sciences, and Technologies	2.8	2.6	2.5	2.4	2.5	2.9	3.5	4.0	4.3	5.0	5.5	5.6
Social and Behavioural Sciences, and Law	1.9	2.0	1.8	2.1	2.0	2.3	2.7	3.2	3.6	3.9	4.3	4.6
Visual and Performing Arts, and Com. Technologies	7.8	9.5	13.4	15.0	17.9	17.2	15.3	16.8	17.8	16.3	17.0	19.3
Other	3.4	3.1	3.0	3.1	3.3	3.7	4.4	4.9	5.6	6.2	6.8	7.2
Total	2.1	1.7	1.7	1.5	1.4	1.8	2.4	3.0	3.7	4.4	5.2	5.7

Source: Statistics Canada, Postsecondary Student Information System (PSIS), tabulation by the authors.

Table A2.4F University Part-Time Enrolments (in 000's), Including Percent Part-Time Enrolments, by Primary Field of Study, 18-24 Years of Age, 1993-2004

Province	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Agriculture, Natural Resources and Conservation	0.9	0.7	0.9	0.9	1.1	0.9	1.0	0.9	0.8	0.8	0.7	0.8
Architecture, Engineering and Related Technologies	2.7	3.1	3.2	3.0	3.3	3.5	3.9	4.3	4.5	4.6	4.7	5.0
Business, Management and Public Administration	11.3	10.0	9.6	9.3	9.8	10.3	11.1	10.9	11.8	12.6	12.6	13.1
Education	3.5	3.4	3.1	3.0	2.9	2.7	2.5	2.2	2.1	2.2	2.6	2.6
Health, Parks, Recreation and Fitness	2.6	2.5	2.7	2.5	2.7	3.1	3.5	3.4	3.4	3.5	3.5	4.0
Humanities	13.7	12.5	13.4	12.6	12.4	11.6	11.0	12.4	13.1	13.3	13.0	12.5
Mathematics, Computer and Information Sciences	2.3	2.5	2.6	2.7	2.8	3.1	3.7	4.2	4.6	4.6	3.7	3.7
Physical and Life Sciences, and Technologies	5.7	5.2	5.8	5.4	5.4	5.2	5.5	5.5	5.7	5.5	5.1	5.6
Social and Behavioural Sciences, and Law	13.5	12.4	12.1	11.3	10.5	10.0	10.5	10.9	11.1	11.8	12.1	13.2
Visual and Performing Arts, and Com. Technologies	1.8	1.7	1.8	1.7	1.7	1.8	1.9	2.0	2.1	2.2	2.4	2.6
Other	17.5	15.6	15.1	15.3	15.6	16.5	17.9	14.3	14.4	15.0	14.9	15.8
Total	75.4	69.6	70.2	67.7	68.1	68.9	72.4	71.0	73.7	76.2	75.2	79.0
Percent Part-Time												
Total	10.7	7.3	8.7	8.8	9.6	8.7	9.5	8.8	9.0	9.1	7.8	8.5
Agriculture, Natural Resources and Conservation	6.7	7.2	7.6	6.9	7.4	7.5	8.0	8.5	8.5	8.0	7.8	8.3
Architecture, Engineering and Related Technologies	17.1	15.9	15.4	14.5	14.7	15.0	15.6	15.2	15.4	15.1	13.8	13.8
Business, Management and Public Administration	11.6	11.1	10.7	10.1	9.8	9.0	8.7	7.9	7.5	7.9	8.6	8.9
Education	6.7	6.4	6.8	6.3	6.6	7.5	8.2	8.2	7.5	7.4	6.7	7.2
Health, Parks, Recreation and Fitness	14.8	14.0	14.2	14.0	14.0	13.4	13.5	14.4	14.6	13.9	12.2	12.0
Humanities	12.0	13.0	13.2	13.4	13.4	13.3	14.2	15.2	15.7	15.4	12.7	13.8
Mathematics, Computer and Information Sciences	10.0	8.9	9.6	9.1	9.0	8.9	8.7	8.8	8.9	8.4	7.0	7.3
Physical and Life Sciences, and Technologies	13.7	12.6	12.6	12.2	11.7	11.3	11.5	11.5	11.3	11.0	10.2	10.4
Social and Behavioural Sciences, and Law	11.4	10.5	10.9	10.2	9.7	10.3	10.2	10.4	10.3	10.2	9.5	10.0
Visual and Performing Arts, and Com. Technologies	51.6	48.0	55.3	48.8	49.4	48.0	43.3	36.1	35.9	36.6	36.2	36.5
Other	15.1	13.9	14.1	13.6	13.6	13.6	13.9	13.3	13.3	13.0	11.8	12.1
Total	10.7	7.3	8.7	8.8	9.6	8.7	9.5	8.8	9.0	9.1	7.8	8.5

Source: Statistics Canada, Postsecondary Student Information System (PSIS), tabulation by the authors.

Table A2.4G University Full-Time Non-Foreign Enrolments by Gender and by Primary Field of Study (in 000's), 18-24 Years of Age, 1993-2004

Province	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Female												
Agriculture, Natural Resources and Conservation	3.7	4.2	4.6	4.8	5.2	5.3	5.3	5.0	4.8	4.7	4.8	4.8
Architecture, Engineering and Related Technologies	7.9	8.7	8.6	8.9	9.2	9.9	10.5	11.1	11.6	12.4	12.8	12.4
Business, Management and Public Administration	27.0	26.2	26.4	27.7	28.9	30.4	31.6	32.6	34.9	37.9	41.2	42.0
Education	21.2	21.4	20.8	21.2	21.1	21.8	21.4	21.0	21.7	21.6	22.4	22.3
Health, Parks, Recreation and Fitness	23.1	23.7	24.0	25.0	25.9	26.2	26.9	27.3	30.6	32.2	36.1	38.2
Humanities	48.2	46.9	49.7	47.6	47.3	47.3	44.6	47.1	49.1	52.5	60.2	58.5
Mathematics, Computer and Information Sciences	5.2	5.1	4.9	4.8	5.0	5.5	6.1	6.3	6.7	6.6	6.7	6.1
Physical and Life Sciences, and Technologies	26.0	27.4	28.7	29.0	29.8	30.0	32.7	33.3	33.7	35.2	39.6	41.3
Social and Behavioural Sciences, and Law	52.6	54.2	53.2	52.3	51.8	51.7	53.3	56.5	58.6	64.2	71.9	77.4
Visual and Performing Arts, and Com. Technologies	8.8	9.2	9.5	9.7	10.2	10.6	10.9	11.7	12.3	13.2	15.5	16.0
Other	9.1	9.4	6.9	9.2	9.2	10.1	13.8	15.0	15.2	15.6	15.6	16.0
Total	232.9	236.5	237.2	240.1	243.8	248.9	257.0	266.8	279.2	296.1	326.7	334.9
Male												
Agriculture, Natural Resources and Conservation	4.0	4.4	4.5	4.7	4.8	4.7	4.5	4.1	3.8	3.5	3.5	3.4
Architecture, Engineering and Related Technologies	30.0	31.2	30.5	31.1	31.8	32.9	33.9	35.1	37.5	40.6	43.1	43.3
Business, Management and Public Administration	27.4	26.7	26.4	27.4	27.9	28.2	28.2	28.1	29.9	33.3	37.5	39.8
Education	5.6	5.6	5.3	5.6	5.5	5.2	4.8	4.7	4.6	4.6	4.8	4.5
Health, Parks, Recreation and Fitness	13.5	13.3	12.7	12.4	12.5	12.1	11.7	11.1	11.9	11.9	12.6	13.6
Humanities	30.3	29.7	31.4	29.6	28.4	28.2	25.7	26.4	27.9	29.9	33.0	33.4
Mathematics, Computer and Information Sciences	11.7	11.9	12.0	12.5	13.4	14.6	16.0	17.0	18.1	18.5	18.9	17.0
Physical and Life Sciences, and Technologies	25.3	26.0	25.7	25.3	24.8	23.7	24.5	24.0	24.2	24.9	28.0	29.2
Social and Behavioural Sciences, and Law	32.5	31.8	30.2	28.7	27.5	27.1	27.3	27.8	28.2	30.9	34.5	37.0
Visual and Performing Arts, and Com. Technologies	5.0	5.1	5.3	5.4	5.5	5.4	5.4	5.8	5.9	6.2	7.2	7.5
Other	7.3	7.4	5.4	6.9	6.7	7.8	9.7	10.3	10.6	10.5	10.6	11.4
Total	192.5	192.9	189.3	189.5	188.8	189.9	191.6	194.4	202.6	214.8	233.8	240.2

Source: Statistics Canada, Postsecondary Student Information System (PSIS), tabulation by the authors.

Table A2.4H Percent Female University Full-Time Non-Foreign Enrolments by Primary Field of Study (in 000's), 18-24 Years of Age, 1993-2004

Province	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Agriculture, Natural Resources and Conservation	48.0	49.3	50.5	50.9	52.1	53.1	54.1	54.6	55.9	57.4	57.6	58.6
Architecture, Engineering and Related Technologies	20.8	21.9	21.9	22.2	22.5	23.2	23.6	24.0	23.6	23.4	22.8	22.2
Business, Management and Public Administration	49.7	49.6	49.9	50.3	50.9	51.8	52.9	53.7	53.9	53.3	52.3	51.4
Education	79.1	79.3	79.7	79.1	79.5	80.8	81.6	81.6	82.5	82.5	82.5	83.1
Health, Parks, Recreation and Fitness	63.0	64.1	65.4	66.8	67.3	68.5	69.6	71.2	72.0	72.9	74.1	73.7
Humanities	61.4	61.2	61.3	61.6	62.5	62.7	63.5	64.1	63.7	63.8	64.6	63.6
Mathematics, Computer and Information Sciences	30.8	30.0	28.9	27.7	27.1	27.4	27.7	27.0	27.0	26.2	26.0	26.3
Physical and Life Sciences, and Technologies	50.7	51.3	52.7	53.5	54.6	55.9	57.2	58.1	58.2	58.6	58.6	58.5
Social and Behavioural Sciences, and Law	61.8	63.0	63.8	64.6	65.4	65.6	66.1	67.1	67.5	67.5	67.6	67.6
Visual and Performing Arts, and Com. Technologies	63.8	64.5	64.3	64.1	65.0	66.0	66.9	66.9	67.5	68.0	68.1	68.1
Other	55.5	56.0	56.2	57.2	57.8	56.5	58.6	59.1	59.1	59.7	59.5	58.3
Total	54.7	55.1	55.6	55.9	56.4	56.7	57.3	57.8	57.9	58.0	58.3	58.2

Source: Statistics Canada, Postsecondary Student Information System (PSIS), tabulation by the authors.

Table A2.4I University Enrolments by Program Level (in 000's), 18-24 Years of Age, 1993-2004

Province	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Count												
Community college certificate or diploma and other community college level	1.1	0.6	0.9	1.0	0.9	0.9	1.3	1.3	1.1	1.2	1.7	1.2
Undergraduate level	453.3	454.0	453.0	454.4	457.2	461.8	474.0	484.1	504.7	536.5	583.1	600.0
Graduate level	16.0	16.3	16.0	16.2	16.2	17.2	17.9	18.0	18.4	19.9	21.5	22.6
Other program level	30.4	28.1	26.8	25.8	26.3	27.8	27.9	28.9	31.3	29.6	29.3	30.3
Total, Program level	500.8	499.0	496.8	497.4	500.6	507.7	521.1	532.3	555.5	587.2	635.7	654.1
Percentage												
Community college certificate or diploma and other community college level	0.2	0.1	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.3	0.2
Undergraduate level	90.5	91.0	91.2	91.4	91.3	91.0	91.0	91.0	90.9	91.4	91.7	91.7
Graduate level	3.2	3.3	3.2	3.3	3.2	3.4	3.4	3.4	3.3	3.4	3.4	3.5
Other program level	6.1	5.6	5.4	5.2	5.3	5.5	5.3	5.4	5.6	5.0	4.6	4.6
Total, Program level	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: Statistics Canada, Postsecondary Student Information System (PSIS), tabulation by the authors.

Table A2.5A – Full-Time Enrolments by Institution Type and Province, 17-24 Years of Age, 1992-2005

Province	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
College														
Newfoundland	6.9	7.0	8.9	8.1	8.5	7.6	7.8	5.6	7.3	8.5	5.0	4.7	4.2	3.9
P.E.I.	0.9	1.2	0.8	0.6	1.2	1.2	1.4	1.4	1.6	1.1	1.1	1.1	1.1	0.9
Nova Scotia	7.1	6.5	9.2	5.7	7.7	5.9	6.5	6.3	8.0	9.1	8.7	6.5	6.3	5.2
New Brunswick	5.0	4.8	4.7	5.8	5.6	6.1	5.4	5.6	5.7	6.3	4.3	4.9	6.3	5.4
Québec	180.2	179.5	171.0	191.2	187.2	183.5	185.9	178.4	171.7	186.1	193.6	162.0	168.9	158.0
Ontario	110.9	124.0	123.1	135.1	135.1	141.6	141.5	138.8	146.8	149.0	154.5	156.3	170.6	153.7
Manitoba	3.6	5.3	5.2	4.5	5.9	5.7	3.9	7.7	6.9	4.7	6.8	6.4	6.9	9.6
Saskatchewan	4.8	4.8	4.0	4.1	4.7	5.4	7.2	5.8	5.4	7.1	6.9	5.2	5.9	4.5
Alberta	29.6	27.9	33.4	23.5	30.2	34.8	33.8	33.1	29.1	48.3	47.7	39.7	39.6	41.3
B.C.	35.5	45.7	38.4	40.3	42.2	44.0	43.0	52.0	59.2	56.2	52.1	53.0	55.0	58.0
Canada	384.6	406.7	398.7	419.1	428.2	435.9	436.4	434.7	441.6	476.3	480.7	439.9	464.8	440.5
University														
Newfoundland	13.8	14.7	14.3	14.6	13.7	16.6	14.9	16.4	13.9	11.5	15.8	13.0	14.2	13.0
P.E.I.	3.1	3.9	3.2	2.9	2.8	2.8	3.7	2.9	3.1	2.9	3.5	4.4	3.8	4.6
Nova Scotia	23.4	22.9	20.1	21.6	23.7	22.3	22.6	21.3	22.6	20.4	21.9	22.5	24.6	27.3
New Brunswick	15.5	16.4	16.4	15.2	16.9	16.8	13.5	14.8	15.5	15.2	15.6	17.8	19.7	17.1
Québec	109.8	120.6	100.2	107.6	102.5	115.6	108.8	109.6	113.9	116.7	117.0	125.9	123.2	128.6
Ontario	189.5	194.0	214.4	213.8	202.8	200.7	181.9	218.0	204.4	214.2	258.9	276.2	299.0	315.2
Manitoba	21.3	21.3	22.7	20.8	22.3	21.3	22.8	20.5	20.1	24.3	24.7	24.8	27.2	28.1
Saskatchewan	17.8	22.0	21.4	22.7	22.8	19.8	22.4	19.4	20.6	21.8	21.5	26.4	21.1	25.8
Alberta	41.5	46.8	41.8	42.0	42.1	43.1	45.7	41.3	47.4	51.2	49.1	60.2	48.9	51.1
B.C.	41.8	40.3	43.6	54.2	55.9	62.6	69.3	68.7	60.1	71.7	73.3	76.7	100.2	79.3
Canada	477.6	502.8	497.9	515.3	505.5	521.3	505.7	533.0	521.4	549.9	601.2	648.0	681.9	690.0

Source: Statistics Canada, Labour Force Survey, tabulation by the authors.

Table A2.5B – Full-Time Enrolment Rates by Institution Type and Province, 17-24 Years of Age, 1992-2005

Province	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
College														
Newfoundland	6.7	7.0	9.3	8.7	9.5	9.0	9.6	7.1	9.4	11.3	6.8	6.4	5.9	5.7
P.E.I.	4.7	6.2	3.9	3.1	5.9	6.2	7.1	7.3	8.3	5.5	5.4	5.5	5.4	4.8
Nova Scotia	5.4	5.0	7.1	4.5	6.1	4.8	5.3	5.2	6.5	7.5	7.1	5.3	5.1	4.1
New Brunswick	4.4	4.3	4.2	5.4	5.2	5.8	5.2	5.5	5.6	6.3	4.3	5.0	6.5	5.5
Québec	19.1	19.0	18.0	20.0	19.4	19.0	19.2	18.3	17.6	19.1	20.1	16.9	17.7	16.6
Ontario	7.5	8.5	8.4	9.3	9.3	9.6	9.5	9.2	9.5	9.4	9.6	9.5	10.2	9.0
Manitoba	2.3	3.4	3.5	3.0	4.0	3.9	2.6	5.2	4.6	3.1	4.5	4.2	4.4	6.1
Saskatchewan	3.5	3.5	2.9	2.9	3.3	3.8	5.0	4.1	3.8	5.1	4.9	3.7	4.2	3.2
Alberta	7.9	7.4	8.9	6.2	7.8	8.6	8.1	7.7	6.6	10.7	10.3	8.5	8.3	8.6
B.C.	7.7	9.7	8.0	8.2	8.4	8.5	8.3	9.9	11.1	10.4	9.5	9.5	9.7	10.1
Canada	9.9	10.5	10.2	10.7	10.9	11.0	10.9	10.8	10.8	11.5	11.5	10.4	10.9	10.3
University														
Newfoundland	13.5	14.8	14.9	15.7	15.4	19.6	18.4	20.8	18.1	15.3	21.5	17.9	19.9	19.0
P.E.I.	15.8	20.2	16.2	14.8	14.5	14.5	19.7	15.5	16.4	15.2	17.8	22.5	19.5	23.1
Nova Scotia	17.8	17.6	15.7	17.0	18.9	18.1	18.5	17.5	18.6	16.8	17.9	18.3	20.0	22.0
New Brunswick	13.7	14.7	14.9	14.0	15.9	16.1	13.2	14.5	15.4	15.2	15.8	18.2	20.2	17.8
Québec	11.6	12.7	10.5	11.2	10.6	11.9	11.2	11.2	11.7	12.0	12.1	13.1	12.9	13.5
Ontario	12.9	13.3	14.7	14.7	13.9	13.7	12.3	14.4	13.2	13.5	16.0	16.9	18.0	18.6
Manitoba	14.0	14.1	15.2	14.0	15.0	14.5	15.5	13.8	13.5	16.1	16.3	16.2	17.5	18.0
Saskatchewan	13.2	16.2	15.6	16.3	16.2	14.0	15.9	13.8	14.6	15.6	15.4	18.9	15.1	18.6
Alberta	11.1	12.4	11.1	11.0	10.8	10.7	10.9	9.6	10.8	11.3	10.6	12.9	10.3	10.6
B.C.	9.1	8.5	9.0	11.1	11.1	12.2	13.4	13.1	11.3	13.3	13.3	13.7	17.7	13.8
Canada	12.3	12.9	12.8	13.2	12.9	13.2	12.7	13.2	12.8	13.3	14.4	15.4	16.0	16.1

Source: Statistics Canada, Labour Force Survey, tabulation by the authors.

Table A2.10 Number of CMSF Bursaries (in 000's) Distributed, by Province, 2000-2005

	2000	2001	2002	2003	2004	2005
Count (000's)						
Newfoundland and Labrador	2.3	2.1	2.2	2.2	2.0	2.0
Prince Edward Island	0.5	0.5	0.4	0.4	0.3	0.4
Nova Scotia	3.1	2.9	2.8	3.6	3.1	3.5
New Brunswick	2.6	2.5	2.5	2.5	2.5	2.5
Quebec	18.7	20.4	18.2	21.4	21.7	17.9
Ontario	35.4	33.0	35.0	35.6	37.5	36.3
Manitoba	3.5	3.1	3.0	3.3	2.9	2.9
Saskatchewan	3.9	3.8	3.6	3.5	3.0	3.6
Alberta	9.0	10.5	9.2	10.5	10.9	10.8
British Columbia	10.2	10.8	11.2	10.9	10.7	13.6
Territories	0.3	0.3	0.3	0.3	0.3	0.3
Canada	89.5	89.9	88.5	94.3	94.9	93.7
Percentage						
Newfoundland and Labrador	2.5%	2.4%	2.5%	2.3%	2.1%	2.1%
Prince Edward Island	0.5%	0.5%	0.5%	0.5%	0.4%	0.4%
Nova Scotia	3.4%	3.2%	3.1%	3.8%	3.2%	3.7%
New Brunswick	2.9%	2.8%	2.9%	2.7%	2.7%	2.7%
Quebec	20.9%	22.7%	20.5%	22.8%	22.9%	19.1%
Ontario	39.6%	36.7%	39.5%	37.8%	39.5%	38.7%
Manitoba	3.9%	3.5%	3.3%	3.6%	3.1%	3.1%
Saskatchewan	4.4%	4.2%	4.1%	3.7%	3.2%	3.8%
Alberta	10.0%	11.6%	10.4%	11.1%	11.4%	11.5%
British Columbia	11.4%	12.1%	12.7%	11.5%	11.3%	14.5%
Territories	0.3%	0.3%	0.4%	0.3%	0.3%	0.3%
Canada	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Source: Canadian Millennium Scholarship Foundation, tabulation by the authors.

Table 2.7 – CMSF Update by Province, 2000-2005

Province/Territory	2000	2001	2002	2003	2004	2005
	Counts					
Atlantic Provinces	8,365	8,008	7,941	8,727	7,932	8,336
Quebec	18,749	20,389	18,170	21,448	21,710	17,873
Ontario	35,415	32,979	34,982	35,583	37,463	36,280
Manitoba and Saskatchewan	7,459	6,890	6,570	6,856	5,933	6,501
Alberta	8,991	10,455	9,228	10,457	10,851	10,763
British Columbia	10,234	10,848	11,247	10,869	10,703	13,605
Canada including Territories	89,785	90,181	88,778	94,572	95,188	93,978
	Percentage					
Atlantic Provinces	9.3%	8.9%	8.9%	9.2%	8.3%	8.9%
Quebec	20.9%	22.6%	20.5%	22.7%	22.8%	19.0%
Ontario	39.4%	36.6%	39.4%	37.6%	39.4%	38.6%
Manitoba and Saskatchewan	8.3%	7.6%	7.4%	7.2%	6.2%	6.9%
Alberta	10.0%	11.6%	10.4%	11.1%	11.4%	11.5%
British Columbia	11.4%	12.0%	12.7%	11.5%	11.2%	14.5%
Canada including Territories	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Source: CMSF Administrative Data, tabulation by the authors.

Table A2.8A - Number of Enrolments, 18-24 Years of Age by Income Quartile, 1997-2004

Quartile	1997	1998	1999	2000	2001	2002	2003	2004
Full-Time 18-21 Year Old Students (Numerator)								
Quartile 1	52.9	59.2	65.5	69.4	71.6	74.1	80.1	83.4
Quartile 2	53.7	61.1	66.9	70.6	82.2	90.0	94.1	97.6
Quartile 3	77.9	87.2	95.6	103.5	114.6	123.3	133.9	136.0
Quartile 4	106.1	115.8	124.3	135.2	147.3	154.5	169.0	172.9
Total	290.6	323.2	352.3	378.8	415.6	441.8	477.0	489.9
18-21 Year Old (Denominator)								
Quartile 1	245.5	249.9	256.6	265.4	276.5	278.5	282.1	286.0
Quartile 2	245.5	249.9	256.6	265.4	276.5	278.5	282.1	285.9
Quartile 3	245.5	249.9	256.6	265.5	276.5	278.5	282.1	286.0
Quartile 4	245.5	249.9	256.6	265.5	276.5	278.5	282.1	286.0
Total	982.0	999.4	1026.5	1061.8	1105.9	1113.9	1128.5	1143.8
Quartile Limits								
Quartile 1	15.2	16.2	17.0	17.3	23.0	24.2	22.3	22.8
Quartile 2	49.0	52.0	54.5	57.1	65.0	68.1	65.5	66.9
Quartile 3	97.2	101.0	104.5	107.7	112.0	115.0	113.5	116.2
Full-Time 22-24 Year Old Students (Numerator)								
Quartile 1	48.0	51.5	54.5	57.0	57.1	57.3	61.9	64.7
Quartile 2	36.7	38.0	41.1	41.5	44.4	45.5	47.7	48.1
Quartile 3	42.9	47.5	50.4	53.5	61.1	68.9	67.1	68.6
Quartile 4	80.6	85.7	89.8	93.3	98.3	101.2	104.3	106.1
Total	208.2	222.7	235.7	245.3	260.9	272.9	281.0	287.5
22-24 Year Old Individuals (Denominator)								
Quartile 1	204.6	203.9	205.2	205.8	209.1	211.7	216.1	221.1
Quartile 2	204.6	203.9	205.2	205.8	209.1	211.7	216.1	221.1
Quartile 3	204.6	203.9	205.2	205.8	209.1	211.7	216.1	221.1
Quartile 4	204.6	203.9	205.2	205.8	209.1	211.7	216.1	221.1
Total	818.4	815.7	820.7	823.0	836.4	846.8	864.2	884.3
Quartile Limits								
Quartile 1	18.8	19.9	20.8	21.2	23.8	24.4	22.5	22.8
Quartile 2	40.4	42.3	43.9	45.5	51.2	54.6	51.0	51.7
Quartile 3	80.5	84.1	87.1	91.1	98.5	105.3	100.7	103.0

Source: Statistics Canada, Longitudinal Administrative Data files, tabulation by the authors.

Table A2.8B - Number of Students and Individuals, 18-24 Years of Age by Income Quartile, 1993-2003

Quartile	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Full-Time 18-24 Year Old Financially-Independent Students (Numerator)											
Quartile 1	30875	28725	31400	28850	29425	28025	27325	41625	47425	52225	55350
Quartile 2	51500	47125	48525	46250	47350	46875	48050	54225	55800	58075	59725
Quartile 3	26050	26300	29200	29925	31350	31275	33325	36625	37750	40150	42025
Quartile 4	16450	17025	19775	21375	22125	23550	25050	26075	27000	28375	29675
Total	124875	119150	128900	126375	130250	129700	133775	158550	167975	178825	186750
18-24 Year Old Financially-Independent Individuals (Denominator)											
Quartile 1	237600	225875	229325	224900	226200	222225	215450	215025	211200	212325	214100
Quartile 2	237600	225875	229325	224900	226200	222250	215450	215025	211200	212325	214100
Quartile 3	237600	225875	229325	224900	226200	222250	215450	215025	211200	212325	214100
Quartile 4	237600	225875	229325	224900	226200	222250	215450	215025	211200	212325	214100
Total	950425	903500	917325	899625	904775	888975	861825	860100	844800	849325	856425
Quartile Limits											
Quartile 1	10000	9600	9200	8600	8700	9000	9400	9300	10100	9000	8900
Quartile 2	19400	18600	18200	17300	17400	18100	18700	18700	20200	18900	18600
Quartile 3	34600	33300	32800	32100	32800	33800	34600	35100	37500	36000	35500
Full-Time 18-24 Year Old Students Living at Home (Numerator)											
Quartile 1	38000	40125	41850	40300	41575	42750	44825	65750	74125	81975	85925
Quartile 2	49000	49800	50350	51425	52650	55050	58025	77225	86800	94550	101075
Quartile 3	58950	58750	60050	60875	62850	65725	69400	88500	97525	106075	114150
Quartile 4	76825	76400	76100	79000	79550	85100	88275	108775	119475	126525	136200
Total	222775	225075	228350	231600	236625	248600	260500	340250	377900	409125	437325
18-24 Year Old Individuals Living at Home (Denominator)											
Quartile 1	223850	225275	218475	224825	223825	227525	229625	235075	242550	249450	257075
Quartile 2	223850	225275	218475	224850	223825	227525	229600	235075	242550	249450	257075
Quartile 3	223850	225275	218475	224850	223825	227525	229625	235075	242575	249450	257075
Quartile 4	223850	225275	218475	224850	223825	227525	229625	235075	242550	249450	257075
Total	895375	901075	873875	899375	895325	910075	918450	940325	970250	997825	1028300
Quartile Limits											
Quartile 1	55600	54600	54400	53800	54600	56400	58600	61200	60200	60800	59900
Quartile 2	85400	85400	85600	85100	86600	89400	91900	95000	94400	95500	94900
Quartile 3	119200	120300	121000	121000	123400	127300	130200	134200	133700	136400	135900

Source: Statistics Canada, Longitudinal Administrative Data files, tabulation by the authors.

Table A2.8 – Percentage of CMSF Bursary and Student Loan Recipients Having an Assessed Need of \$300 or More per Week, by Province, Excluding Québec, 1999-2004

Province	CMSF Bursary Recipients					Student Loan Recipients				
	1999-2000	2000-2001	2001-2002	2002-2003	2003-2004	1999-2000	2000-2001	2001-2002	2002-2003	2003-2004
Numerator										
Newfoundland	1.7	2.2	1.9	1.0	0.3	6.5	6.6	5.2	4.8	3.9
P.E.I.	0.0	0.0	0.0	0.0	0.0	0.4	0.6	0.5	0.6	0.8
Nova Scotia	1.6	2.6	2.6	3.2	0.0	7.1	8.5	8.7	9.7	0.9
New Brunswick	0.0	0.0	0.0	0.0	0.0	4.6	5.0	5.5	5.8	6.6
Ontario	17.3	18.8	16.3	20.3	27.2	61.5	64.9	61.3	67.5	86.7
Manitoba	1.3	1.3	1.0	1.1	1.2	4.3	4.1	3.4	3.5	3.7
Saskatchewan	0.0	0.0	0.0	0.0	0.1	1.6	5.6	5.7	5.9	6.6
Alberta	4.1	5.2	5.0	6.1	6.6	14.0	17.6	16.6	19.4	21.4
B.C.	0.1	0.1	0.1	0.1	0.1	22.6	28.0	28.3	32.4	36.5
Canada, Excl. Qc.	26.1	30.2	27.0	31.9	35.5	98.2	112.9	110.3	118.5	131.9
Denominator										
Newfoundland	2.1	2.4	2.5	1.6	0.6	14.8	16.0	13.9	12.6	11.6
P.E.I.	0.0	0.0	0.0	0.0	0.0	2.3	3.0	3.1	3.2	3.4
Nova Scotia	2.8	2.9	2.7	3.6	3.1	16.6	16.9	17.2	17.0	16.8
New Brunswick	0.0	0.0	0.0	0.1	0.1	13.9	15.7	15.6	15.5	15.9
Ontario	33.1	34.8	33.5	35.3	37.2	170.0	157.8	144.5	148.0	159.6
Manitoba	3.3	3.0	2.9	3.3	2.9	10.6	10.8	10.2	10.0	9.7
Saskatchewan	0.0	0.0	0.0	0.1	0.1	15.2	16.4	16.2	15.5	15.3
Alberta	7.8	8.9	8.1	9.3	8.7	39.7	43.1	41.7	41.8	42.1
B.C.	0.1	0.1	0.1	0.2	0.2	51.9	62.7	63.6	64.7	65.7
Canada, Excl. Qc.	49.4	52.3	49.9	53.4	52.8	335.2	342.7	326.1	328.7	340.4

Source: Statistics Canada, Longitudinal Administrative Data – Student Loan Administrative files, tabulation by the authors. Note that assessed needs have been adjusted to 2003-2004 dollar value using a yearly 2 percent inflation rate.

Table A4.5A Full-Time College Completion Rates, by Income Quartile, 18-24 Years of Age, 1996-2003

Quartile	1996	1997	1998	1999	2000	2001	2002	2003
Counts – Numerator (000's)								
1	23.4	26.0	29.7	32.8	43.7	35.1	39.1	36.3
2	22.0	31.9	33.3	26.2	34.0	43.9	30.3	36.1
3	24.0	26.8	30.5	33.6	30.4	32.8	33.4	26.5
4	17.0	23.2	31.6	30.2	27.2	28.9	42.3	28.5
Total	86.5	107.9	125.1	122.8	135.3	140.7	145.1	127.3
Counts – Denominator (000's)								
1	110.0	117.3	124.3	121.5	130.7	135.2	117.1	119.4
2	109.9	117.5	120.2	121.4	130.5	135.2	117.1	117.1
3	110.4	119.4	121.5	122.1	130.9	135.9	117.6	117.9
4	108.6	114.7	122.0	120.8	130.2	134.5	116.3	118.1
Total	438.9	468.9	488.0	485.8	522.3	540.8	468.0	472.5
Quartile Limits (\$000)								
1	35.7	33.5	34.2	36.0	32.2	33.3	26.5	25.9
2	66.3	65.3	67.2	64.9	61.9	61.1	53.7	50.6
3	105.0	100.7	104.7	100.8	96.4	92.8	83.5	76.7
Percentage								
1	21.3%	22.1%	23.9%	27.0%	33.4%	26.0%	33.4%	30.4%
2	20.0%	27.2%	27.7%	21.6%	26.1%	32.5%	25.9%	30.8%
3	21.8%	22.4%	25.1%	27.5%	23.2%	24.1%	28.4%	22.4%
4	15.7%	20.2%	25.9%	25.0%	20.9%	21.5%	36.4%	24.1%
Total	19.7%	23.0%	25.6%	25.3%	25.9%	26.0%	31.0%	26.9%
Q4-Q1%	-5.6%	-2.0%	1.9%	-1.9%	-12.6%	-4.5%	3.0%	-6.3%

Source: Statistics Canada, Survey of Labour and Income Dynamics (SLID), tabulation by the authors. Note: the percentage represents the number of students who were enrolled on a full-time basis and who received a degree.

Table A4.5B Full-Time University Completion Rates, by Income Quartile, 18-24 Years of Age, 1996-2003

Quartile	1996	1997	1998	1999	2000	2001	2002	2003
Counts – Numerator (000's)								
1	36.9	39.2	41.9	33.7	30.9	36.0	30.5	38.0
2	25.0	23.1	20.0	22.1	28.0	23.7	31.7	35.7
3	30.0	25.2	20.5	15.0	21.0	24.8	16.7	30.7
4	26.4	26.6	21.7	29.1	21.4	27.3	28.2	30.6
Total	118.4	114.1	104.0	99.9	101.2	111.7	107.1	135.0
Counts – Denominator (000's)								
1	157.1	162.4	152.9	151.7	159.1	161.1	142.0	172.6
2	156.4	159.8	149.8	152.3	159.5	161.8	141.1	172.0
3	156.9	160.7	151.6	150.4	160.3	160.4	140.4	172.1
4	156.6	160.9	149.7	151.2	156.5	160.7	140.9	171.2
Total	626.9	643.8	604.1	605.6	635.4	644.0	564.3	687.9
Quartile Limits (\$000)								
1	34.9	30.2	35.8	41.7	35.6	31.5	29.3	26.7
2	74.7	70.7	70.8	70.8	68.9	61.6	55.9	54.5
3	117.4	113.7	112.4	110.7	109.8	100.7	93.8	92.2
Percentage								
1	23.5%	24.1%	27.4%	22.2%	19.4%	22.4%	21.5%	22.0%
2	16.0%	14.5%	13.3%	14.5%	17.5%	14.6%	22.4%	20.8%
3	19.2%	15.7%	13.5%	10.0%	13.1%	15.4%	11.9%	17.8%
4	16.9%	16.5%	14.5%	19.2%	13.7%	17.0%	20.0%	17.9%
Total	18.9%	17.7%	17.2%	16.5%	15.9%	17.4%	19.0%	19.6%
Q4-Q1%	-6.6%	-7.6%	-12.9%	-3.0%	-5.7%	-5.4%	-1.5%	-4.1%

Source: Statistics Canada, Survey of Labour and Income Dynamics (SLID), tabulation by the authors.
 Note: the percentage represents the number of students who were enrolled on a full-time basis and who received a degree.

Table A4.5C Full-Time Combined University and College Completion Rates, by Income Quartile, 18-24 Years of Age, 1996-2003

Quartile	1996	1997	1998	1999	2000	2001	2002	2003
Counts – Numerator (000's)								
1	85.3	91.1	96.5	98.5	91.5	98.3	96.7	92.5
2	78.8	74.4	77.9	78.1	99.7	86.9	77.1	91.7
3	70.1	75.1	65.3	71.2	77.3	82.4	70.8	89.8
4	67.1	67.0	75.7	81.9	66.6	77.8	77.7	76.6
Total	301.4	307.6	315.5	329.7	335.0	345.3	322.3	350.6
Counts – Denominator (000's)								
1	268.0	275.3	270.1	271.6	287.3	292.7	256.7	287.9
2	261.9	275.2	270.9	271.8	287.4	292.5	256.8	284.8
3	264.7	274.9	268.1	270.1	287.2	293.5	256.1	287.2
4	263.8	274.8	268.5	270.7	286.9	291.3	256.5	284.6
Total	1,058.4	1,100.2	1,077.7	1,084.2	1,148.8	1,170.0	1,026.1	1,144.4
Quartile Limits (\$000)								
1	35.7	31.4	35.3	38.1	33.8	32.4	28.0	26.7
2	71.0	67.4	69.0	66.9	66.1	61.6	54.4	52.7
3	112.1	108.1	109.6	105.3	103.7	96.4	89.4	84.9
Percentage								
1	31.8%	33.1%	35.7%	36.3%	31.8%	33.6%	37.7%	32.1%
2	30.1%	27.0%	28.8%	28.7%	34.7%	29.7%	30.0%	32.2%
3	26.5%	27.3%	24.4%	26.4%	26.9%	28.1%	27.6%	31.3%
4	25.5%	24.4%	28.2%	30.3%	23.2%	26.7%	30.3%	26.9%
Total	28.5%	28.0%	29.3%	30.4%	29.2%	29.5%	31.4%	30.6%
Q4-Q1%	-6.4%	-8.7%	-7.5%	-6.0%	-8.6%	-6.9%	-7.4%	-5.2%

Source: Statistics Canada, Survey of Labour and Income Dynamics (SLID), tabulation by the authors.
Note: the percentage represents the number of students who were enrolled on a full-time basis and who received a degree.

Impact of CMSF bursaries on PSE persistence, completion and debt levels

Province	Number of Recipients (000's)					Average Amount of Student Loan (\$)				
	2000-2001	2001-2002	2002-2003	2003-2004	2004-2005	2000-2001	2001-2002	2002-2003	2003-2004	2004-2005
Newfoundland	16.0	13.9	12.6	11.5	10.4	4,354	4,408	4,479	4,507	4,476
P.E.I.	3.0	3.1	3.2	3.4	3.3	4,426	5,259	5,249	5,274	5,261
Nova Scotia	16.9	17.2	16.9	16.7	16.0	5,365	5,393	5,461	5,548	5,536
New Brunswick	15.7	15.6	15.4	15.9	15.4	4,938	4,978	5,046	5,189	5,184
Ontario	158.3	145.3	148.2	159.7	167.4	4,451	4,430	4,485	4,600	4,594
Manitoba	10.9	10.3	9.9	9.6	9.2	4,319	4,334	4,367	4,569	4,518
Saskatchewan	16.4	16.2	15.4	15.2	14.1	4,779	4,861	4,841	5,013	5,043
Alberta	43.3	42.3	42.1	42.5	41.4	4,254	4,284	4,454	4,709	4,801
British Columbia	63.0	64.5	65.0	65.4	59.8	4,743	4,801	5,077	5,228	5,261
Yukon	0.3	0.3	0.3	0.3	0.3	4,691	4,999	5,021	5,012	4,944
Canada, Excl. Qc.	343.6	328.7	329.0	340.2	337.3	4,554	4,586	4,695	4,830	4,829

Table A5.9A - Student Loan Uptake for Students 18-21 and 22-24 Years of Age by Income Quartile, 1997-2003

Quartile	1997	1998	1999	2000	2001	2002	2003
Full-Time 18-21 Year Old Student Loan Recipients (Numerator)							
Quartile 1	25.8	28.0	30.3	34.9	38.6	41.0	43.6
Quartile 2	26.3	28.8	32.2	37.2	38.6	39.4	43.5
Quartile 3	14.0	15.9	17.5	17.7	17.0	16.7	18.0
Quartile 4	3.4	3.6	4.0	4.1	4.2	4.1	4.1
Total	69.4	76.2	84.0	93.8	98.4	101.3	109.1
18-24 Year Old Students (Denominator)							
Quartile 1	72.7	80.8	88.1	94.7	103.9	110.5	119.3
Quartile 2	72.7	80.8	88.1	94.7	103.9	110.5	119.3
Quartile 3	72.7	80.8	88.1	94.7	103.9	110.5	119.3
Quartile 4	72.7	80.8	88.1	94.7	103.9	110.5	119.3
Total	290.6	323.2	352.3	378.8	415.6	441.8	477.0
Quartile Limits							
Quartile 1	25.5	27.2	28.2	30.3	40.7	43.9	41.8
Quartile 2	73.7	76.2	78.5	82.3	87.7	89.8	88.8
Quartile 3	118.9	122.3	124.3	128.9	132.1	135.0	135.0
Full-Time 22-24 Year Old Student Loan Recipients (Numerator)							
Quartile 1	20.3	19.9	22.0	23.5	23.3	23.7	23.6
Quartile 2	14.0	14.0	15.6	17.3	17.9	19.0	18.8
Quartile 3	13.2	14.2	14.8	15.8	15.4	15.0	16.7
Quartile 4	7.6	7.5	8.2	8.3	8.6	8.1	8.5
Total	55.1	55.6	60.6	64.9	65.2	65.8	67.6
22-24 Year Old Students (Denominator)							
Quartile 1	52.1	55.7	58.9	61.3	65.2	68.2	70.3
Quartile 2	52.1	55.7	58.9	61.3	65.2	68.2	70.3
Quartile 3	52.1	55.7	58.9	61.3	65.2	68.2	70.3
Quartile 4	52.1	55.7	58.9	61.3	65.2	68.2	70.3
Total	208.2	222.7	235.7	245.3	260.9	272.9	281.0
Quartile Limits							
Quartile 1	20.5	21.7	22.6	23.1	28.2	31.0	26.5
Quartile 2	57.2	60.1	62.0	65.2	72.5	79.1	73.7
Quartile 3	111.1	115.5	117.1	121.8	126.9	132.2	128.7

Source: Statistics Canada, Longitudinal Administrative Data - Student Loan Administrative files, tabulation by the authors.

Table A5.9B – Student Loan Uptake for Dependent and Independent Students, 18-24 Years of Age by Income Quartile, 1993-2003

Quartile	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Full-Time 18-24 Year Old Student Loan Financially-Independent Recipients (Numerator)											
Quartile 1	13500	14400	14675	14900	17500	17400	18550	19775	16400	13725	15100
Quartile 2	10625	10675	10825	11475	14250	14800	15800	17700	15175	15175	16600
Quartile 3	8525	8675	8800	8850	10550	10375	11725	13100	11350	10900	11950
Quartile 4	6100	5875	6500	6250	7425	7500	8175	9150	7550	7600	7925
Total	38750	39625	40825	41500	49725	50050	54225	59725	50475	47425	51575
18-24 Year Old Financially-Independent Students (Denominator)											
Quartile 1	31600	32550	32425	33450	39625	42000	44700	46675	41600	39075	44675
Quartile 2	31600	32575	32425	33450	39650	42000	44700	46700	41600	39075	44675
Quartile 3	31600	32575	32425	33450	39650	42000	44700	46675	41600	39075	44675
Quartile 4	31600	32575	32425	33450	39650	42000	44725	46675	41600	39075	44675
Total	126375	130250	129700	133775	158550	167975	178825	186750	166425	156275	178725
Quartile Limits											
Quartile 1	10500	10100	9900	9600	8400	8300	8400	8300	8400	7200	7000
Quartile 2	16200	15700	15600	15300	14000	14200	14500	14600	15400	13900	13700
Quartile 3	27400	26600	27000	26900	25000	25800	25900	26300	28900	27100	26400
Full-Time 18-24 Year Old Student Loan Recipients Living at Home (Numerator)											
Quartile 1	21950	21475	22800	25150	33250	35825	39950	46675	52625	56375	60075
Quartile 2	12625	13250	14900	15175	23425	25900	28475	29825	34550	36675	38375
Quartile 3	7550	7650	8600	8900	12250	14100	15450	16050	18125	18475	18900
Quartile 4	4475	4600	4900	5075	5850	5825	6450	6400	7775	8100	7725
Total	46625	46950	51200	54275	74750	81650	90325	98950	113075	119600	125075
18-24 Year Old Students Living at Home (Denominator)											
Quartile 1	57900	59150	62150	65125	85050	94475	102275	109325	127500	139600	144825
Quartile 2	57900	59150	62150	65125	85050	94475	102275	109325	127500	139600	144825
Quartile 3	57900	59150	62150	65125	85050	94475	102275	109325	127500	139600	144825
Quartile 4	57900	59150	62150	65125	85075	94475	102275	109325	127500	139600	144825
Total	231600	236625	248600	260500	340250	377900	409125	437325	510000	558450	579300
Quartile Limits											
Quartile 1	66800	65700	66300	65600	63200	64700	66200	69800	69100	69700	69300
Quartile 2	98300	98200	99100	98500	97300	99300	101200	105100	104500	105500	105100
Quartile 3	134600	135200	137100	136600	136000	140400	142300	146600	146600	148500	148800

Source: Statistics Canada, Longitudinal Administrative Data - Student Loan Administrative files, tabulation by the authors.

Table A5.3 – Average Student Loan Amounts, by Year, Age Group and Province

	2000-2001			2001-2002			2002-2003			2003-2004			2004-2005		
	Students (000)	Stud. Loan (\$M)	Avg Stud. Loan (000)	Students (000)	Stud. Loan (\$M)	Avg Stud. Loan (000)	Students (000)	Stud. Loan (\$M)	Avg Stud. Loan (000)	Students (000)	Stud. Loan (\$M)	Avg Stud. Loan (000)	Students (000)	Stud. Loan (\$M)	Avg Stud. Loan (000)
Age Group															
0-21	166.1	679.9	4.1	146.1	600.4	4.1	148.1	623.6	4.2	158.0	692.4	4.4	158.2	691.5	4.4
22-25	93.4	445.0	4.8	97.8	464.3	4.7	97.1	471.6	4.9	99.1	495.0	5.0	100.4	507.8	5.1
26-29	35.9	184.0	5.1	36.9	188.9	5.1	36.6	193.1	5.3	36.3	196.2	5.4	35.2	189.9	5.4
30 +	48.1	255.8	5.3	47.9	253.9	5.3	47.3	256.4	5.4	46.7	259.4	5.6	43.5	239.6	5.5
Province															
NF	16.0	69.5	4.4	13.9	61.3	4.4	12.6	56.2	4.5	11.5	52.0	4.5	10.4	46.5	4.5
PE	3.0	13.5	4.4	3.1	16.1	5.3	3.2	17.0	5.2	3.4	17.9	5.3	3.3	17.3	5.3
NS	16.9	90.7	5.4	17.2	92.9	5.4	16.9	92.5	5.5	16.7	92.6	5.5	16.0	88.8	5.5
NB	15.7	77.6	4.9	15.6	77.7	5.0	15.4	77.9	5.0	15.9	82.5	5.2	15.4	80.0	5.2
ON	158.3	704.5	4.5	145.3	643.7	4.4	148.2	664.6	4.5	159.7	734.5	4.6	167.4	768.9	4.6
MB	10.9	46.9	4.3	10.3	44.5	4.3	9.9	43.4	4.4	9.6	44.1	4.6	9.2	41.5	4.5
SK	16.4	78.2	4.8	16.2	79.0	4.9	15.4	74.5	4.8	15.2	76.0	5.0	14.1	71.3	5.0
AB	43.3	184.2	4.3	42.3	181.3	4.3	42.1	187.3	4.5	42.5	200.1	4.7	41.4	198.9	4.8
BC	63.0	298.6	4.7	64.5	309.5	4.8	65.0	330.0	5.1	65.4	342.0	5.2	59.8	314.4	5.3
Canada	343.6	1564	4.6	328.7	1507	4.6	329.0	1544	4.7	340.2	1643	4.8	337.3	1628	4.8

Source: Canada Student Loans Program (2003-2004) *Annual Report*, tabulation by the authors. The data excludes Québec.

Table A5.10 – Percent Receiving CMSF Bursaries, by Year

	CMSF Bursaries (\$M)	All Student Loans					Student Loans of CMSF Recipients				
		Cda Stud. Loan (\$M)	Est. Prov. Stud. Loan (\$M)	Total Stud. Loan (\$M)	Count (000's)	Per-cent CMSF	Cda Stud. Loan (\$M)	Est. Prov. Stud. Loan (\$M)	Total Stud. Loan (\$M)	Count (000's)	Per-cent CMSF
Year											
2000-2001	204.8	1,564.7	1,043.1	2,607.8	69.3	7.86%	155.8	277.1	184.7	461.8	52.3%
2001-2002	207.4	1,507.4	1,004.9	2,512.3	70.1	8.26%	149.1	283.4	188.9	472.3	49.9%
2002-2003	217.1	1,544.7	1,029.8	2,574.5	72.6	8.43%	155.2	307.5	205.0	512.5	53.4%
2003-2004	220.1	1,643.0	1,095.3	2,738.4	73.0	8.04%	155.2	310.5	207.0	517.5	52.7%
2004-2005	219.1	1,628.8	1,085.8	2,714.6	75.6	8.07%					

Source: Student Loan Administrative files and Canada Student Loans Program (2003-2004) *Annual Report*, tabulation by the authors. The data excludes Québec.

Table A5.11 – Multinomial Logistic Regression Results of CMSF Bursary Recipients, Excluding Québec, 1999-2004

Variables	Coefficient	Std. Err	t-statistics	P> t
Federal student loan >= \$4,000	2.536	0.009	286.1	0.0
Provincial student loan >= \$2,500	-0.028	0.005	-5.5	0.0
Assessed weekly need >= \$300	0.912	0.005	196.9	0.0
Year 1999-2000	0.188	0.008	24.2	0.0
Year 2000-2001	0.224	0.007	32.7	0.0
Year 2001-2002	0.171	0.007	25.0	0.0
Year 2002-2003	0.156	0.007	23.0	0.0
University	0.255	0.005	49.4	0.0
Private or other institution	-1.149	0.010	-117.0	0.0
Constant	-3.914	0.009	-418.9	0.0
F(9,1529447)	18973.65			
Probability > F	0			

Source: Statistics Canada, Longitudinal Administrative Data - Student Loan Administrative files, tabulation by the authors.

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Comments on Vestimetra paper:

This paper uses an unsound approach to reach a conclusion that calls into question the positive influence of grants and bursaries (including CSLP grants such as Canada Study Grants) on persistence. It is not appropriate to base conclusions about the impact of need-based student financial assistance, as these authors do, on a comparison of bursary recipients – who generally have high levels of financial need – with non-bursary recipients who may not even qualify for a student loan, let alone have high need. Other interested parties, such as provincial student loan program directors, may also have concerns about basing such a contentious conclusion on a comparison of non-comparable groups of students. The paper's conclusions on persistence are further weakened by the authors' mistaken assumption that the only published research that uses a "before/after" comparison of similar groups of students is restricted in scope to an analysis of merit-based scholarships. CSLP managers are aware that this published research (by Lori McElroy) is in fact based on a study of need-based bursaries, yet they chose not to request that the error be corrected. The discussion of debt levels in this paper is largely restricted to trends in the period that preceded the establishment of the Foundation, and does not include a detailed review of the published data on debt after 2000. As a result, the conclusions the paper reaches on the impact of the Foundation on student debt are not based on the available evidence from the time period in question. This paper, therefore, is based on poor analysis and is not relevant to the review of the Foundation. CSLP should have asked the authors to correct the evident errors and omissions.

Authors' response to the CMSF's comments:

Even though the authors of the report did not have any stake for or against CMSF activities, this does not mean that the Foundation should dismiss a paper without providing substantive arguments based on factual evidence or to misinterpret the results and conclusions. The authors used extensively data available from various sources, including SLID, LFS, YITS, CSLP administrative database (which includes CMSF data), CMEC, and linked LAD-CSLP data^[1], and were unable to discern any influence the CMSF bursaries may have on enrolment, participation, persistence, completion and debt load of PSE students. Detailed data about debt levels was used to portray the situation before and after the Foundation was created. If the Foundation has other data that are contrary to conclusions arrived at by authors of the report, it should make it available. The Foundation should also acknowledge the fact that CMSF bursaries are awarded at least 4 months after the start of the school year and as such are not very likely to affect persistence. Moreover, it is very unlikely that persistence for the entire PSE population can be affected by the small percentage of people receiving CMSF bursaries. The McElroy papers, quite irrespective of the fact that need-based or merit-based bursaries are involved, are based on a survey with a very small sample taken from only six institutions. Needless to say, the data is simply not representative of the Canadian population. Methodologically-speaking, how can we say anything about persistence when socio-economic and academic performance variables were left out of the analysis? In that respect, such papers should never be used to gauge the CMSF bursaries influence on persistence.