The Value of a Degree: Education, Employment and Earnings in Canada

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I. Introduction

Access to post-secondary education matters.

This chapter presents data that underpin the importance of widening access to post-secondary education in Canada.

It demonstrates that the relationship between employment, earnings and higher education remains clear: post-secondary graduates are more likely to be employed, and they earn more than those who did not continue their studies past high school.

For this reason, they are the strongest contributors to the tax revenues that sustain the key programs and services provided by governments.

This information needs to be highlighted in order to challenge assertions that there is already too much pressure on young Canadians to pursue post-secondary education and that access should be restricted so as not to dilute the market value of a degree. These assertions notwithstanding, the data show that while the number of post-secondary graduates has grown in recent years, the benefits of a degree in terms of more stable employment and higher earnings have not diminished.

To take but one initial example, the gap between the unemployment rates of young Canadians with higher and lower levels of education has widened over the past 35 years. The unemployment rates of young men without a high school education grew by seven percentage points between 1971 and 2005, compared with an increase of less than one point for those with a university degree. The unemployment rate for young women without a high school diploma grew three times as much over the same period as that of young university-educated women (see Figure 1.I.1). As we will see below, a similar trend is evident in the case of earnings.

The benefits of a post-secondary education in terms of the labour market outcomes of individuals are only one reason why access matters. In the previous edition of The Price of Knowledge (Berger, Motte and Parkin, 2007) we featured another reason, arguing that Canada’s changing demography means that the number of young adults within the population as a whole will soon begin to decline. Consequently, if participation in post-secondary education is not widened, the number of college and university graduates in Canada will decline too. Finishing the next decade with fewer post-secondary graduates is not an encouraging prospect for a country as dependent on human capital as Canada.

Figure 1.I.1 — Growth in Unemployment Rates of 25- to 34-Year-Olds, by Education, 1971–2005 (in Percentage Points)

Not everyone welcomed our argument: some preferred to talk about the “myth” of declining enrolment (Charbonneau, 2007; cf. Berger, 2008a). Yet the most recent figures\(^1\) confirm that full-time university enrolment is already declining in four provinces and is growing noticeably in only two. At the college level, enrolment growth levelled off in the early years of this decade before experiencing its first decline in over 10 years between 2004 and 2005. If anything, then, our demographic argument is more pertinent than ever.

In this chapter, however, we shift focus somewhat to examine how widening access to higher education pays dividends through greater opportunities for those joining the workforce.

As many before us have emphasized, few if any investments an individual makes will produce as much of a return as higher education. The evidence about the positive returns to post-secondary education is so well-known that it seems unnecessary to review it again.

Unfortunately, not all commentators with access to the media are inclined to base their arguments on evidence. There have been a series of recent suggestions that somehow we have too many students in Canada, not too few. Some wonder whether a higher education is really worth what people think it is, given that it has become so commonplace. Sociologists James Côté and Anton Allahar, for example, speak of an “oversupply of higher degrees” that has resulted in “lost market value” for credentials (Côté and Allahar, 2007, 177). Others lament the fact that many students, at least at the university level, are woefully under-prepared or unmotivated and so really shouldn’t be there at all. Taken together, these reflections lead some to wonder whether we are doing young people a disservice by suggesting that a post-secondary education is more important to their future than ever before. As *The Globe and Mail’s* Margaret Wente puts it, “Everybody knows that these days, you are doomed unless you go to university. Otherwise, you won’t cut it in the knowledge economy… But maybe the real problem is something else entirely. Maybe it’s not that too few kids go to university, but too many” (Wente, 2008, A23).

To counter this recurring myth—that post-secondary education is overvalued—we provide an update on the data on the benefits of a college diploma or university degree, showing that the earnings of post-secondary graduates increased above the rate of inflation between 2000 and 2007. We demonstrate that the earnings premium, which captures the relative difference between individuals with higher and lower levels of education, has continued to increase since 1980. This has occurred during a time of significant growth in the population of post-secondary graduates in Canada. The value of a post-secondary credential has increased at a faster pace than the share of the population completing some form of higher education; in other words, degrees have grown more valuable even as they have become less scarce. Finally, we demonstrate that the benefits of post-secondary education accrue both to the individual and to Canadian society at large.

None of this means any concern about falling standards within universities and colleges in the age of “mass” post-secondary education is misplaced. The remedy for what may ail the ivory tower, however, should not be to once again restrict access to the elite, as some have suggested (Malick, 2009; Dehaas, 2009). If we want to ensure that standards are maintained (or, better, raised), then we should be thinking about how access to higher education in Canada can be combined with excellence within the sector. This will require changes in how faculty and staff at post-secondary institutions relate to both current and prospective students.

In the end, our argument is this: it is not the widening of access itself that threatens the quality of post-secondary education, but rather the questionable thinking that leads some to believe that our society must choose between these two goals—that we can pursue either access or excellence but not both.

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1. These figures are presented in Chapter 2.
II. The Earnings Premium

The latest census data illustrate the link between post-secondary education and more stable employment. Canadian workers without a high school diploma are two and a half times more likely to be unemployed than are those with a bachelor’s degree (see Table 1.II.1). In the case of Aboriginal Peoples, the ratio rises to three and a half times. Moreover those with lower levels of education are more likely to be among the chronically unemployed (Brooks, 2005). The 2006 census also confirmed that “higher education is a gateway to higher earnings” (Statistics Canada, 2008a, 17).

In terms of earnings, the benefits of higher education are often expressed in two ways. The first calculates the earnings premium, or the difference in median earnings among groups of individuals with different levels of education. The university earnings premium, for example, is often expressed as the average difference in earnings between university and high school graduates. The second calculates a rate of return on an investment. This takes into account the costs of post-secondary education and is expressed as the earnings premium divided by the actual and opportunity costs of post-secondary education (including, for example, tuition, fees, books and forgone income while in school).

First, we will consider the earnings premium. According to the 2006 census, while the median annual earnings of a high school dropout are 15 percent lower than those of a high school graduate, those with a college diploma earn almost 15 percent more and those with a bachelor’s degree earn almost 50 percent more. In 2005, a bachelor’s degree holder earned $18,000 more per year than a high school graduate; a university graduate with a post-bachelor’s degree earned $29,000 more than a high school graduate. As Figure 1.II.1 demonstrates, median earnings increase with education in all parts of the country.

Even recent demand for low-skill jobs in Western Canada underlines the benefits of higher education. According to Chung (2006), young men with relatively low levels of education experienced an increase in earnings during the beginning of this decade, owing to the strong resource-based economy in Western Canada. That said, their earnings were lower than those of young men with low levels of education in 1980, and the earnings gap between them and more highly educated men remains. The premium associated with a post-secondary education thus reflects both its own value in the labour market and the declining value of a high school diploma (even once the effects of regional resource booms are taken into account).

Table 1.II.1 — Unemployment Rate (2006) by Educational Attainment

<table>
<thead>
<tr>
<th>Educational Attainment</th>
<th>Total</th>
<th>Male</th>
<th>Female</th>
<th>Aboriginal</th>
</tr>
</thead>
<tbody>
<tr>
<td>No high school certificate</td>
<td>11.1</td>
<td>10.8</td>
<td>11.5</td>
<td>22.5</td>
</tr>
<tr>
<td>High school certificate of equivalent</td>
<td>7.3</td>
<td>7.2</td>
<td>7.3</td>
<td>12.8</td>
</tr>
<tr>
<td>Apprenticeship or trades certificate or diploma</td>
<td>6.2</td>
<td>6.1</td>
<td>6.3</td>
<td>13.9</td>
</tr>
<tr>
<td>College / CEGEP certificate or diploma</td>
<td>5.0</td>
<td>4.9</td>
<td>5.0</td>
<td>9.9</td>
</tr>
<tr>
<td>University certificate or diploma at bachelor’s level or above</td>
<td>4.5</td>
<td>4.1</td>
<td>5.0</td>
<td>6.4</td>
</tr>
</tbody>
</table>

Source: Statistics Canada, 2006 census.
While the difference in income by level of education is substantial for any one given year, the effect over the course of a lifetime is remarkable (see Figure 1.II.2 and Table 1.II.2) As Figure 1.II.2 demonstrates, over the course of 40 years, a college graduate will earn $394,000 more than a high school graduate. A bachelor’s degree holder will earn a premium of $745,800 over the course of 40 years.

Statistics Canada points out that figures such as these underestimate the real earnings differences between workers with higher and lower levels of education because they compare only those employed on a full-time basis. As we have seen, those with less education are more likely to be unemployed and therefore to have no earnings at all, something which the earnings amounts reported here do not take into account (Statistics Canada, 2008a, 18).

2. Note: This figure multiplies the average annual earnings premium among 25- to 64-year-olds in 2006 by 40, approximating an individual’s life in the labour force. As a result, it does not take into account the expectation that individuals with lower levels of education will work more years (because a high school graduate will enter the labour force at an earlier age than a post-secondary graduate, perhaps 10 or more years earlier than a Ph.D holder, and also because individuals with higher annual earnings may be able to retire earlier and live off savings growing from the annual earnings premium).
Table 1.II.2 — Earnings Premium Relative to a High School Graduate over 40 Years, by Province

<table>
<thead>
<tr>
<th>Location</th>
<th>Less Than High School</th>
<th>Trades or Apprenticeship</th>
<th>College</th>
<th>University Below Bachelor</th>
<th>Bachelor’s Degree</th>
<th>University Post-Bachelor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Canada</td>
<td>-$214,960</td>
<td>$103,720</td>
<td>$221,360</td>
<td>$394,000</td>
<td>$745,800</td>
<td>$1,165,280</td>
</tr>
<tr>
<td>Newfoundland and Labrador</td>
<td>-$191,600</td>
<td>$243,520</td>
<td>$339,480</td>
<td>$866,520</td>
<td>$997,560</td>
<td>$1,527,640</td>
</tr>
<tr>
<td>Prince Edward Island</td>
<td>-$91,640</td>
<td>$171,320</td>
<td>$233,120</td>
<td>$580,000</td>
<td>$748,520</td>
<td>$1,157,440</td>
</tr>
<tr>
<td>Nova Scotia</td>
<td>-$147,600</td>
<td>$164,040</td>
<td>$197,360</td>
<td>$509,040</td>
<td>$765,600</td>
<td>$1,289,960</td>
</tr>
<tr>
<td>New Brunswick</td>
<td>-$128,080</td>
<td>$155,600</td>
<td>$196,160</td>
<td>$567,320</td>
<td>$884,480</td>
<td>$1,272,640</td>
</tr>
<tr>
<td>Quebec</td>
<td>-$215,080</td>
<td>$4,760</td>
<td>$247,760</td>
<td>$504,880</td>
<td>$753,400</td>
<td>$1,189,600</td>
</tr>
<tr>
<td>Ontario</td>
<td>-$181,800</td>
<td>$204,880</td>
<td>$220,640</td>
<td>$343,600</td>
<td>$769,720</td>
<td>$1,188,480</td>
</tr>
<tr>
<td>Manitoba</td>
<td>-$155,400</td>
<td>$127,680</td>
<td>$215,040</td>
<td>$454,200</td>
<td>$728,480</td>
<td>$1,210,080</td>
</tr>
<tr>
<td>Saskatchewan</td>
<td>-$175,680</td>
<td>$166,640</td>
<td>$244,240</td>
<td>$503,800</td>
<td>$898,840</td>
<td>$1,309,840</td>
</tr>
<tr>
<td>Alberta</td>
<td>-$150,160</td>
<td>$452,520</td>
<td>$274,720</td>
<td>$522,280</td>
<td>$891,960</td>
<td>$1,376,440</td>
</tr>
<tr>
<td>British Columbia</td>
<td>-$197,800</td>
<td>$230,760</td>
<td>$169,760</td>
<td>$226,080</td>
<td>$536,760</td>
<td>$956,760</td>
</tr>
<tr>
<td>Yukon Territory</td>
<td>-$145,480</td>
<td>$190,480</td>
<td>$197,360</td>
<td>$235,840</td>
<td>$791,000</td>
<td>$980,080</td>
</tr>
<tr>
<td>Northwest Territories</td>
<td>-$392,200</td>
<td>$395,120</td>
<td>$313,840</td>
<td>$342,400</td>
<td>$840,120</td>
<td>$1,372,360</td>
</tr>
<tr>
<td>Nunavut</td>
<td>-$891,040</td>
<td>-$4,000</td>
<td>$192,640</td>
<td>*</td>
<td>$988,520</td>
<td>$1,192,520</td>
</tr>
</tbody>
</table>

* Too unreliable to be published.

Source: Statistics Canada, Income and Earnings Highlight Tables, 2006 census. Authors’ calculations.

Provincial Variations

As Table 1.II.2 demonstrates, the earnings premium associated with post-secondary education varies considerably from province to province. The premium for a bachelor’s degree is highest in Newfoundland and Labrador, where an individual who completes a first degree is likely to earn just under $1 million more than a high school graduate. At nearly $900,000, the college diploma premium is also highest in Newfoundland and Labrador. The lowest post-secondary premiums are reported in British Columbia, where a college graduate can expect to earn about $225,000 more than a high school graduate and a bachelor’s degree holder might earn a premium of about half a million dollars over the course of a professional lifetime. These variations, however, may reveal more about the earnings of high school graduates than post-secondary graduates. Because a high school graduate’s wages in Atlantic Canada are lower than in the rest of the country, the post-secondary premium (which simply measures the earnings of a college or university graduate compared to a high school graduate) may appear to be larger. Similarly, because high school graduates in Western Canada are relatively better paid, the post-secondary premium may appear somewhat more moderate. The fact that the average high school graduate in B.C. earns more than a typical college graduate in the Maritimes is more an indication of the different economies in these two parts of the country than it is of the value of higher education. More to the point: even in Canadian provinces where high school graduates do reasonably well in the labour market, post-secondary graduates do considerably better.
The most recent findings from the National Graduates Survey provide additional information about the earnings of Canadian graduates. As Figure 1.II.3 reveals, the earnings of post-secondary graduates have increased since the mid-1990s. After adjusting for inflation, college graduates from the class of 2005 reported the same earnings as those who had graduated five years earlier (both cohorts were surveyed two years after they had graduated). University graduates were earning about three percent more than their colleagues in the class of 2000. The class of 2005 was also doing better earlier in their working lives than were those who graduated in 1995. At the same point after graduation, college graduates from the class of 2005 were earning 7.5 percent more than those who graduated in 1995. Bachelor’s degree and Ph.D. recipients were earning about 10 percent more than their peers from 10 years earlier. (Master’s degree recipients were earning less than one percent more, as the earnings of master’s degree holders atypically declined between 1995 and 2000.)

The Impact of the Economic Downturn

The growth of earnings noted in Figure 1.II.3 occurred during a period of economic growth. It remains to be seen how earnings of college and university graduates will be affected by current economic circumstances. There is good reason, however, to expect that even if earnings of graduates are adversely affected by the current downturn, they will fare better than those without a post-secondary degree. As noted above, for instance, a review of long-term trends in unemployment shows that while unemployment rates between 1971 and 2005 grew for all workers, they grew faster for those with lower levels of education (Morissette and Hou, 2006). More recently, while overall employment in Canada between October 2008 and April 2009 declined by 1.9 percent, the decline was especially sharp in industries that traditionally employ workers with lower levels of education, such as construction (decline of 8.5 percent), manufacturing (6.5 percent) and natural resources (5.9 percent) (Statistics Canada, 2009b).

Figure 1.II.3 — Median Earnings among Post-Secondary Graduates in Canada, by Level of Study and Year of Graduation, 1995–2005 in Real 2007 Dollars

Note: Earnings were measured two years after graduation (1997, 2002, 2007).
Source: Statistics Canada, National Graduates Survey.
Boothby and Drewes (2006), who use census data to analyze nationwide trends in education outcomes since 1980, provide a much more careful examination of this issue. As Figure 1.II.4 demonstrates, the earnings premium associated with a post-secondary education has continued to increase since 1980, despite the simultaneous increase in the proportion of the population with a post-secondary credential. Generally speaking, since 1980, the post-secondary education premium—the gap between the earnings of a post-secondary graduate and a high school graduate—has grown even faster than the rate of educational attainment in Canada. Between 1980 and 2000, college and university degree attainment increased by 23 percent while the post-secondary earnings premium increased by 37 percent. Although higher education is less scarce than it was 25 years ago, it appears to have more relative value.

Figure 1.II.4 — Relative Change in College and University Attainment and in the Earnings Premium of College and University Graduates in Canada, 1980–2000

Note: Sample is restricted to high school graduates who have completed either a college program or a bachelor’s degree-level programs, but not both.
Source: Census data from Boothby and Drewes, 2006; authors’ calculations.

3. It should be noted that while these figures are taken from Boothby and Drewes’s paper, those authors do not claim that increases in educational attainment must necessarily produce concomitant increases in the earnings premium. Our argument is simply that those who wonder if the increase in educational attainment has not eroded the relative value of a degree should look more closely at the type of evidence produced by Boothby and Drewes.
While the general trend is positive, certain kinds of post-secondary graduates do better than others. For instance, while the earnings premium associated with an undergraduate degree has increased at a faster rate than university attainment among men, the opposite has occurred among women, as Figures 1.II.5a and 1.II.5b demonstrate. At the college level, while the earnings premium among males nearly doubled between 1980 and 2000, that of women has experienced slower growth which tapered off in the late 1990s (see Figures 1.II.6a and 1.II.6b).

These data prompt three observations. First, the general trend holds across post-secondary level and gender. For instance, although female college graduates do not enjoy the same earnings premium as their male counterparts—perhaps because the kinds of fields men and women typically study are rewarded differently in the labour market—women still benefit from higher education. The second observation concerns what is not shown by these data, namely the socio-economic situation of graduates before they begin their studies. We do not know

**Figure 1.II.5a — Relative Change in University Attainment among Males and in the Earnings Premium of Male University Graduates in Canada, 1980–2000**

Source: Census data from Boothby and Drewes, 2006; authors’ calculations.

**Figure 1.II.5b — Relative Change in University Attainment among Females and in the Earnings Premium of Female University Graduates in Canada, 1980–2000**

Source: Census data from Boothby and Drewes, 2006; authors’ calculations.
how the earnings premium differs between those who come from lower- and higher-income family backgrounds. Third, it is worth keeping in mind that the earnings premium is a two-sided coin: a post-secondary graduate in 2000 is better off than one 20 years earlier, and a high school graduate is worse off. While graduating high school is better than dropping out, a high school diploma is worth less than ever before.

To sum up, the most recent evidence suggests two things:

- The earnings of post-secondary graduates continue to improve.
- The earnings premium associated with a higher education credential when compared with the earnings of a high school graduate also continues to grow.

Of course, the picture is incomplete without taking into account the costs of post-secondary education. These are covered in the following section on rates of return.
According to census data from Statistics Canada, Aboriginal post-secondary graduates report earnings that approach those of non-Aboriginal Canadians. As demonstrated in Figure 1.II.7 below, the earnings gap between Aboriginal and non-Aboriginal Canadians is smallest among those who have completed a bachelor’s degree. (The pattern is similar to that shown for unemployment rates in Table 1.II.1, above.)

The largest gap exists among those who completed a certificate or diploma below the bachelor’s level (Statistics Canada includes those with only a high school diploma or certificate in this group as well); the gap between those with a degree above the bachelor’s level, including graduate studies, medicine, law, etc., is also significant. To put it bluntly, the median income of Aboriginal individuals with a certificate is 70 percent that of a non-Aboriginal with the same qualification. In the case of a bachelor’s degree, it is 86 percent.

Figure 1.II.7 — Median Income among Aboriginal and Non-Aboriginal Individuals in 2005, by Level of Education

Source: Statistics Canada, 2006 census.
Higher education has not only become increasingly central to individual and societal wealth and quality of life, it has also become more expensive. Since the 1990s, there has been a significant increase in tuition and the additional costs almost all students face, including ancillary fees, accommodation, books and equipment, food and transit. An understanding of the benefits of a post-secondary degree must take both these trends into account. The rate of return allows for the assessment of the value of education as if it were an investment. It represents the net worth of education once costs are considered, including upfront costs like tuition and books as well as costs such as forgone income. The rate of return acts as a de facto interest rate that is equivalent to the proportion of the total cost returned to the individual as a benefit, in the form of earnings. Expressed as a percentage, the rate of return allows for the comparison of investments in education to financial products.

Canadian researchers have confirmed that the returns to post-secondary education have risen over the past decades:

- According to Emery’s survey of the literature in Canada (2005), rates of return increased steadily from the 1960s to the early 1990s, where they peaked at 16 percent (women) and 12 percent (men) before dropping off only slightly.

- Belzil and Hansen (2006) examined rates of return using census data, finding an increase during the 1990s, from 9 percent in 1991 to 11 percent in 2001, although they tend to vary by discipline, gender and region. Notably, the authors demonstrated that the rate of return to post-secondary education increased significantly despite the large tuition increases of the 1990s.

- Similarly, Jorgen Hansen (2007), using census data from 1991, 1996 and 2001, finds that the rate of return increased during the 1990s for most fields of study. Hansen reports increases in the rates of return for females in the humanities, social sciences, business and commerce, agricultural/biological/nutritional/food sciences, health and mathematics/computer/physical sciences. He found no change in educational/recreational/counselling services and engineering and a small decline in the fine and applied arts. Rates of return for males increased in every field except educational/recreational/counselling services (which did not change) and fine and applied arts (which declined).

- Demers (2008) uses 2006 census data to examine the returns to education in Quebec. He finds that the amount of taxes paid increases with educational attainment in the province. Additionally, he identifies a rate of return to individuals who receive a bachelor’s degree of 10.6 percent, as well as a public rate of return of 8.5 percent. Demers also describes how unemployment levels decrease with educational attainment.

While much of the literature is focused on the benefits of a university education, there is some evidence that similar trends occur at the college level. As mentioned above, Boothby and Drewes (2006) report that the college earnings premium increased between 1980 and 2000. Ferrer and Riddell (2002) also identify a small earnings premium to non-university post-secondary education (compared to those with a high school education). While college graduates enjoy a more modest earnings premium than university graduates, they still benefit from a substantial rate of return for two reasons. First, college is typically cheaper than university in Canada. Also, college programs tend to be shorter,

4. These figures will be presented in Chapter 4.
reducing the opportunity cost (the forgone income the individual would otherwise earn).

This analysis of the benefits of post-secondary education focusing on the returns to individuals is inevitably incomplete. There are significant societal benefits that underpin the argument for increased educational attainment. As Figure 1.II.6 demonstrates, post-secondary graduates pay the lion’s share of taxes in Canada and receive a relatively small portion of government transfers.

Beyond government revenues and expenditure, educational attainment is associated with a number of positive characteristics. Riddell (2006) offers a summary of the four areas that are discussed in the literature on returns to schooling. The first concerns intergenerational effects. Higher levels of parental education are associated with lower levels of teenage pregnancy, child abuse and neglect and reduced crime in children. The second area is health. Riddell points to a pair of studies that find a causal relationship—not mere correlation—between education and health. In particular, there is evidence to suggest that even when controlling for levels of health knowledge, individuals with higher levels of education use that knowledge more efficiently. Studies by Lleras-Muney (2005) and Lleras-Muney and Lichtenberg (2002) reveal strong correlations between levels of education and mortality, as well as the use of more recently approved prescription drugs. Third, evidence from the United States suggests that increasing educational attainment can reduce arrests, incarcerations and self-reported crime. Fourth, higher levels of educational attainment are associated with greater civic participation, particularly voting. As the U.S.-based Institute for Higher Education Policy (1998) has noted, greater levels of post-secondary education within the population lead to increased productivity, consumption and charitable giving.

Of course, by definition, examining earnings premiums and rates of return focuses on the average experience of post-secondary graduates. A recent Statistics Canada project commissioned by the Canada Millennium Scholarship Foundation and the Higher Education Quality Council of Ontario examines the situation of highly educated young Canadian workers with below-average earnings. Specifically, the study examines the characteristics of these graduates and then explores their shifting experience within the labour market.

Compared to other OECD countries, Canada has the highest proportion of post-secondary graduates earning less than half the median income. Among those aged 25 to 64, almost 18 percent of university graduates and 23 percent of college graduates earned less than half the median income ($16,917) in 2006. On the surface, this suggests that the earnings benefits of post-secondary

**Figure 1.III.1 — Percentage of the Population and Share of Income Tax Paid and of Government Transfers Received by Level of Education among Canadians Aged 25 to 64 in 2006**

<table>
<thead>
<tr>
<th>Level of Education</th>
<th>Percentage of the population</th>
<th>Share of government transfers received</th>
<th>Share of income tax paid</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less Than High School Diploma</td>
<td>14%</td>
<td>6%</td>
<td>23%</td>
</tr>
<tr>
<td>Obtained High School Diploma</td>
<td>15%</td>
<td>11%</td>
<td>15%</td>
</tr>
<tr>
<td>Some Post-Secondary (No Certificate)</td>
<td>10%</td>
<td>8%</td>
<td>11%</td>
</tr>
<tr>
<td>Non-University Post-Secondary Certificate</td>
<td>31%</td>
<td>28%</td>
<td>31%</td>
</tr>
<tr>
<td>University Certificate</td>
<td>41%</td>
<td>22%</td>
<td>14%</td>
</tr>
</tbody>
</table>

Source: Statistics Canada, Survey of Labour and Income Dynamics, custom tabulation.
education are not as robust as the literature claims. In fact, as the Statistics Canada report explains, few Canadians with a post-secondary education who fully participate in the labour market find themselves with relatively low wages. Among university graduates with very low earnings, 43 percent reported doing something other than working as their main activity for the year in question; 24 per cent reported being self-employed (and therefore had an incentive to report low earnings in the tax files that form the basis for the SLID data) and five percent reported both. On the college side, one-third reported something other than working as their main activity; 27 percent were self-employed; and five percent reported both. Leaving aside those who were self-employed or were not working as their major activity in 2006, only five percent of Canada’s university-educated population and eight percent of its college-educated population earned less than half the median. The Statistics Canada report explains how this phenomenon is more common among women and among those who studied arts and communications technologies or parks, recreation and fitness. Furthermore, post-secondary-educated individuals in Newfoundland and Labrador, Prince Edward Island and New Brunswick were more likely than those in other provinces to earn less than half the national median.

In short, though a small minority of Canadians who have completed university or college studies earn relatively low wages, their situation is more easily explained by the nature of their participation in the labour market and by the regional variations in the Canadian economy than by the outcomes of their post-secondary studies. For the vast majority of Canadians, higher education pays.

Myth: More Access Erodes Quality

Not everyone agrees that both the number and the value of post-secondary degrees can grow at the same time. Most famously in recent years, James Côté and Anton Allahar (2007) have argued that we have pushed too many unmotivated and unprepared young people to continue their studies and that, in response, universities have had to adapt by lowering their standards. The result is not simply more degrees but more degrees than necessary and so ultimately degrees whose real value is questionable. As they explain, “over-educated taxi drivers are commonplace... [T]he production of university degrees has outstripped the need for them in the workplace...[W]e have produced more than the demand required, and these credentials are now worth less” (Côté and Allahar, 2007, 152–53).

There are a number of problems with this argument, not least of which is the fact that the decline in standards that they lament has taken place at a time when the proportion and the socio-economic mix of the youth population enrolling in university have both remained essentially unchanged (these data will be presented in Chapter 2). While Côté and Allahar worry about the “bulk of the population” being pushed toward university, the university degree attainment rate among 25- to 34-year-olds in Canada is 23 percent. Quality may be eroding at some Canadian universities, but it is not because they have suddenly become open-access institutions.

The real problem with Côté and Allahar’s approach, however, is their policy prescription: having concluded that too many unqualified students are attending university, their solution is to lower young people’s aspirations (Côté and Allahar, 2007, 181). If more students could be streamed away from the country’s universities and directly into the labour market or trades training, then universities could expect more from the remaining students and the real value of the resulting degrees could rise again. In other words, their solution is to ration the opportunity to benefit from higher education to those who finish high school at or near the top of their class.

This is based on both a limited appreciation of human potential and a restricted appreciation of
what post-secondary educators should be striving
to accomplish. To illustrate, consider first the
costarring vision of how we should approach
the question put forward by Ben Levin in his
recent report to the Government of Manitoba.
Levin argues:

“One of the real barriers to improvement
is the perceived limits to people’s ability.
There remains a widely stated view that
too many students may already be taking
part in post-secondary education. We hear
frequent statements from various places,
including in the mass media, that too many
students are not capable, that they do not
have the necessary skills, and that standards
are therefore falling. Many people believe
that postsecondary education should re-
main a somewhat elite activity.

The Commission unconditionally rejects
that proposition because there is such
compelling evidence that it is a wrong
view, contradicted by everything we know.
The stance in this report is that research
and experience both tell us that people are
capable of more than we think; that when-
ever we stretch our sense of what people
can do, many will rise to the new level...

In short, history tells us that we have under-
estimated how many people can reach
high levels of education” (Levin, 2009, 4).

The second weakness is that the authors assume
that the only response that post-secondary institu-
tions and teaching faculty can have in the face
of the challenge posed by students who, perhaps
for reasons relating to their family background,
are initially less prepared for the rigours of the uni-
versity curriculum is to throw up their hands in
despair and lower their standards. This, of course,
is far from the case. Many post-secondary institu-
tions in Canada, the United States, Europe and
beyond are developing programs designed to help
students of different types—including students
who are initially academically weaker—succeed
in their studies. Two such programs in Canada—
the Foundations for Success pilot project at
three Ontario colleges and the LE,NONET pilot
project for Aboriginal students at the University of
Victoria—are currently the subject of research
evaluations (University of Victoria, 2008; Malatest,
2009a, b and c). These are but two examples, but
they are sufficient to show that waxing nostalgic
for an era when students were more engaged is
not the only response available to post-secondary
educators.

Perhaps the idea that widening access necessarily
erodes quality within post-secondary institutions
is not so much a myth as a self-fulfilling prophecy.
If educators assume that no other outcome is
possible, they will not take the steps necessary to
ensure that students from all backgrounds have
the opportunity to succeed in their studies. There
is no reason why access and excellence cannot be
managed as two sides of the same coin so that our
efforts to promote excellence lead us to open up
higher education to students from a wider range
of backgrounds, and our policies to promote
access include measures designed to promote
academic achievement. This is a theme we will
return to in subsequent chapters.
International comparisons demonstrate that the rates of return to higher education are positive across a variety of countries. Boarini and Strauss (2007) report that the returns to an additional year of average post-secondary education in 21 countries range from four percent to 15 percent.

According to the OECD’s latest report (2008), the rate of return to post-secondary education in Canada is slightly below the OECD average. The private rate of return (i.e., the return to the individual) in 2004 was 9.4 percent for males and 9.1 percent for females, below the OECD averages of 12.2 percent and 11.4 percent, respectively. The OECD also examined public rates of return (i.e., returns to society), finding that Canada had below-average results, at 7.9 percent for males and 7.3 percent for females (the respective OECD averages were 11.1 percent and 9.1 percent).

The fact that the rates of return in Canada are lower than average do not, however, take away from the conclusion that post-secondary education remains a worthwhile investment both for individual Canadians and for the country.

Other Economic Indicators

Not surprisingly, the advantages that post-secondary graduates have in terms of employment and income translate into advantages in other areas. For instance:

- While the median wealth of families in Canada rose between 1984 and 2005, the wealth of families headed by a university graduate rose twice as much as that of families headed by someone without a university degree (Morissette and Zhang, 2006, 9).

- The poverty rate—or percentage of families with low income—is twice as high for families headed by someone without a university degree as it is for those headed by a university graduate (Morissette and Zhang, 2006, 11).

- The proportion of families in 2005 with no private savings for retirement is more than twice as high for families headed by someone who did not finish high school as it is for those headed by a university graduate (35 percent compared with 15 percent) (Statistics Canada, 2006a, 23).
Higher education is a positive-sum game. The benefits of post-secondary studies that accrue to individuals who undertake them have been growing in recent decades. Although a post-secondary credential is currently less scarce in Canada than at any time in its history, individual degree- and diploma-holders are financially better off now relative to non-graduates than they were 25 years ago. As we mentioned at the outset, this is just one more reason why access to post-secondary education matters. Access is one of the most important ways in which individuals can improve their circumstances and ensure a high quality of life for themselves, their families and their communities.

The question that remains to be examined, then, is how well Canada has been doing in widening participation in higher education. It is to this question that we will turn next.