



## ECONOMICS

# In Focus

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## Education and Employability: Can We Close The Gap?

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From a long term perspective, an economic growth policy is largely an education policy. With the running speed of the economy slowing down due to demographic realities, the margin for error on Canada's education policy has never been narrower. Rethinking the relevance of today's education system to the workplace of tomorrow is essential for Canada's future economic growth.

Students are already starting to demonstrate greater pragmatism, increasingly gravitating toward disciplines that are closely correlated with positive labour market outcomes. But the system is not yet flexible enough to build on that momentum. Relevant, timely and accurate labour market information is in short supply; tuition fees are rising fastest in areas where we need more students; resource allocation in universities is not appropriately aligned with the changing demands for education; the cost, in terms of time and money, to obtain relevant education is too high; and the

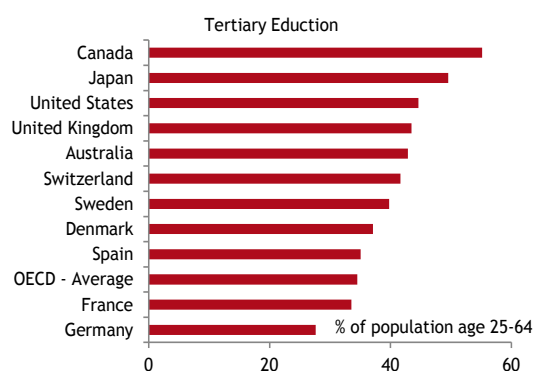
level of collaboration between colleges and universities is sub-optimal.

The cost of that mismatch is already visible in both disappointing youth employment conditions and the rising share of Canadians earning below average incomes. Those vulnerabilities will be fully exposed in the next economic downturn. The time to act is now.

### Winning One Race, But Losing Another

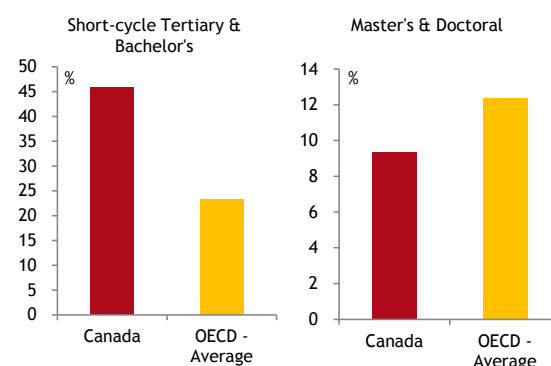
Canadians are known for our hockey players, our beer and apparently the number of individuals with post-secondary education. According to OECD data, the country has the highest rate of tertiary education among OECD countries (Chart 1). That's certainly something to celebrate, given the close ties between education and wealth. But there's always room to do better. In fact, among OECD countries, Canada actually lags the average in graduating master's and doctoral level students (Chart 2, right & left).

Chart 1  
**Canada Leads in Tertiary Education Rates**



Source: OECD, CIBC

Chart 2  
**Canada is Above Avg in Undergraduate and College Education (L), It Lags in Post-Grad (R)**

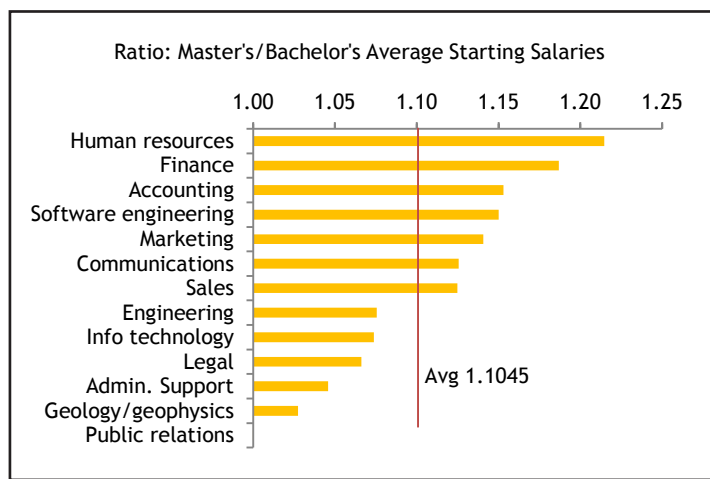


Source: OECD, CIBC

<http://economics.cibccm.com>

Chart 3

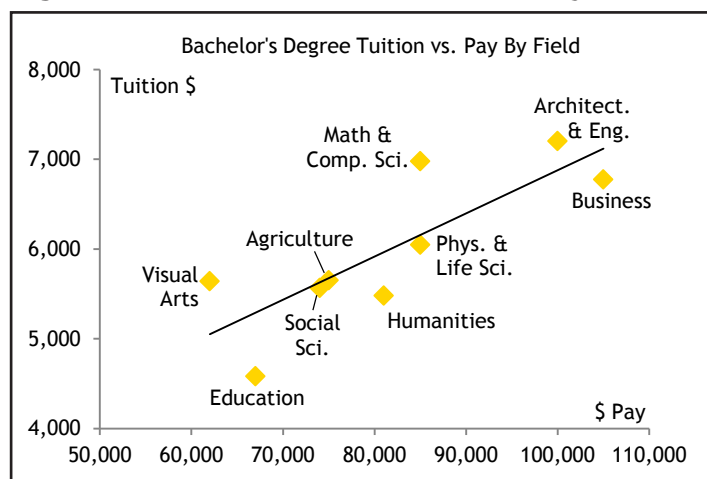
### Within Fields Master's Degrees Have Higher Starting Salaries Than Bachelor's



Source: Conference Board of Canada, CIBC

Chart 5

### High Correlation Between Tuition and Pay



Source: Statistics Canada, CIBC

Canada's lagging status in terms of upper-level education is revealed in the clear cost to potential wage earners. A wide array of professionals, ranging from human resources to finance to software engineering, benefit by way of a higher starting salary from adding a master's or Ph.D (Chart 3) to their resumes.

### Students Are Finally Listening

As for bachelor's degree-holders, the 30% enrolment rate in high-paying fields is still well behind degrees associated with more mid-range earnings power. That said, the trend is starting to change. Enrolment among high-paying fields has been growing faster than others recently (Chart 4, left). Indeed, both business and the so-

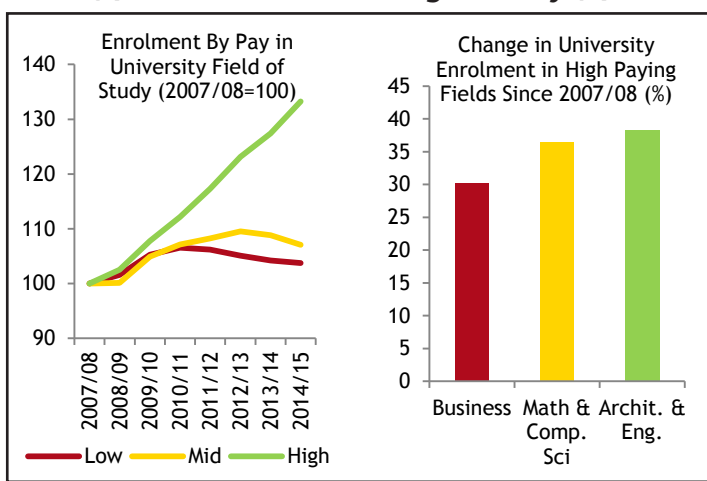
called STEM sectors—science, technology, engineering, math—have begun attracting students at a much higher rate than before (Chart 4, right). It seems that the constant emphasis on studying those sectors earlier in life is paying off.

### Tuition Fees Rising Fastest Where They Shouldn't

That gradual shift to higher paying fields hasn't come cheap. There's a strong correlation between tuition fees and pay in specific fields of study (Chart 5). Making matters worse, universities are already reacting to the recent pickup in enrolment in those fields. Fee inflation in high-tuition programs has been accelerating at almost double the pace seen in cheaper options (Chart 6). The

Chart 4

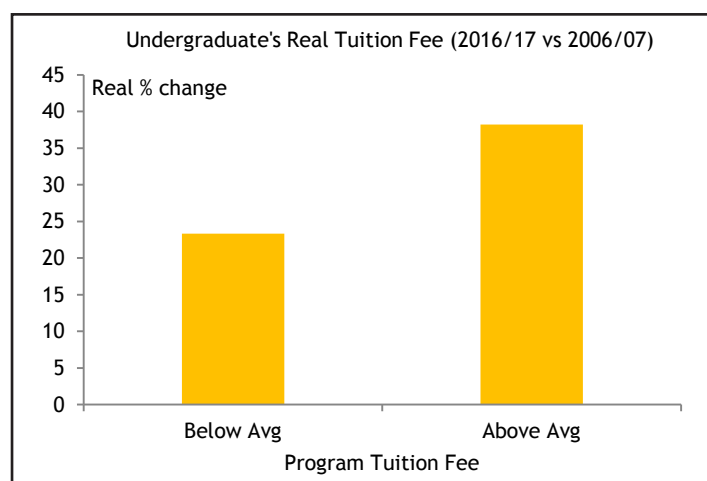
### University Enrolment Rising Fastest in High-Paying Fields (L); STEM Sectors Leading the Way (R)



Source: Statistics Canada, CIBC

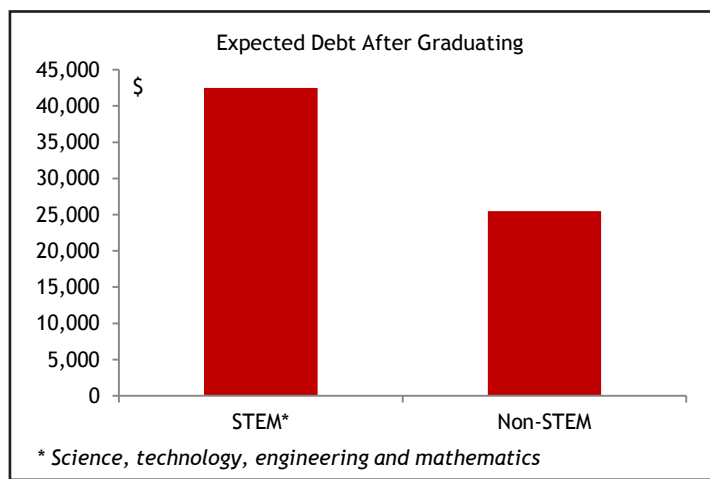
Chart 6

### High Tuition Fields Are Seeing the Fastest Pricing Inflation



Source: Statistics Canada, CIBC

Chart 7

**Expensive Programs Are Leaving Students More Indebted**

Source: CIBC Education Poll

already high level and the strong recent price appreciation are the main reasons students in those fields are left with higher debt loads upon graduation (Chart 7).

That's a problem. The price appreciation can slow or even derail the positive momentum observed in recent enrolment trends. If Canada wants to have more graduates in STEM or any high-paying field, the country needs to work to make it affordable. This type of pricing only exacerbates already ingrained income inequalities across the country.

Universities can help by reallocating resources and increasing subsidies in certain fields. Higher-education is an example of an area that should not be a perfectly free market in which higher demand is wholly reflected in higher prices.

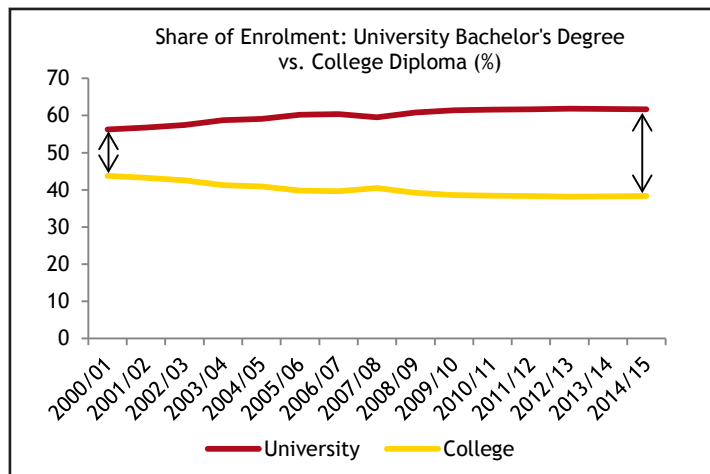
**Students Increasingly Likely to Choose University Over College**

Students also affect their career prospects in their choices between a university degree and a college diploma. Young Canadians continue to choose universities over colleges, a gap that has actually widened in recent years (Chart 8). Why are prospective students so eager to choose a university education over that of college?

One reason is that people have been led to believe that a university degree is always the better choice between the two, something that appears to be a reflection of both myth and reality.

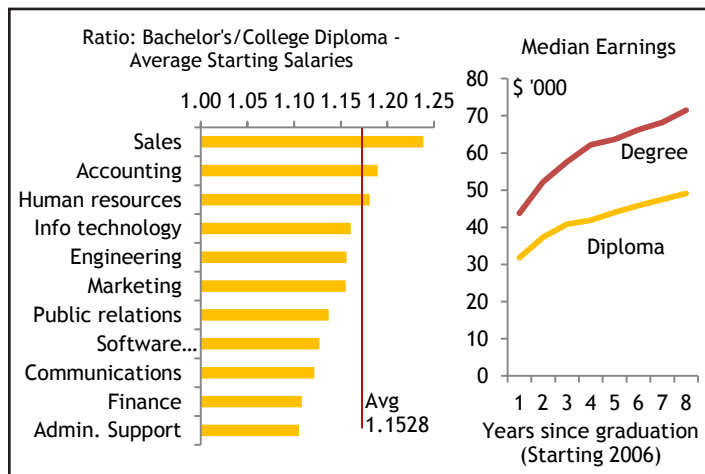
In general, it's true that a bachelor's degree will pay better than a college diploma in terms of both starting salary and potential upside (Chart 9, left & right). And, looking at the past two recessions in this country, university educated workers also tend to have more job stability during times of economic stress (Chart 10). But the chart also shows that the protection afforded to those with a degree has been diminishing. Furthermore, employment rates across those with college, bachelors's and above bachelor's degree education have converged over time, currently showing virtually no difference (Chart 11). So it's beginning to look a little less clear that a university education trumps that of college in all cases.

Chart 8

**Students Are Increasingly Choosing University Over College**

Source: Statistics Canada, CIBC

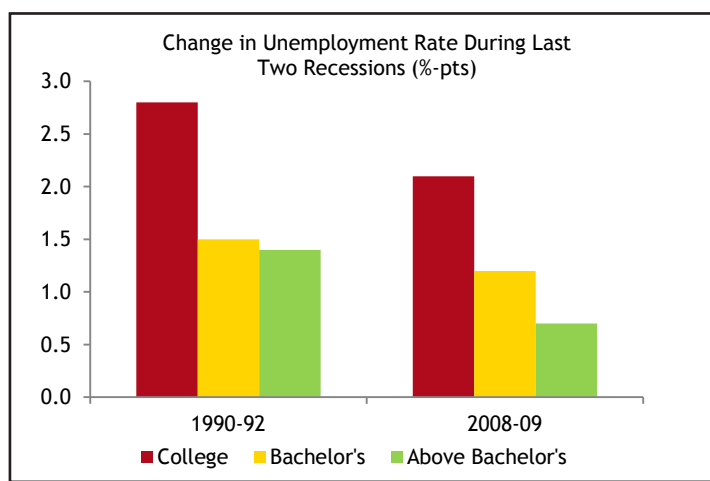
Chart 9

**Within Fields University Degrees Have Higher Starting Salaries Than College**

Source: Conference Board Research, University of Ottawa Education Research Initiative Program, CIBC

Chart 10

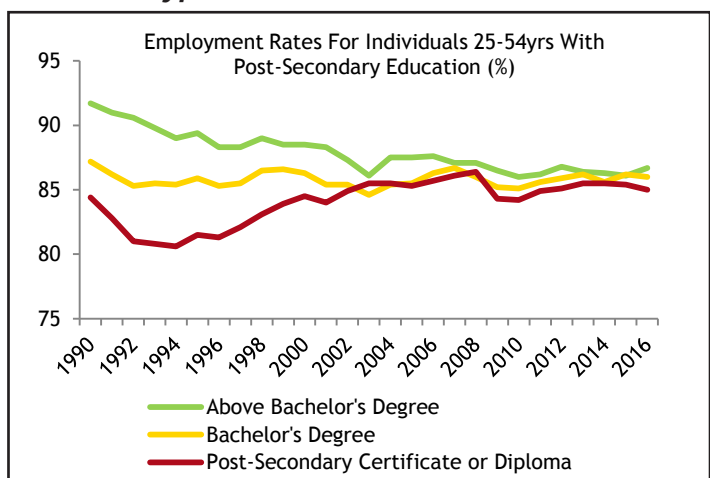
### University Education Leads to More Job Stability in Times of Economic Stress



Source: Statistics Canada, CIBC

Chart 11

### Employment Rates Are Virtually The Same Across Education Types



Source: Statistics Canada, CIBC

Indeed, there are instances where a college diploma would lead to higher earnings power than a bachelor's degree. For example, a person with a university undergraduate degree in education could be expected to earn roughly \$67k per year. However, the same person with a college diploma in business would actually be expected to earn \$6k more. The field of architecture and engineering is another example where a college grad could earn more than say someone with a bachelor's degree in social science.

These examples aren't meant to discourage anyone who's passionate about a specific field of study. They're meant

to show how following the herd can sometimes lead to suboptimal decisions. Education is not one size fits all. Students must weigh their interests with earnings desires and where jobs are in demand. Add it up, and it seems like students have a lot of work to do even before opening a post-secondary textbook.

### Needed: Increased College-University Collaboration

While students do their thinking, educators and policymakers need to think even harder. The simple reality is that the current education system is not flexible enough to fully accommodate the needs of today's students.

As we noted, Canada trails the OECD average in graduating Master's and Ph.D. students. What seems encouraging is that nearly 40%<sup>1</sup> of undergraduates in CIBC's survey indicate that they are very likely to pursue additional training after graduation, and if history is any guide more of them will do it. Even postgraduate students don't see themselves leaving school anytime soon, with no less than 35%<sup>2</sup> of them saying they are very likely to pursue further education.

The problem is that the additional training is not always a step forward, it can sometimes be a sideways step. Indeed, most of those who proceed with their studies choose to do it in a different field.

This is clearly a suboptimal situation given the increased cost and time it takes students to achieve the education required to succeed in today's labour market. And it's not that they are confused or misguided. More than 80%<sup>3</sup> of today's students would agree that getting a good job is the primary reason to pursue post-secondary education. While today's students are more practical, they are not completely willing to abandon their dreams with 45%<sup>4</sup> choosing their field because they are passionate about it.

The system ought to be flexible enough to combine passion and practicality. A much higher level of collaboration between colleges and universities is clearly needed. No doubt, things are moving in the right direction with Ontario for example offering 45 joint college/university programs but it's not moving fast enough. Only 8%<sup>5</sup> of Canadian students are in such a dual system—at this point that rate should be much higher.

The solutions to solving the education and employment gap can be tricky. But a necessary condition for a more practical system must be a much higher level of collaboration between government, industry and

educational institutions to ensure that the education systems as a whole catches up with the rapidly changing market.

**Note:**

- (1) *CIBC Cost of Education Poll:*  
From July 27 to August 2, 2017 an online survey was conducted among 1,506 randomly selected Canadian adults who are currently enrolled as full or part time students. The margin of error—which measures sampling variability—is +/- 2.4%, 19 times out of 20. Discrepancies in or between totals are due to rounding.
- (2) *CIBC Cost of Education Poll*
- (3) *CIBC Cost of Education Poll*
- (4) *CIBC Cost of Education Poll*
- (5) *CIBC Cost of Education Poll*

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