Pre-Budget Submission Regarding the 2013 Federal Budget

Canadian Association for Graduate Studies

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The case for continued investment in Graduate Education

The Canadian Association for Graduate Studies (CAGS) is the national organization that promotes, advances, and fosters excellence in graduate education and university research. CAGS was formed in 1962 and provides a venue for dialogue and cooperation for its members - 58 Canadian universities, the three federal research-granting councils, as well as other institutions and organizations having an interest in graduate studies.

It is imperative that the Federal Government continue to not only invest in graduate education, but to increase its investment so that Canada can meet the demand for the highly qualified personnel required to contribute to our economic growth, and so that we are prepared to take advantage of the inevitable economic turnaround. Investing in graduate education is not an end in itself. The education of highly skilled Canadians- and increasing numbers of them – both in the STEM disciplines and the creative arts, social sciences and humanities – is necessary to meet the needs of increasingly complex public and private spheres which are competing within an ever-expanding global economy.

Case for Increased Investment in Graduate Education

Ensuring that research continues within universities to permit the education and training of successive generations of workers is crucial if Canada is going to meet the challenges posed by generational change.

The demand for workers with graduate education is rising. As the population grows and as day-to-day living becomes ever more technologically complex so do social and economic issues that require the specialized training and advanced skills that graduate education provides. Everything from developing the Canadarm to cancer research, negotiating trade deals to developing improved approaches for caring for a growing elderly population, benefit from the investment that is made in graduate education.

Between 1990 and 2008 the employment of graduate degree holders doubled (Figure 1).

![Figure 1](source: Statistics Canada, Labour Force Survey)

**Figure 1.** Canada has experienced a strong growth in the demand for graduate degrees.
There is no doubt that training university graduates at the masters and doctoral level has a cost. It is an investment that the students, their families, and Canadian society share. However, this cost has a significant return. Indeed, the economic rationale for investment in higher education is strong. Figure 2 shows that the earning capacity of university graduates, in particular those with graduate degrees (Master’s and doctoral), is higher than those with a bachelor’s and has trended to nearly double that of those with lower levels of education.

![Figure 2](image)

**Figure 2.** Increase in earnings as a function of experience and highest level of education.

From a revenue viewpoint, the level of income tax paid by these workers – approximately 44% of taxes paid - follows the same trend making them a value for Canada.

![Figure 3](image)

**Figure 3.** Commensurate with their increased earnings, university graduates, especially those with Master’s doctoral degrees contribute approximately 44% of Canada’s income tax.
As well, the incidence of unemployment in these cohorts is also considerably lower than in other educational cohorts. Holders of masters and doctoral degrees are often more mobile which enables them to relocate to areas of greater employment need.

Figure 4. Canadian unemployment rates are lower for those with graduate degrees.

The monies that the Government of Canada delivers to researchers and students through the granting councils is a crucial investment in the development of productive, mobile, highly employable post graduates and a crucial investment in Canada’s future. The contribution that these individuals will contribute to the economy, society, and Canada’s innovation agenda will more than pay back this contribution.

CAGS recommends that the Government of Canada increase funding to the federal research-granting councils, especially the support of graduate students as this is an investment in Canadians and the future of our innovative Canadian economy.
How are we doing at attracting and maintaining the graduates who will be needed in the future?

Although there have been significant increases in graduate enrolment (at both the Master’s and doctoral level) in Canada (Figure 5), Canada has been unable to meet the demand for graduate degrees.

As a result, Canada has turned to the international market (Figure 6) to meet its demand and is benefitting from the injection of new minds and different ways of thinking. Figure 6 shows that in 2010 there were four times as many full-time Masters students and four and a half times the number of full time PhD students, respectively, studying in Canada as in 1980.

There are two points to be made here:

- Canada needs to do more to attract the very best graduates from around the world. The competition for top graduate students worldwide is very stiff, especially as other advanced and emerging countries are developing and marketing their own graduate education systems.
The availability of high quality graduate students – who might remain in Canada – and of highly educated and trained workers cannot be taken for granted. Canada has slipped in the OECD rankings of post graduates from the top to close to the bottom of the pack. Canada must ensure that it maintains high quality programs within our universities that produce the graduates necessary to fill the economic and social needs of the future.

How do we ensure that graduates are workplace ready?

It is recognized within the university community that there is a need to add to the range of skills that graduates bring to the workplace. As stated by Professor Douglas Peers, then Associate Vice President (Graduate) and Dean of Graduate Studies at York University (in his keynote address at a conference entitled Navigating Your Path: Exploring and Supporting Teaching Assistant and Graduate Student Development, held at the Ontario Institute for Studies in Education in Toronto in May 2011), concerning the need for skills training:

…it is essential that our institutions prepare and graduate students who are flexible, adaptable, and (to put it bluntly) more immediately employable than may have been the case in the past.

…our students need to profit from our willingness to put our time and resources into supplementing their core education with skills training that will help them to forge pathways into the world of work such that they will have the opportunity to realize their potential for contribution to the wider world in varied ways.

CAGS requests that the Federal government invest in innovative skills training for graduate students in all disciplines that will complement their academic skills and make them both more competitive and more workplace ready.