



Moving forward, from a position of strength

Pre-budget submission of the Canadian
Federation for the Humanities and Social
Sciences to the House of Commons Standing
Committee on Finance



Executive summary

A healthy and productive humanities and social sciences sector ensures we have the graduates and innovative ideas needed to spur new companies, jobs, investments and understanding of our rapidly changing world. Our ability to train talented individuals and use university research effectively is a key driver, giving a competitive advantage to our industries and supporting innovation in society.

Canada has a lot to be proud of when it comes to sustained and strategic support to research and the expansion of knowledge. This is precisely why, even in austere times, it is critical to sustain investments that will fuel innovation and improve our quality of life in Canada, especially as certain countries continue to struggle to regain momentum and brace for additional strains on global financial markets. Investments today position us to address our productivity gap, create new jobs, and achieve the prosperity needed to meet tomorrow's challenges.

As more and more companies and social stakeholders realize how advanced research partnerships help them connect with the next generation of talented and creative employees, universities will attract more external investment. This, in turn, will help ensure that Canada's most talented young researchers are encouraged to stay here, notwithstanding the accelerating global competition for highly skilled researchers.

We hope that the federal government maintains a leadership role in ensuring Canada's success in the knowledge economy by focussing on funding research, cross-sector collaboration and graduate education. Our recommendations, outlined in this document are necessarily focussed, as we appreciate the financial pressures that must be taken into account. They represent elements of a successful R&D enterprise that we believe are appropriate priorities in a time of restraint, offering high potential in terms of cost effectiveness and impact.

- 1. Continue to increase funding to the federal research granting agencies to support innovation**
- 2. Encourage cross-sector mobilization of knowledge and research to enhance understanding of our world, create new processes, products and services, and improve our well-being**
- 3. Invest in graduate and postdoctoral training through scholarships and internships to develop the next generation of Canadian employees, leaders, innovators and citizens.**

The Canadian Federation for the Humanities and Social Sciences president, Graham Carr, Dean of Graduate Studies at Concordia University, has requested the opportunity to discuss these recommendations directly with the committee through its consultation process. In the meantime, the remainder of this brief provides some additional rationale and information for the committee's consideration.

Representing more than 85,000 researchers and students in 80 scholarly associations, 79 universities and colleges, and 6 affiliates, the Canadian Federation for the Humanities and Social Sciences is the national voice for the university research and learning community in these disciplines.

“By investing in Canadian scholarship at the highest level, together we can do things like improve the health of mothers and children, identifying new ways to reduce crime, or learn more about the ecosystem of our arctic. We could foster deeper appreciation of our history, or invent the next world-changing technology.” Stephen Harper (August 3, 2011)

Introduction

Canada has a lot to be proud of when it comes to sustained and strategic support for research and the expansion of knowledge. The 2011 Federal Budget recognized the tangible contributions that research in the humanities and social sciences make to Canadian’s health, environment and economic prosperity. This, along with several other key measures, demonstrated that the government remains committed to its innovation and research strategy and is bolstering areas of strength, even as we tackle deficits.

It is critical to sustain these investments that will fuel creativity and innovation and improve quality of life in Canada. As certain countries struggle to regain momentum and brace for additional strains on global financial markets, we have an opportunity to improve our competitive position as knowledge leaders. Investments today put us closer to addressing our productivity gap, and to creating the new jobs and prosperity needed to meet tomorrow’s challenges.

However, as was recently reiterated in the *State of the Nation* report of the Science, Technology and Innovation Council (STIC), Canada is in danger of seeing its global R&D rank fall even further unless we improve our innovation performance. The report identified inadequate R&D investments by the private sector as a primary concern and pointed to the 2008 SR&ED tax credit program as an example of a policy that did not deliver intended returns on investment. The upcoming report of the R&D Review Panel will provide additional insights on our balance of direct and indirect mechanisms to spur innovation. We look forward to the panel’s assessment and are poised to collaborate with government and all partners in implementing recommendations that will achieve greater results for Canadians.

But, we cannot sit tight in the meantime. We must move forward, examine where we might be underperforming and learn from previous experiences as we develop new approaches—ones that must be grounded in a firm understanding of the changing global context, demographically, economically, culturally and socially.

The reality is that other countries are stimulating innovation at levels vastly superior to Canada and investment in education is vital to their success:

- The education sectors are exploding in China, Asia and Singapore. Within the next decade, it is projected that 50% of global GDP will be generated by Asian nations.¹
- Israel has one of the highest public expenditures on educational institutions relative to GDP, the highest rate of R&D investment relative to GDP and the highest ratio of university degrees per capita.²
- According to the Association of Universities and Colleges of Canada, Brazil produces twice as many PhDs as Canada and over the next decade, the Indian government expects that 1,400 new post-secondary institutions will be created to serve seven million more students.

To remain competitive in the global knowledge economy, we must graduate more people with great ideas, outstanding research skills and a thirst to mobilize them. Talented, creative and motivated people are integral to successful societies. When they work together, not just as Canadians, but with citizens,

¹ Research Money, June 22, 2011.

² Inside Higher Ed, July 11, 2011.

business, and institutions around the world, we improve our economy, health, employment prospects and well-being.

Success in these areas depends on strategic investments in the social sciences and humanities, which allows economists, psychologists, political scientists, sociologists, historians and others to address Canada's most pressing issues. Further, a well-supported humanities and social sciences sector provides Canada with the types of graduates demanded by the workforce, brings talented people to our country and stimulates the ideas for new companies, jobs and investments. Our ability to produce and use university research in these disciplines effectively is a key driver, giving a competitive advantage to our country.

Another important advantage is Canada's rich diversity. According to Scott Page, the Leonid Hurwicz Collegiate Professor of Complex Systems, Political Science, and Economics at The University of Michigan, "innovation provides the seeds for economic growth, and for that innovation to happen depends as much on collective difference as on aggregate ability... Finding new and better solutions, innovating, requires thinking differently. That's why diversity powers innovation".

We have enormous untapped potential, not least in our education and research sectors. Similarly, there are areas of the arts, industry, public and not-for-profit sectors—and people, from across our society—that are bursting with creative energy and the desire to make important change. The dividends from prudent investments in education are considerable in terms of their immediate, medium and long-term benefits to society and the economy.

Our recommendations, outlined here are necessarily focussed, as we appreciate the financial exigencies. They represent elements of a successful R&D enterprise that we believe are appropriate priorities in a time of restraint, offering high potential in terms of cost effectiveness and impact.

1. Continue to increase funding to the federal research granting agencies to support innovation

The 2011 Federal Budget recognized the tangible contributions that research and training across disciplines make to Canadian's health, environment and economic prosperity. Investments in the three federal research granting agencies—including \$7 million for the Social Sciences and Humanities Research Council (SSHRC), which represented a larger allotment for these disciplines—and 10 new Canada Excellence Research Chairs were positive signs and welcomed by our research community.

Further investment through SSHRC, the Canadian Institutes of Health Research, the Natural Sciences and Engineering Research Council and the Canada Foundation for Innovation is needed so they can better facilitate knowledge mobilization, social innovation and commercialization. This will position Canada as a centre for research excellence, fuel innovation and creativity in all sectors, and help create a rich environment for training the leaders of tomorrow.

The granting agencies, and particularly SSHRC, have dramatically reformed their programs specifically to support talent, innovation and partnerships. Thus, funding the overall and existing research enterprise as a public investment for all Canadians will yield more long-term benefits.

The important contributions that social science and humanities research and creative activity make across all sectors of society and the economy is increasingly being recognized. Recently the Institute for Competitiveness & Prosperity (ICP) argued compellingly that it is essential to encourage "expanding

research investment beyond the hard sciences”, recognizing the value a variety of disciplines and management skills bring to our competitiveness and prosperity.

Research outputs—publications, citations and major awards—are helpful in pinpointing the impact of a university’s contributions to knowledge in science, technology, engineering and health sciences disciplines. However, Canada’s quality of life and economic stability also attest to the value of investing adequately in social sciences and humanities research.

2. Encourage cross-sector mobilization of knowledge and research to enhance understanding of our world, create new processes, products and services, and improve our well-being

Investment in science, technology and medicine is fundamental to social and economic progress. But, *how* and in *what* we invest are key. Until recently, there were no tablet computers. Three years from now, we can only imagine where technology will have taken us. In the knowledge economy and digital society, the most valuable asset is people who can adapt, and who can situate new technologies, languages and knowledge in a wider context of understanding.

It is not surprising then, that Google recently announced plans to hire 4,000 to 5,000 employees from the humanities or liberal arts.³ Like other leading industries and organizations, Google recognizes that people educated in the humanities and social sciences develop an appreciation of context in an era of globalization and are adept at creative thinking, analytical reasoning and taking intellectual risks.

Thus, we need better channels to encourage connections between academia and the opportunities that enhance social and economic development and unleash our creative potential. As the STIC report concludes, supporting more robust university-industry collaborations is one way to accomplish this objective. Similarly, more partnerships between universities, communities and governments, which extend beyond specific projects, will help us tackle cross-cutting, complex and global issues.

Several programs have been implemented in recent years in Canada to spur these partnerships and create innovation incubators involving a diversity of stakeholders. Under the new program architecture at SSHRC, nearly two thirds of the most recent Partnership Grants competition proposals include private and voluntary sector partners. Proposals for the Partnership Development Grants involve domestic and international partners, ranging from large telecom companies and creative performance groups to organizations from around the world, including the U.S., China, France and the U.K.

Further investments in these and other programs, such as the National Research Council of Canada’s Industrial Research Assistance Program (NRCIRAP) would encourage industry links with leading social science and humanities researchers.

“Given that crime reduction is one of the four key areas of focus for the City of Surrey, we view our partnership with the [SSHRC funded] Acting Together Community-University Research Alliance as a key component in assisting us as we move forward in our efforts to develop partnerships, seek solutions to root causes of crime, and to ultimately bring together all stakeholders in our shared goal of ensuring a safe, healthy and vibrant community.”

Dianne Watts, mayor, City of Surrey

“For researchers, the link with community practitioners gives us access to essential information that, in turn, fuels good analysis and strong theorization. For community stakeholders, the research partnership provides academic expertise and knowledge that allows them to have a greater understanding of the environment in which they work, and to help shape their progress and development.”

Jean-Marc Fontan, professor of sociology, Université du Québec à Montréal

³ Macleans.ca, May 19, 2011.

3. Invest in graduate and postdoctoral training through scholarships and internships to develop the next generation of Canadian employees, leaders, innovators and citizens

Graduate education is critical to competitive success internationally, and yet relative to our population Canada trails the U.S. and other OECD countries, producing 35% fewer PhDs per capita than the average.

To enrich the graduate learning environment and to add value to Canadian businesses, not-for-profits and other organizations, initiatives could encourage students to interact with the users of research and future employers. By learning how industry thinks about research, graduates gain the knowledge and skills needed by all sectors. Employers also need ways to connect meaningfully with graduates who can apply their knowledge, skills and imagination to meet challenges, helping Canada retain its best minds.

Mitacs Inc.'s programs to train and deploy students are examples of this. With a broader mandate, that qualifies not-for-profits and social organizations (in addition to businesses) for federal funds under its Accelerate Internship Program, Mitacs could help hundreds more organizations each year connect with students in the humanities and social sciences who could meet their research needs. Similarly, with additional support for cross-sector networks, we could see more university-led initiatives like Waterloo's Conrad Business, Entrepreneurship and Technology Centre (CBET), Ryerson's Digital Media Zone and McGill's Dobson Centre for Entrepreneurial Studies gain traction across Canada.

Canada has invested in university research and infrastructure and in developing the next generation through the Canada Excellence Research Chairs, the Canada Research Chairs, the Banting Postdoctoral Fellowships Program and the Vanier Canada Graduate Scholarships. In tandem with these world-renowned programs we also need to expand the Canada Graduate Scholarships and postdoctoral fellowship programs funded by SSHRC and other funding agencies. This helps develop a larger critical mass of advanced degree students, who can apply their knowledge and skills across sectors and champion greater collaboration in the new knowledge economy.

Conclusion

Because of tremendous complex and global forces that will continue to affect us in the years ahead, we must bolster and expand a bottom-up, Canadian approach to excellence in the knowledge economy. We need to strengthen our distributed networks and transform Canada into an innovation culture.

By acting now, even in incremental ways, Canada can help more universities and colleges teach and train the talent needed to meet existing labour market and social demands, and spur new companies, jobs and investments. Further, we can help organizations see partnerships with universities as a way to connect with the next generation of talented employees. This approach will ensure that young people see that they have appealing opportunities to stay in and contribute to Canada even as the lure of global competition for highly skilled researchers reaches an all-time high.

Universities, businesses, governments and not-for-profits need to collaborate on cross-cutting issues in response to pressures and by seizing opportunities. By working together, all sectors can make innovation a part of our culture and transform our research enterprise—Canada's future growth and prosperity depends on this.