



HOUSE OF COMMONS
CHAMBRE DES COMMUNES
CANADA

44th PARLIAMENT, 1st SESSION

Standing Committee on Science and Research

EVIDENCE

NUMBER 045

PUBLIC PART ONLY - PARTIE PUBLIQUE SEULEMENT

Thursday, May 18, 2023

Chair: Mr. Lloyd Longfield



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• (1100)

[*English*]

The Chair (Mr. Lloyd Longfield (Guelph, Lib.)): We'll get started. I just got the thumbs-up from the interpreter that the audio for our online guests is working.

Welcome to meeting 45 of the Standing Committee on Science and Research.

Today's meeting is taking place in a hybrid format, pursuant to the House order of June 23, 2022. Members are attending in person in the room. We also have a few with us remotely today.

I'd like to make a few comments to the witnesses and members.

We have our witnesses here in person. Speaking through me is the way to go. You both are seasoned in this department. Welcome back. It's great to have you here.

Interpretation is available. For the people on Zoom, you know you can choose English or French. For those in the room, you can have your earpieces on if you need them.

As a reminder, again, work through the chair. I'll be friendly and accommodate when I can.

We've made a bit of a shift, with committee business at the end of the next hour. For now, we'll get started with our witnesses.

Pursuant to Standing Order 108(3)(i) and the motion adopted by the committee on Tuesday, February 14, 2023, the committee is commencing its study of the Government of Canada's graduate scholarship and post-doctoral fellowship programs.

It's now my pleasure to welcome, from the Association des collèges et universités de la francophonie canadienne, Martin Normand, director of strategic research and international relations. Welcome, Martin.

We also have Paul Davidson from Universities Canada. It's great to see you again. It's been a few years.

I'm looking forward to your five minutes of remarks.

If you want to get us going, Martin, that would be great. I'll start the timer.

[*Translation*]

Mr. Martin Normand (Director, Strategic Research and International Relations, Association des collèges et universités de la francophonie canadienne): Thank you.

The Association des collèges et universités de la francophonie canadienne, or ACUFC, brings together the 22 francophone or bilingual post-secondary institutions in a francophone minority setting. Its mandate is to represent the collective interests of our members to federal institutions to improve access to post-secondary education in French. Today, I will provide you with three elements to consider in your work. They are rooted in the particular situation of post-secondary institutions in francophone minority settings.

First, according to the 2018 national graduates survey, the average student debt at graduation for those studying exclusively in French outside of Quebec is \$35,000. That's \$4,000 more than those studying exclusively in English. A study in Quebec noted that an individual's level of debt may cause them to postpone or drop out of graduate studies. Given that the average debt load is higher among francophones, they may be at greater risk of postponing or dropping out of graduate studies should they have inadequate financial support. Add to this the fact that we have very few French-language graduate programs outside of Quebec, and an individual might face higher costs if they need to move away from their home community.

In the context where we are in dire need of a new generation of researchers to advance knowledge on the issues facing francophone minority communities, scholarships with more adequate and competitive dollar amounts become an essential tool.

Second, graduate students often rely on access to supplemental income to bring up their revenue. However, access to supplemental income is reduced at smaller institutions in francophone minority settings. Smaller post-secondary institutions, as well as researchers, are generally less likely to win research grant agency competitions due to institutional and language bias on review committees.

For example, one study once assessed that smaller universities were less likely to receive federal funding. You have already conducted a study on French-language research and are well aware of the barriers the French-language research community faces in obtaining funding. As a result, institutions and researchers have fewer opportunities to offer graduate students, like teaching assistant positions or research contracts. Again, in the absence of more adequate fellowships, the gap in access to graduate education is widening between mainstream and smaller francophone institutions.

Third, this context reinforces institutional bias. It's harder for researchers in our network of institutions to find graduate students to conduct their funded research mandates, sometimes their peer reviewers sometimes blame on them. Without research grants, researchers, especially early career researchers, are confined to teaching duties and are unable to attract and retain graduate students or develop a competitive research record. More adequate scholarships would help smaller institutions to compete and grow the research culture at their institution.

I will finish with three recommendations.

First, much like other witnesses, we recommend increasing the value of graduate and postdoctoral fellowships to make them competitive, and then indexing them to preserve the allure of pursuing graduate studies.

Next, we recommend that granting agencies adjust their programs so that researchers can also provide increased financial support and more competitive salaries for student researchers and postdoctoral fellows, and educate stakeholders so that institutional policies reflect this desire to take action.

Finally, federal institutions are already required to take positive measures to enhance the development and vitality of francophone minority communities. If Bill C-13 to modernize the Official Languages Act passes, this obligation will be reinforced, particularly with respect to post-secondary education. Federal institutions will have to implement meaningful and positive measures to have a positive impact on francophone minorities, in particular to support the generation and dissemination of information in French that contributes to advancing scientific knowledge. Federal institutions will also be required to establish assessment and monitoring mechanisms relating to the positive measures.

Therefore, we recommend that Innovation, Science and Economic Development Canada and the granting agencies, in consultation with stakeholders in francophone minority settings, implement new meaningful positive measures to promote access to graduate studies for individuals from francophone minority communities to support the research community in those settings.

The measures must be part of the government's commitment to help the post-secondary sector in minority settings move toward substantive equality with their counterpart in majority settings. This could result in programs tailored to the realities of these communities.

Thank you.

• (1105)

The Chair: Thank you, Mr. Normand.

[English]

You were right on time.

Now, for five minutes, we have Mr. Davidson from Universities Canada.

[Translation]

Mr. Paul Davidson (President, Universities Canada): Thank you, Mr. Chair.

Good morning, everyone.

Thank you for the invitation to appear before the committee today. It's wonderful to be here all together in person.

My name is Paul Davidson and I am president of Universities Canada, a membership organization representing 97 universities across the country.

[English]

Before I get into the subject today, I just want to say a big thank you for the creation of this committee and for the way this committee is working. It is working in a non-partisan context, driving to consensus. This is exceptionally rare and exceptionally valuable. It's something we've called for for years, and it models other nations that have found cross-party support for investing in research.

Investing in research is investing in the future. Strong research capacity is essential for Canada and essential for economic growth, fighting climate change, building an equitable society, preparing ourselves for emergencies and building a strong health care system for Canadians.

Let me make this real. Last night I was at an event honouring Pieter Cullis, a researcher from UBC. I want every member of Parliament to know Pieter Cullis, and I want every schoolchild in this country to know him. Why? It's because his groundbreaking, discovery research done in the 1970s and 1980s saved 10 million lives through the pandemic. He is a Canadian hero. When people in your caucus ask you what research is all about, how about saying 10 million saved lives? How about shortening the pandemic by six to 12 months? That's just one example.

If UBC is too far away, look at the University of Ottawa, just down the street, where researchers set the global standard for waste-water analysis. Think of what that has meant to your communities in shortening the pandemic and focusing the problem. That's what research is about in Canada.

My great fear is that Canada is actually heading in the wrong direction on research. The government's own advisory panel on Canada's research ecosystem, in the Bouchard report, concluded that Canada has been losing ground when it comes to investing in research. Over the past 20 years, Canada's investments in research and development have declined significantly.

I have some stats that I'll share with the clerk and the analysts. Currently, Canada spends about 1.8% of GDP on research and development. The OECD average is 2.1%. The U.S. is at 3.4%. Germany is on track to reaching 3.5%. You may say, those are big countries; we can't possibly compete with that. Finland has made an all-party commitment to get to 4% of GDP. Where are we? We are at 1.8%. That is the stake of international competition and investment in research.

At the same time, while the overall spending is declining, support for graduate students has been static. The number and value of awards have not changed in over 20 years. Think about living on a budget from 20 years ago. Think about that when you have choices around the world.

The U.S. is doubling down on science. I'm very proud of the government's investments to respond to the CHIPS and Science Act and the IRA. That addresses some of the business needs, but keep in mind that the U.S. has increased its investment in fundamental research by \$200 billion. If you're a younger person wondering where your future is, what does that signal tell you?

The United Kingdom, even through three prime ministers in the last 18 months, has made investment in discovery research a pillar of their economic growth strategy—not an appendix, not an afterthought, and not a backwards glance on what some people did in 2018 or 2012. They're not saying, "We will thoughtfully consider someday maybe getting around to it." They are investing now. That's a signal to Canada's graduate students.

The situation is urgent. Our competitors recognize and understand that the investments in research they make will play a vital role in determining where their countries will be in 10, 20 and 30 years.

When I started this job 14 years ago, the then clerk of the Privy Council said, "Paul, we've been investing for five to 10 years. Where are the results?" I said, "Listen, give this time. These are transformative, long-term investments." Why are we leading in AI? Why are we leading in quantum? Why are we leading in EV battery production? It is because of the environment the previous governments created to attract the talent and to retain the talent. We are in a global competition to retain that talent.

In a very discouraging, polarizing and polarized world, there is broad public support for research. You're on the doorsteps. I ask you to invoke the name of Pieter Cullis. I ask you to talk about the waste-water analysis. When people ask, "What does research do?", think of what it has done in your own communities—in Huron around the agricultural community and right across the country. I could talk about how the agricultural community in the south shore of Nova Scotia has been transformed by Acadia. This is research that matters to Canadians.

The data shows that 90% of Canadians think the Government of Canada should make investments in research at internationally competitive levels.

• (1110)

The Chair: Okay, that's where we'll stop for now. We'll pick up on your passionate delivery through the questioning period.

Thank you both for your testimony.

We're going to start off with Mr. Mazier, for six minutes.

Mr. Dan Mazier (Dauphin—Swan River—Neepawa, CPC): Thank you to the witnesses for coming here today.

We had some students in here last week. They packed the place up. They were part of the group that was striking the day before or the week before. They told us stories. Of course, we all know the life of a graduate student. They are not very well paid, and as you both alluded to, pay hasn't been increased for 20 years. This is despite asking the government for that. They've been asking since 2018 and 2019 in every budget that came up, but this government has not responded to those asks.

Have both of you asked this Liberal government for increases in funding for students?

[*Translation*]

Mr. Martin Normand: Our association hasn't been directly involved in that issue in recent months. However, we are aware that many of our institutions and many of the students who attend them have made these requests of various governments.

[*English*]

Mr. Paul Davidson: It has been a priority for us for many years. I'll just add that it's not—

Mr. Dan Mazier: Have you directly asked or had a conversation with the government about that?

Mr. Paul Davidson: We've had many conversations with the government about this—

Mr. Dan Mazier: But there was no action.

Mr. Paul Davidson: If I could just illustrate this for a moment, there are 6,000 Canadian graduate scholarship awards. There are 240,000 graduate students. We not only need investments in scholarships and bursaries for graduate students. We need support for the granting councils, because 80% of graduate students get their funding from working with principal investigators.

• (1115)

Mr. Dan Mazier: That is exactly where I'm going with this.

Is there anything the government can change legislatively to increase the pay these students are getting? For example, say you get \$1 billion. If NSERC gives out \$1 billion, is there anything limiting us in the applications that says, no, we can't pay these students any more?

Mr. Paul Davidson: The limiting factor is available resources. As I said in my statement, we are falling behind and we have to step up.

Mr. Dan Mazier: If you have a \$1-million budget and you have six students working for you—researchers, whoever it is—you can't take another 0.1% or 1% and say, no, that's going to salaries and then you're going to have to figure it out. Has that ever been asked?

Mr. Paul Davidson: Principal investigators have some *marge de manoeuvre* in how they fund their exercises, but the fundamental issue is that there aren't sufficient resources.

[Translation]

Mr. Martin Normand: I would add that some institutional policies sometimes set salaries and lead investigators can't offer more than what the institutional policy allows. If a lead investigator wants higher salaries or additional funding to attract unique talent, they might be held back by institutional policy.

[English]

The Chair: You still have three minutes.

Mr. Corey Tochor (Saskatoon—University, CPC): Thank you, Chair. I'm going to take over and share our time.

Mr. Normand, you talked about some of the struggles that students are having. We've heard of students living in homeless shelters. A lot of the 1.5 million Canadians who now rely on food banks are students. Are you hearing some of those horror stories?

[Translation]

Mr. Martin Normand: We haven't heard any on our end, because students aren't members of our association, but from time to time we see some of those stories.

Personally, I got a grant to do my master's in 2006, and a fellowship for my doctorate from the Social Sciences and Humanities Research Council, or SSHRC, in 2008. I got postdoctoral fellowships after that. I remind you that those are taxable. Yes, it's \$34,000 a year, but that amount is taxable. So you have to find supplemental income to keep up a decent standard of living.

In smaller institutions or those in rural or remote areas, where researchers have trouble getting funding from granting agencies, it's hard for them to provide additional funding to students. This leaves students with the choice of either pursuing higher education and accepting to live in deplorable conditions or entering the workforce.

Right now, given the labour shortage, salaries are very competitive, and that's more than researchers are able to pay to attract talent to their research teams.

[English]

Mr. Corey Tochor: Thank you for that.

We talk about a dollar not going as far as it used to. As much as the federal government has been neglectful in not increasing the

supports to students, some of their policies have driven inflation to 30-year record highs.

Has that also affected the institutions' ability to operate the important research they do?

Mr. Paul Davidson: There are a number of factors at play here.

Inflation is a global challenge—I'll just say that. Every institution and every country is facing a postpandemic inflation challenge.

In addition to the inflation challenge, there has also been a destabilizing at the provincial level. We all want students to succeed. The impact of the tuition freeze in Ontario has taken \$2 billion out of Ontario's university system. Nobody is asking universities to do less, but there are two billion fewer dollars in Ontario right now than there were recently. If you look at the Alberta situation, \$400 million has been taken out by the provincial government there.

Universities are being asked to do more for all parts of society, and for students, faculty and their communities. I'll remind members that, throughout the pandemic, universities stayed open. Throughout the pandemic, universities delivered emergency PPE. Throughout the pandemic, we conducted research that shortened the pandemic.

We're trying to get the government's and all parties' attention on the urgent need we are facing for reinvestment.

The Chair: Thank you, Mr. Davidson.

Thank you for the questions.

Now it's over to Valerie Bradford from the Liberals for six minutes.

• (1120)

Ms. Valerie Bradford (Kitchener South—Hespeler, Lib.): Thank you, Mr. Chair.

Welcome to the witnesses. I appreciate your being here.

President Davidson, I have a couple of questions for you.

We're all convinced that it's a dire situation for our graduate students and post-doctoral researchers. That point has definitely been made, even in previous studies we've done.

Apart from funding amounts, are there other incentives the Government of Canada could offer to graduate and post-doctoral researchers besides the stipends?

Mr. Paul Davidson: I really appreciate the question.

Again, the stipends and graduate scholarships are one vehicle. However, the most important vehicle is increasing the granting councils' operating budgets so they can provide the grants to principal researchers, who can, in turn, staff their labs with top talent. Pieter Cullis, in addition to finding the key process for mRNA vaccines, also created two businesses in Vancouver that have kept 500 young people in Vancouver employed and staying in Canada.

Graduates today are looking around the world and seeing the U.S. invest at record levels. They are seeing it in the U.K., Japan, Germany and even Finland. Investing in the granting councils is key to success for Canada's research enterprise.

Ms. Valerie Bradford: Following up on that, would low graduate and post-doctoral salaries represent the main factor that leads promising researchers to decide to pursue careers outside of research and education?

[Translation]

Mr. Martin Normand: There are very few graduate programs in our network of institutions, so it's very difficult to even consider a postgraduate internship.

What's more, as soon as we start our studies at the graduate level, the idea is instilled in us that we have to start looking at careers other than research careers or teaching careers. Since there are very few positions available at universities, we are not told too much about the possibility of teaching there.

However, as soon as we start looking elsewhere, we quickly realize that working conditions and wages are much more competitive in the private sector, and even in non-profit organizations.

I now work for one of these organizations and I earn much more than I earned as a post-doctoral fellow or what I would have earned even had I been a professor at the beginning of my career.

Therefore, we need to make the career of a researcher more attractive and increase the value of post-doctoral fellowships. That would certainly help attract researchers to our institutions and convince them that it is worth pursuing a career in research. At the same time, it would increase the diversity of research perspectives.

In addition, increased funding for the granting officers of all the granting agencies would further diversify the types of research projects funded, as well as the research topics considered by researchers. That way, we would have a better overview of the problems facing Canadian society, not just the ones that are fashionable and that also seem to be profitable for industry.

[English]

Mr. Paul Davidson: If I can build on that very briefly, we're not simply trying to recreate a professoriate. We're trying to create the talent that Canada needs to be globally competitive.

Canada is now 28th in the world for graduate student enrolment. We are all proud of our undergraduate attainment in both colleges and universities. That is at record levels. However, in terms of graduate attainment, we're 28th in the world.

If you look at every investment that's been made by major international companies over the last 18 months, it's about the talent and access to talent. I'll point to GM. When they were building their en-

gineering centre in Markham, Ontario, they talked about having 800 engineers. It was right in the press release. We have five universities within spitting distance that are going to create the engineering talent we need.

If you look at the recent Volkswagen investment, yes, there is some federal subsidy, but that's not the decisive factor. It's the pipeline of talent. It's the access to research. Why are we leaders in batteries? Why are people coming here for batteries? It's because 15 or 20 years ago we attracted battery expertise to do the work and be discovery researchers, and now we're seeing the benefits of that.

My concern today is that we're eating our own seed corn. If you're from a rural community, you know what that means. We're harvesting the benefits of previous governments' investments. We have to invest now for the economy of the future.

● (1125)

Ms. Valerie Bradford: The point has been made that we need to increase funding to the research councils, because they provide a lot of the funding for students and researchers.

How can the federal, provincial and post-secondary institutions work together to ensure that graduate and post-graduate students are making a livable wage as they conduct their research? I don't think we can dump it all on the tri-council agencies. I think there are roles for all levels of government and the post-secondary institutions themselves. I know you say a lot is expected of them.

The Chair: You have 30 seconds.

Mr. Paul Davidson: I am happy to speak to that.

Because of this great federation, everybody has a role to play. The federal government has a role to play. The provinces have a role to play, which is one of the reasons I explained how resources are being drawn away from the post-secondary sector at the provincial level. Frankly, municipalities have had a role to play.

I would just say that you might want to look at a study done by the University of Toronto called "The 10,000 PhDs Project". It's a tracer study of what happened to the last 10,000 Ph.D. graduates from U of T. They're working in business, they're working in civil society, they're working in municipalities and they're working in government. They are the motive force of this country.

That's why it's so important that we invest in the talent we have before us today.

The Chair: Thank you. We are over time.

I was in the train station in Toronto and I met a Ph.D. researcher, a neuroscientist from the University of Guelph who I knew. She is now working at one of the financial institutes, so there is a pipeline, but I won't interrupt more of our committee's time.

We'll move over to Mr. Blanchette-Joncas for six minutes.

[*Translation*]

Mr. Maxime Blanchette-Joncas (Rimouski-Neigette—Témiscouata—Les Basques, BQ): Thank you, Mr. Chair.

I thank the witnesses, Mr. Davidson and Mr. Normand, for joining us for this important study. I was very pleased to hear their presentations. I also want to commend them for being honest and authentic, and also for painting a picture of the reality using truthful data.

You know, Mr. Chair, I hear some of my colleagues, especially government members, telling us that we're leaders, but that's not what I'm hearing on the ground. I think Mr. Davidson and Mr. Normand have clearly shown us the truth today—that we have a lot of potential, but that we still have a long way to go.

My first question is for Mr. Davidson.

Mr. Davidson, on March 30, I moved a motion before this committee to invite Minister Champagne, Minister of Innovation, Science and Industry, to come and talk to us about his budget. The federal budget, as you well know, provides no investment for science and research in Canada, no increase, no investment for the three granting agencies, and no increase for graduate scholarships, which have not been indexed in 20 years.

We are still waiting for the minister. Mr. Davidson, you had the privilege of meeting with him on May 8. I don't think he has seen fit yet to set aside an hour of his time to come and be accountable to his parliamentary colleagues. That's not one of its priorities. I want to point out the reality here, for the benefit of the people watching us and the witnesses. It seems that it is not important enough for him to be transparent and explain his decisions in a budget that makes absolutely no investment in science and research. Then they come and give us lip service, like Minister Champagne, who said:

Because we know that today's science is tomorrow's economy, our government is committed to ensuring that our talented, world-class researchers have the right support for the crucial work they are doing.

We saw the exact opposite in the latest budget. The people who are here today have clearly shown us what the situation is.

Mr. Davidson, we had the Naylor report, which was commissioned by the government in 2016 and published in 2017. We had the Bouchard report, tabled on March 20, with some fairly clear recommendations: increase funding for the three granting agencies by 10% over the next five years and increase graduate scholarships. Mr. Davidson, the latest budget contains none of that.

As you said, we are losing ground as we try to position ourselves internationally.

My question is quite simple: In concrete terms, what are you asking the government for today to avoid the breaking point that we are on track to reach?

[*English*]

Mr. Paul Davidson: Thanks very much for the question. Thanks also for your tireless work on this file.

I hope the minister will come to the committee. We were pleased to have an opportunity to meet with him.

Our expectations and our requests were very clear with the minister. We know he's super busy with a whole range of other files, but we need his attention on this file now. People have said now for the third year in a row, "Maybe next year." Every month that we wait, we're losing talent.

We're looking at the fall fiscal statement. That's our deadline for the minister. People will say, "Oh yes, but there's the fiscal framework and it's going to take more time." Universities are sending a signal to every member of Parliament on all sides of the House. This is not a partisan issue. We had issues with the previous government.

We know the government is preoccupied with a whole bunch of other priorities right now, and we're encouraged by a number of its developments, but it's time to pay attention to Canada's future. It's time to reinvest in research for the long term. Every month we wait is a month too long.

Concretely, it's about the increase to the granting councils, the increase to the number and value of graduate students and a mechanism to keep those moving forward as the economy grows.

• (1130)

[*Translation*]

Mr. Maxime Blanchette-Joncas: Thank you, Mr. Davidson.

You set the stage very well in your presentation earlier and you explained the data. For several months now, I have been explaining this to my colleagues and members of the government in an attempt to change the situation. I talk to people about that.

You represent 97 universities in Canada. I would like you to clearly explain the consequences of the government's inaction. You mentioned it, and I will say it again: Canada is the only G7 country that has lost researchers since 2016. It is the only country in the entire G7 that is reducing its investments relative to its gross domestic product. This is no trivial matter. I would like you to explain to the people watching us, to the members of Parliament and to my colleagues here, what the consequences are for the scientific ecosystem and, of course, for the academic institutions you represent.

[English]

Mr. Paul Davidson: I've heard some people say, "Oh, don't think of the budget as a snapshot. Think of the movie." It's a good line. Frankly, we've seen this movie before. We saw it in 1993, 1994 and 1995. Frankly, that was when a committee much like this, from all sides of the House, came together and made it an urgent priority for the Chrétien-Martin government to invest in successive research investments. We need to see that movie, not the movie watching top talent leave.

I cite the example of Dr. Panchanathan, who is now the chair of the National Science Foundation, one of the largest granting foundations in the United States. He was a young professor at the University of Ottawa in 1994. He got snagged away to Arizona State University, which is now a world leader in commercializable research. He then got picked by the President of the United States to head up the National Science Foundation.

Do you know what his challenge is this year? It's how to spend an additional \$1.5 billion this year in research. It's how to set up 50 innovation zones—one in every state—linked to universities in every state. Those are the challenges he's dealing with, whereas our granting councils and our university presidents are having to say, "Would you just hang on for another year?"

That's why we're saying the fall economic statement is going to be a really important signal to the research community, not just to the graduate students, but to the principal investigators as well. We need to see the full package.

The Chair: Thank you, Mr. Davidson. Those were great questions and responses.

I was thinking of Peter Adams when you were talking. I was fortunate to meet him before he passed, up in Peterborough. I know he was one of the real instigators.

We need to continue with our meeting. I'll turn off my reflections.

We'll go over to Ms. Gazan. It's great to have you here. Thank you and welcome to our committee.

Ms. Leah Gazan (Winnipeg Centre, NDP): Thank you so much. It's so nice to be here today.

I'll start with President Davidson.

You're very clear. I was a long-time post-secondary educator myself, in fact, for almost 20 years. I didn't lose students because they weren't brilliant. I lost students because of poverty. I know that, according to the Canadian Federation of Students, 71% of graduate students live below the poverty line, and one in three graduate students lives on less than \$1,250 a month.

We've spoken about standards of living and how financial insecurity and poverty impact graduate students' quality of life, but I want you to focus more specifically on academic performance. For example, I had many students when I was teaching at university who had to work two jobs and study.

How does that impact our ability to produce students who are real experts in their fields?

Mr. Paul Davidson: I have a couple of reflections on that. Thank you for the question.

I think Canadians across the country can be proud of the commitment to making sure that every qualified student gets a good undergraduate experience. The level of financial support for undergraduate students has actually changed considerably.

I want to do a shout-out to the government here. In the early days of the pandemic, when everything was scary, the government did dramatic things on the student financial assistance file to give hope to students and to give confidence to parents that the educational journey could continue. Canada is exceptional—our enrolment actually went up, our retention went up and our completion went up. This is convocation season, and we have 250,000 Canadians graduating this spring who are ready to put their shoulder to the wheel for Canada.

The challenge is at the graduate level. That's where people fall off the cliff. The level of support is just not there. As I said earlier, opportunities elsewhere are very attractive. I never want to create a panic about a brain drain, just as you don't want to create a run on the bank, but I'm telling you today that the conditions are very similar to what we saw in the early 1990s. It took over a decade and billions of dollars to patch that brain drain and bring talent back to Canada.

We can act now and make sure we're positioned into the future, or we can spend another year telling graduate students, "Well, maybe next year", and telling principal researchers, "Yes, I know Japan is doing this, and I know the U.K. is doing this, and someday we might have an agreement with another country."

• (1135)

Ms. Leah Gazan: Just building on that, brain drain is a real phenomenon. It's deeply troubling for me at a time of mass misinformation, when people are spewing information not based on science at all.

In a previous meeting, Professor Andrade with the Canadian Black Scientists Network told the committee about the international models for funding scholarships and bursary values for graduate and post-doctoral researchers, including Norway's system of standardization based on level and years of experience.

This question is for both of you. What international models for funding graduate students and post-doctoral fellows should Canada take inspiration from? Perhaps you could give one each.

Mr. Paul Davidson: I don't want to over-complicate the conversation today. Canada's system is not that bad; it's just underfunded. I don't know how many ways and how many different times we have to say it. We've had the Naylor report. We've had the Harder report. I hope this committee has looked at the Harder report, which looks at international competition and how we use research to advance economic growth and prosperity.

Now we have the Bouchard report. The Bouchard report is outstanding in many respects. It says that discovery research is foundational. It says that the granting councils are doing an effective job. It says that international competition is increasing. It also says that we have to act now. It makes some other recommendations about structures, but really, the critical issue now is getting the funding in place so that young people can have the future they deserve and that Canada needs.

Ms. Leah Gazan: Mr. Normand, could you respond as well?

[Translation]

Mr. Martin Normand: I tend to agree with Mr. Davidson.

The granting council system could provide better coordination among the councils—which is a finding in the Bouchard-Taylor report—but the current system seems to suit the community.

The problem is funding, including scholarships and institutional supports that enable research infrastructure to operate. We are talking about money that goes directly to researchers, but we also have to think about the spaces for these researchers. In our institutions, which are smaller, it is difficult to create welcoming and attractive spaces. This is even more true in cutting-edge disciplines, since it costs a fortune to develop new programs. However, institutions in minority settings do not have the money they need to do so. We need to think about increasing the capacity of institutions across Canada, regardless of the field of research, in order to have a greater diversity of views and disciplines that contribute to the advancement of Canadian society.

[English]

Ms. Leah Gazan: Professor Andrade also gave this testimony on May 9 before the committee:

...we are advising people to take fewer graduate students, because we need to be able to support them at a level where they can live. I've done external reviews for departments where the graduate students generally like the program but are struggling in these ways. We advise that they sometimes halve the number of graduate students they take in, which is going to have very negative effects upstream on the knowledge economy.

The Chair: I'm sorry. We'll have to cut you off at that. Could you give us a question in just a few seconds so we can ask for a written response?

• (1140)

Ms. Leah Gazan: Sure.

In your experience, do the levels of funding available and the expected incomes influence an individual's decision to pursue a career in graduate or post-doctoral research?

The Chair: Thank you. We're well over now. We'll leave that on the floor.

It's over to Mr. Lobb for five minutes.

Mr. Ben Lobb (Huron—Bruce, CPC): Thanks, Mr. Chair.

The first question is for Mr. Davidson, and I don't think I've heard this yet, in all the meetings we've had. What's the number? If you were going to meet with Minister Freeland and say, "Look, this is what we need", what is the number to make everybody happy, this quantity?

Mr. Paul Davidson: It's about \$1 billion.

Mr. Ben Lobb: It's \$5 billion.

Mr. Paul Davidson: No, it's \$1 billion annually, and \$700 million of that is for the granting councils, with a couple of hundred million to the graduate students.

That's the order of magnitude we're speaking about—\$1 billion annually.

Mr. Ben Lobb: Okay.

You don't have to comment on this. It's just a thought. In seven or eight years, the budget has increased pretty well 50% to 60%, to almost \$400 billion. One billion dollars to set the course for the next 15 or 20 years seems like a pretty small percentage of our overall investment. However, don't answer that, because I know you need to have meetings again sometime.

That's the number, so that's good. Hopefully we can get that in the report.

There's another thing, and I think a few people have mentioned this already. Why don't you folks and some of the university presidents meet with—maybe you already have—the granting tri-councils and say, "You know what? Screw it. We are only going to fund this many projects, and we're going to fund them for the appropriate number of dollars. We're going to let the federal or provincial government deal with the backlash of the reduced granting. On principle, we are going to finance these folks with the proper amounts, so they can live their lives accordingly."

Why don't we just do that?

A voice: Exactly.

Mr. Paul Davidson: Part of the challenge is that the demands on universities are increasing. To say no to a field of research that may actually create significant new opportunities for Canada, help us in the next pandemic or help us fight the wildfires in Alberta is not a position any university president wants to be in. The universities have done their level best to stretch all available resources to make sure they can support the undergraduate enterprise, the graduate enterprise, work-related learning experiences, the mental health support of university students, the—

Mr. Ben Lobb: In a way, though, you're facilitating. I'm not criticizing you, but you say, in a way—

Mr. Paul Davidson: No, we've had those conversations internally. We've—

Mr. Ben Lobb: You're facilitating the lack of investment by going along with the thing. I'm not criticizing you, of course. I'm just saying that the way I look at it, that's a bit of the reality.

Now, I—

Mr. Paul Davidson: Again, rhetorically, we've seen a number of emergency centres in hospitals close their doors. It's just—

Mr. Ben Lobb: It's almost every emergency room in my riding. I know that.

Mr. Paul Davidson: I will say that university presidents are looking at what their alternatives are.

Mr. Ben Lobb: Okay, thank you.

I have another one. It's about these large multinational tech corporations, some of them wealthy Canadian tech companies, like OpenText and Constellation Software. There's quite a long list.

The big Canadian banks all poach these very intelligent people to do their hedge funds, ETFs and everything else. Why doesn't the government put more pressure on them? Instead of saying, "We're going to put a wealth tax on you high-profit banks", why not say, "You know what? We're getting rid of that. What we want you to do is put more into our universities and our future."

What do you think about going back to the table and saying, "Business, you're taking a lot of these people anyway. Put more money in."

Mr. Paul Davidson: We have some tremendous Canadian business leadership. I don't want to start a long list, but top of mind is Dave McKay, the CEO of RBC. RBC has put \$500 million of their corporation's money into their future launch program, which has created scholarships for Black, indigenous and under-represented youth. That is a tangible commitment the Royal Bank has made.

You mentioned OpenText, a great Canadian success story driven out of University of Waterloo discovery research. You know, it's not far from Guelph. They are in active conversations with Canada's universities about investing in the research enterprise.

One thing that's also on the to-do list, frankly—and it was on the to-do list during the Harper years and continues to be on the to-do list—is looking at the SR and ED tax credit system. It's been announced twice by this government. They want to have a review on how to make sure we can optimize private sector investment in the research enterprise, because that continues to be an ongoing challenge. That's another way of looking at how we attract more resources into the research enterprise.

• (1145)

Mr. Ben Lobb: Before my time runs out, I'll note there are some extremely wealthy Canadian executives, innovators and entrepreneurs who have done extremely well. John McCall MacBain from the McCall MacBain Foundation—Marcy is actually from my area—donated \$200 million to McGill.

What about more of that? What about more of these super-, ultra-, uber-wealthy people...and providing them an incentive, or more of an incentive, to help offset...? What else are they going to

do? You can only buy so many yachts and so many private jets. Why not put it into universities—

The Chair: Thank you, Mr. Lobb.

Mr. Paul Davidson: Every alumni development officer in the country is singing hallelujah to your comments right now. They're working very hard to raise funds.

I'll just add—

The Chair: Actually, we're well over time now.

Mr. Paul Davidson: To just add, Mr. Chair, if I may—

The Chair: No. I'll go to Charles Sousa from the Liberals, who's next. However, definitely give us a submission.

Mr. Charles Sousa (Mississauga—Lakeshore, Lib.): Not to worry. I will follow up on the question that Mr. Lobb was expressing.

I want to begin by reaffirming something so that we all have some clarity. I think all of us around this room want to see us succeed in grants, research and investment. We want our talent to be homegrown and stay here. We want the commercialization of some of the work that's been produced to stay home as well, because we're at risk there.

You've cited some of the issues that need to be corrected to ensure we are setting ourselves in the right direction. To your point, we're talking beyond election cycles here. We're not talking about any particular government per se. We're talking about what is in the best interests of Canada in the future. We're talking about enabling ourselves to put our infrastructure in place so we can continue to succeed, because there has been success.

Notwithstanding that everything seems to be broken on the other side, it's not. Things have been going well, but we can do much better. I want us to talk about what has been going well.

To follow up on Mr. Lobb's question, there is private sector engagement, not just in Canada but around the world. You cited some GDP numbers relative to what the grants could be, but what is the private sector's engagement in the United States, for example, or in the U.K. or Australia, and how is that facilitating some of the needs we have?

We'll hear from Mr. Davidson and then we'll go to Mr. Normand.

Mr. Paul Davidson: Again, I'm an optimist and I'm a booster for Canadian research and innovation. We can be really proud.

I grew up in the sixties and seventies. Where do you find Canadian success? We have a whole track record of success, both on research and on innovation.

This is Canadian Innovation Week, and one of the things we like to say is the innovation comes from discovery and research. Canada has had a challenging history of developing into commercializable research, and this government has taken important actions through the creation of the new innovation agency, which is a good step. It is a century-long problem of attracting private investment into the research enterprise in Canada. There will always be a role for government.

When we look at our international competitors, the U.S. levels of private sector investment research are much higher. When we look at the U.K., Japan and Korea, they're much higher. Is it a combination of tax measures? Is it grant measures? What do we do to attract them?

The innovation agency will be one partial step, but again, it's one of those things where we have to do more than one thing at one time. This is because the emphasis on immediate innovation and what's commercializable is at the expense of this generation of young researchers, who will be part of the next AI, the next quantum and the next EV.

[*Translation*]

Mr. Martin Normand: I would like to add that the dynamic that is being referred to at the moment—that of the private sector and wealthy potential donors—is occurring in favour of major fashionable disciplines. We talk a lot about MATES—mathematics, arts, technology, engineering and science. If this is the model we want to move toward, we are abandoning the smaller institutions that do not have the means to offer these types of programs or that do not offer them.

These institutions are unable to position themselves relative to the major players—in other words, the U15, the group of Canadian research universities. Examples include the Université de l'Ontario français, Université Sainte-Anne in Nova Scotia, the Collège communautaire du Nouveau-Brunswick and Collège Boréal in Ontario. These institutions are connected to their local industry and serve the needs of local SMEs. These SMEs will not be able to support research infrastructure in rural and isolated communities.

When Mr. Davidson says that we have to do more than one thing at a time, that's what it's about. Yes, we can count on funding for major research projects, major initiatives and major innovations. However, small local innovations will not be possible without extra government funding to support smaller institutions that have specific fields of research and expertise and that meet local needs that no one else is meeting.

At the Université Sainte-Anne, for example, an entire research team has developed on the lobster fishery. If the Université Sainte-Anne does not do so, the University of Toronto or the University of Alberta will certainly not be meeting the local needs of Acadian fishers in Nova Scotia. A diverse research infrastructure is needed.

• (1150)

[*English*]

Mr. Charles Sousa: Do I still have some time?

The Chair: You have 30 seconds.

Mr. Charles Sousa: I think we all agree, Mr. Normand, that this is a collaborative effort between the government and the respective bid corporations and larger institutions. However, it's essential to have small communities and SMEs. Some of the colleges that are working collaboratively with some of those SMEs are also important. We need a collaborative effort, but we need to have a partnership. We need to ensure we attract and incentivize some of those efforts.

I appreciate the work. I appreciate the Bouchard report. It is being reviewed and assessed, so we will take it into stock when we do our report.

Thank you.

The Chair: Thank you so much.

We have Monsieur Blanchette-Joncas for two and a half minutes.

[*Translation*]

Mr. Maxime Blanchette-Joncas: Thank you very much, Mr. Chair.

I'll come back to today's study on graduate scholarships.

When someone has a shameful record, it is only natural to want to avoid the subject of the discussion. We just had a good demonstration of that.

I would like to get back to the heart of the matter with Mr. Davidson.

Mr. Davidson, we would like to get some data that will inform our report. Could you provide us with concrete data on the proportion of students who receive federal scholarships compared to the number of students pursuing graduate studies at the 97 universities you represent?

My next questions are for Mr. Normand.

Mr. Normand, you mentioned in your opening remarks that the average student debt of a francophone student at the end of their studies was \$4,000 higher than that of an anglophone student. This is a big deal for a student who already has to pay for rent, groceries, travel, tuition and everything else, with a scholarship that has not increased in 20 years. I repeat, 20 years. That is not to mention the large proportion of students who do not even receive scholarships. This may influence a person's decision to pursue an education or to go to work to pay off their debts.

Can you tell me more about why there is such a gap between the indebtedness of francophone and anglophone students?

Mr. Martin Normand: The first phenomenon that explains this gap is the distance that francophone students outside Quebec have to travel to study at a francophone institution.

There are 97 universities in Canada, and the Association des collèges et universités de la francophonie canadienne has 22 member institutions.

In some provinces, there is only one francophone institution. In Alberta, the University of Alberta's Campus Saint-Jean is the only francophone institution. The same goes for the Collège de l'Île in Prince Edward Island.

As a result, students who want to study in French have no choice but to travel and pay much higher costs than students who want to study in English at the University of Alberta, which may be on the corner of their street. In addition, Campus Saint-Jean does not offer graduate programs in French.

Therefore, the costs associated with the decision to study in French, whether at a bachelor's or graduate level, are higher.

Mr. Maxime Blanchette-Joncas: So we can say that higher education is less accessible for francophone students outside Quebec than for anglophone students.

Knowing how important scientific research is to the affirmation, prosperity and empowerment of a community, we cannot ignore the seriousness of this situation.

What measures must be taken to put an end to this obvious discrimination experienced by francophone students?

Mr. Martin Normand: I think we need to take a step toward true equality in the post-secondary sector and take seriously some of the imperatives that are embedded in Bill C-13. We will have to accept that there may be specific measures for francophone students, as well as as asymmetrical thinking on granting agency programs, including scholarships.

Mr. Maxime Blanchette-Joncas: Thank you, Mr. Normand.

[English]

The Chair: Thank you very much.

We're getting a lot of bases covered today.

We will go to Ms. Gazan for the last two and a half minutes.

Ms. Leah Gazan: Thank you, Chair.

President Davidson, we spoke a bit, and you just briefly mentioned untraditional post-secondary students. I used to teach in a program called the access program. It was designed for "non-sequential" students and students coming from backgrounds of poverty. One of the pillars of the program was bursaries. I know we're talking about the graduate level, but how is the lack of financial bursaries impacting equity and equality in universities for people who want to pursue graduate studies?

• (1155)

Mr. Paul Davidson: This is another area where there's been some progress made in recent years, but there is more distance to go around removing barriers for accessibility, particularly for under-represented groups and under-represented students.

One thing the evidence has shown is that if you invest strategically and you have a system that's designed to meet these goals, you can do it. It's a question of money. It's also about system design, and the government has made some good investments in this area. There is still much more to be done.

Let's put it in economic and demographic terms. We have to increase labour force participation in this country. We have all sorts of talented people sitting on the edges, sitting on the margins. We have to bring them into colleges and universities at the undergraduate and graduate levels. Unless we do that, our standard of living will not support the quality of life we've come to expect.

Ms. Leah Gazan: Would you argue that failing to do that negatively impacts the Canadian economy? We often talk about the Canadian economy. I've often put forward the high cost of poverty and the high cost of not investing in people. I would include in that access to education.

How badly is the failure to support folks currently impacting the economy? I would put education as a pillar for mobility in that discussion.

Mr. Paul Davidson: One of the key elements of increasing labour force participation, particularly for minority groups, is to make sure they have access to education and have wraparound supports. Ensure, first, that it's seeable and doable; second, that resources are there, provincial and federal; and third, that universities and colleges do more than put out a sign saying "Please come". They have to reach into communities and start early.

There's all sorts of good work happening across the country, and this has been an area of real change over the last 15 years.

The Chair: That's tremendous. Thank you both, and thank you to members for great questions and a wide-ranging discussion. I wish we had more time, but we don't.

For now, I'll thank Mr. Davidson and Mr. Normand for joining us for this study we're doing on the Government of Canada's graduate scholarship and post-doctoral fellowship programs. If you have more information you'd like to submit—I've mentioned the Harder report, "Rising to the Challenge of New Global Realities"—anything that can help us with our study would be appreciated.

For now, though, we'll be suspending briefly to allow our witnesses to leave, and then we will resume in camera.

For members on Zoom, could you use the second hyperlink the clerk sent out yesterday to join the in camera session? We'll see everybody in a few minutes.

[Proceedings continue in camera]

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