

# Standing Committee on Industry, Science and Technology

Tuesday, May 10, 2016

#### • (1535)

# [English]

The Chair (Mr. Dan Ruimy (Pitt Meadows—Maple Ridge, Lib.)): All right, we will get going on this very first day of our manufacturing study. This is exciting.

Welcome, everybody, to meeting number 13 of the Standing Committee on Industry, Science and Technology.

Today, we are graced with the presence of Scott Smith, the director of intellectual property and innovation policy at the Canadian Chamber of Commerce; and from the Conference Board of Canada, Michael Burt, director, industrial economic trends.

Again, as we normally do, you will have 10 minutes for your presentations, and then we'll begin our rounds of questioning.

We're going to get right to it. Go ahead, Mr. Smith.

Mr. Scott Smith (Director, Intellectual Property and Innovation Policy, Canadian Chamber of Commerce): Thank you very much, Mr. Chair, and members of the committee, for inviting me here to appear before you.

I'm pleased to be representing the Canadian Chamber of Commerce. We are the largest business organization in Canada, with a network of over 450 local and provincial chambers and boards of trade, representing over 200,000 businesses in all regions and in all sectors in this country. My comments to you today are based on and informed by a regular dialogue with all of those members.

There is an important relationship between innovation and manufacturing. I'd like to start by saying that the minister's mandate letter and the name change of the department to Innovation, Science and Economic Development has given the chamber and its members a reason to be cautiously optimistic about Canada's innovation prospects. Competitiveness is the driving focus for the Canadian Chamber, and innovation is the key to competitiveness. I say "cautiously optimistic" because, as of 2014, Canada was ranked 15th in the world in competitiveness, and 22nd in the world in innovation by the World Economic Forum. The Conference Board recently gave Canada a C grade on innovation, which is up from a D grade. I have kids in high school, and bringing home a C is not such a great thing. Clearly we need to better.

I think that need to do better was recognized in budget 2016, which focuses on new science and improving facilities, the industrial research assistance program, and addressing climate change.

The chamber certainly encourages continued spending on science discovery. Our national reputation as a place to do business in part depends on the reputation of our educational institutions, but we need to balance that and encourage businesses to invest. While our educational system and labour market efficiency perform well on global indexes, our innovation and competitiveness rankings are less stellar.

One explanation for why this might be is that our innovation incentive programs are fragmented. They're fragmented among departments and not consistently aligned with Canadian business structures. Ninety-nine per cent of Canadian businesses are small to medium-sized enterprises, and 75% have fewer than 10 employees, yet the bulk of private enterprise spending on research and development comes from large business. Just 12 companies account for roughly half of business enterprise spending in Canada. In 2013, the top 10 businesses for R and D spending accounted for \$7.2 billion, or 46% of Canada's \$15.5-billion total business expenditure on research and development. In fact, the top three R and D spenders in Canada were Bombardier, BlackBerry, and Magna, together accounting for more than a quarter of all business expenditures.

Keep in mind that some of those business expenditures have actually suggested the multiplier for that kind of spending is up to 56%, yet most of our incentives are now designed for small business. Accelerating spending to match the leading global jurisdictions would have a significant impact on corresponding business expenditures. Part of the decline in Canada can be attributed to the relative decline of the manufacturing sector as a whole. In 2008, manufacturing represented 11.9% of the economy. During the recession, manufacturing sales dropped 17.6%. In 2014, manufacturing recovered to pre-recession levels in terms of constant dollars, but remained at only 10.6% of GDP. In contrast, U.S. manufacturing recovered to pre-recession levels by 2011.

Worse still, when asked about upgrading manufacturing technologies, the Canadian manufacturing community revealed a hesitancy to make investments that could help Canada climb back towards the front of the pack. Manufacturers, especially smaller ones, cite a need to prioritize where and how to leverage innovation in ways that will drive efficiencies without consuming vast resources. 2

One issue is the inefficiencies in the incentive program structure. Programs like IRAP, for example, are designed for small business start-ups. By nature, this is a diverse group. It is not possible for government program managers to acquire sufficient expertise in the diversity of research that these programs cover. Consequently, technical experts are hired by government to audit companies and decide whether the work they've done is innovative enough. Similarly, start-up companies are populated by experts in a specific technology, with little or no experience in navigating government programs. To meet those requirements, they hire consultants to prepare their claims. All of this costs money, and none of it adds any value.

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Finally, the programs have the unintended consequence of misaligning resources. The programs focus on engineering, science, and technology and make it tempting to just throw more engineers at a problem. As a result, Canadian start-ups have world-class engineering teams, but often fall short on the product and user side—in other words, sales and marketing.

Until 2012, tax incentives for research and development spending by business were among the most attractive in the world. Public spending on higher education and post-secondary institutions remains the highest in the world, but changes to the incentive programs have hindered the abilities of Canada's branch plant companies to attract R and D investment. Some estimates indicate that the lack of competitiveness of current tax incentives to innovation could result in a reduction of overall R and D activities by as much as 70% in Canadian manufacturers, while 18% would shift their activities to other jurisdictions.

We need to consider alternatives to our tax structures that not only encourage innovation, but have the potential to attract new foreign investment and generate new untapped revenues. This government has signalled an extension to flow-through shares in the mining sector through 2017. We should consider the idea of the benefits of such measures in things like the high-tech community and life sciences sector to attract investment to start-ups that don't have sufficient revenues to benefit from existing tax credits. We should also consider measures such as an innovation box that provides preferential tax treatment for intellectual property that resides in Canada.

Finally, we seem to be challenged by our ability to commercialize ideas. There's no easy answer, but part of the problem is market driven. Most start-up companies seek priority patent filing in the U. S. first. It's the larger market. As a consequence, much of the wealth flows south. Part of the problem is our policy framework. We have a disincentive to growth in the form of our business tax structure that penalizes companies that grow beyond a certain level. The same is true for R and D direct incentives, which are geared towards small companies.

We also struggle with rising energy costs. Electricity rates have doubled in Ontario since 2005. Our response to climate change is piecemeal, and we continue to struggle with a sticky border, all adding a strain on manufacturing.

We've seen a structural shift in employment into services, resulting in skills gaps and mismatches. By investing in better

labour market information, we can connect businesses to skilled workers. The new manufacturing GPS initiative, for example, funded by the federal government, aims to address this and should be promoted to the sector.

Incentives to create more work-integrated learning opportunities through a wage subsidy would help overcome the largest barrier to offering student placements, and we need to align our education systems with employment markets, bringing technology, manufacturing expertise, and practical education together in a collaborative environment.

In budget 2016, the federal government committed to increase the transfer of EI funds to the provinces and territories from \$2 billion to \$2.5 billion annually. Now is the time to see if those programs should address the manufacturing sector and ensure their relevance and accountability.

With respect to IP structures, some of those are misaligned with the incentives that offer we to post-secondary institutions. The research dollars flow to the post-secondary institutions where projects are designed to satisfy academic curiosity instead of market demand. The incentives for advancement in our post-secondary system focus on publications in prestigious journals and the citations generated through those publications. The wealth generated by patent filings of a research project is not considered in the career path of a researcher.

Invention is exciting. It's sexy. It attracts attention. However, invention alone does not create wealth, and innovation is more than just an invention. Innovation is the art of using inventions in new ways. Wealth is created by owning the intellectual property and by making things. Instead of always thinking about how to make better things, we should probably consider sometimes thinking about a better way to make things.

Okay, I'm done with the doom and gloom.

Here are some bright spots: Canadian pharmaceutical production is up 100% from 2011 levels to \$10.9 billion from \$5.5 billion; production of passenger cars and light trucks is up nearly 50% from 2011; exports of aircraft, parts, and engines grew to \$21.9 billion in the last year from \$13.2 billion in 2011; food and beverage manufacturing had a 42% increase in exports since 2011; and furniture and fixture manufacturing rose to \$6 billion from \$4 billion 2011.

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Most importantly we have a huge opportunity in front of us with technology. As computers, data science, and broadband internet coverage merge with manufacturing, new technologies are emerging such as 3D printing, advanced robotics, and artificial intelligence. Existing technologies, such as computer-controlled cutting, or CNC, are finding new relevance and uses within modern supply chains. These changes are leading to new approaches to the way that things are made. For example, in Canada's auto sector, there is an opportunity to attract more high-end technology work here, with all the seismic shifts due to the connected and autonomous driving cars. Many people are no longer choosing their cars on performance factors and horsepower. Instead, they are looking at how their cars make their lives easier.

There is no single easy answer in the path toward manufacturing success. We have some of the fundamentals right. In some areas, we need to reinvent ourselves.

I will conclude by saying that we need to take a balanced, coordinated, and collaborative approach to public investments and public policy-making in order to attract and retain investment in this country.

Thank you so much for your attention.

The Chair: Thank you very much.

I need to point out that copies of your remarks were given, but they were only given in English, so we can't pass them out. We'll have to make sure in the future that the instructions are very clear that they are to be given in both official languages.

**Mr. Chandra Arya (Nepean, Lib.):** Mr. Chair, should we insist that the witnesses also give them in both languages?

**The Chair:** I just said that we're going to have to make sure that the witnesses, if they are bringing material, bring it in bilingual form.

Mr. Burt, go ahead.

Mr. Michael Burt (Director, Industrial Economic Trends, Conference Board of Canada): My name is Michael Burt. I'm with the Conference Board of Canada. For anyone who is unaware, we're a non-profit, non-partisan research institute based here in Ottawa. We do research in a variety of areas, including public policy and economic forecasting and analysis.

You invited me here today to talk about manufacturing.

Manufacturing is still a very important part of the Canadian economy. It accounts for about 10% of GDP, 10% of employment and, even more importantly, for about half of our exports and half of the R and D activity that takes place here in Canada.

However, its role in the economy has been shrinking. I'm sure you're already well aware of that. If you look back at the turn of the century, for example, instead of being 10% of GDP, it was about 16% of GDP. So we've had a pretty big shift in a fairly short period of time. Some of that has been absolute. If you look at employment, we have 500,000 fewer people employed in manufacturing today than we did 15 years ago. On the production story, things a little bit more positive. Production is not much different today than it was 15 years ago and a lot of that is due to what's happened during the dip, during the recession. We've had a pretty healthy recovery from the dip that occurred in 2008-09.

The other thing I want to say is that it's very important to note that the decline in manufacturing that we're seeing in Canada is not unusual. In every single developed country around the world, we're seeing manufacturing shrinking as a share of production and as a share of employment. Canada has probably seen a larger than average decline over the last few years, but this is not unique to Canada. In fact, even in China, employment in manufacturing is flat. It's not rising, but because the rest of the economy is growing, manufacturing is shrinking as part of China's economy, believe it or not.

What I'm trying to say is that this is a normal thing that's going on.

I will say, just because one the questions you asked in the invitation letter to me was about the strategic importance of manufacturing, that we as a country likely put too much emphasis on it. Services are 80% of our economy. They account for a lot of the growth in jobs, GDP, and trade in the last decade or so. We probably need to look a little more at that, but, of course, you've asked me to talk about manufacturing today, so that's where I'll focus my comments.

What caused this big drop in manufacturing activity in Canada, or at least its share of GDP in Canada?

There are a few key things. First, a lot of it has been due to declining demand for some of the key products that we make here in Canada. The paper industry is a very clear example of this. The industry is 30% smaller today than it was 10 to 15 years ago, and that's just tied to the fact that demand for paper products has shrunk dramatically over that period of time, due to what's been going on with the digitization of media. That's one thing that's been happening.

Another big thing is that the competitive environment internationally has fundamentally changed. China came onto the world stage in the early 2000s. It has dramatically changed the manufacturing world. We've seen a big change in the North American supply chains, in North American expertise and strengths. To list just a few things in which we've lost very large market share, both domestically and in the U.S., these include apparel, furniture, and electronics, all of which are tied up with what's been going on with China. Mexico is also a part of this story. It's not just China, but there are other emerging markets. For example, Mexico has been a big competitor for Canadian auto manufacturers and parts manufacturers in the United States, and so we've lost market share, as well.

Therefore, it's first partly about what we make and, second, it's about the competitive environment we're facing.

Then, finally, another big factor is that for most products we have a very narrow focus on the U.S., which means that the impacts of the strong Canadian dollar during much of the 2000s were amplified. We really had a limited ability to take advantage of opportunities outside of the U.S. market because we were so geared to that north-south trade relationship.

I will echo what you said: this is not necessarily all a bad news story. There are many success stories in our manufacturing sector, and I think it's really important to start learning from those success stories in trying to see how we can grow other parts of the manufacturing sector.

Food manufacturing is one that I often talk about. It's actually the biggest part of our manufacturing sector. Many people don't realize that it's bigger than autos and parts. It has been a stellar growth engine over the last 10-15 years. It's been slow but steady growth, and it's expanded tremendously. It's been led by a variety of products, things like red meat, canola oil, snack foods, ready-to-eat products. This is an industry that has been very successful in Canada over the years.

# • (1550)

Another more micro example is things like cosmetics and beauty products. Most people don't realize that. We are quite successful. We have a very large market share relative to our size in those products, and it's really down to a few key companies. Some of them target basically private label brands, in things like retailers and hotel chains, those sorts of things. They have developed very strong relationships with partners for marketing their products, selling their products.

The other group falls into things like companies that have targeted emerging markets, key markets. They have a specialty product that has certain features that are very desirable in key emerging markets, and they've said they are going after that emerging market. Those are examples of success.

Beyond that, if you look at other areas of growth in manufacturing, prior to the drop in oil prices, we had very strong growth in things like—

**Mr. Brian Masse (Windsor West, NDP):** On a point of order, Mr. Chair, we've had the documents distributed in English only. According to our routine proceedings, it has to be in both official languages, so this is a problem.

The Chair: Those are just Mr. Smith's speaking notes.

**Mr. Brian Masse:** I know, and as much as I'd like to hear from Mr. Smith, the documents, following routine proceedings and what we've set up in the House of Commons, which we are supposed to follow, require that they be in both official languages.

**Mr. Chandra Arya:** Excuse me, but in the other committee, documents, including the Auditor General's speaking notes, were only in English and were distributed.

**The Chair:** Okay. How about we have a discussion afterwards and we'll follow the procedure.

It's because Mr. Dreeshen had asked for the notes.

**Mr. Brian Masse:** I know, Mr. Chair, but we do have to respect both official languages here, and we do have this in our routine proceedings.

The Chair: That's fine.

Mr. Dreeshen.

**Mr. Earl Dreeshen (Red Deer—Mountain View, CPC):** On that point of order, I'd asked if the notes were available. I do know that the rules are that they have to be both in French and English.

The Chair: I was just trying to be accommodative.

Mr. Brian Masse: I don't take it as any ill will. I'm just raising it.

**Mr. Michael Burt:** To continue what I was saying about our other success stories, we have a variety of industries where production may now be lower today than it was at its peak, but we've seen strong growth coming out of the recession in things like wood products, chemicals, plastics, electronics, autos, and parts. So there are a lot of good news stories out there when you talk about our manufacturing sector.

We've done a variety of research trying to identify the success factors of Canadian businesses, particularly when they go overseas. I did share this with the clerk earlier today. It's available in English and French. I don't know if it was made available to the committee ahead of time.

The four key things we've identified include skilled executives. Your business leaders need to have entrepreneurial spirit, they need to have a commitment to growth, and it's also helpful if they to have an international exposure, so that they don't just know about Canada or even a particular region in Canada, but have a global view.

The second thing is international networks. This is around taking advantage of helping hands, if you will, to get out into global markets. This might be leveraging the networks that come with your existing customers. It might be government contacts, or things like our trade commissioners overseas and the variety of professional services firms out there that specialize in helping businesses make that leap into international markets.

The third thing is market knowledge. This means, first of all, knowing your customers. Too many businesses are making products for their own benefit rather than their customers' benefit. Know your customers, and know what they want. Have a local presence. You need to be there somehow. It's hard to serve a market remotely. Choose your markets wisely. Don't just say, "I'm going to go into China". It's a big market. Try to identify what your key target market is there, and adapt your products to your clients' needs.

The fourth thing was innovation capabilities. To echo what Matt was saying earlier, it's not just about product development and not just about new whiz-bang products, but it's also about process improvement and doing things better. It's about adopting existing technologies that are out there and available, but which we just haven't implemented yet. Finally, invest in R and D. That's part of knowing your customer, knowing your market, and these sorts of things. If we want our manufacturing sector to succeed and to continue to grow going forward, what can we do? There are a few things we've identified in our research. First is how Canadian companies become part of global value chains. Too often we're organized around serving just the U.S. market. How do we become globally successful number one companies, particularly in niche products, so that if If you want this particular thing, you go to this company in Canada? Countries like Germany and Israel have followed this sort of strategy in developing global champions. It's around creating world-class products, but not necessarily an Apple-type product. Maybe it's something a little more modest and being successful at that.

Second, pull, don't push. We have lots of programs in place trying to help Canadian businesses do different things, like incubator programs or those sorts of things. There are lots of them out there. It's about making them more effective. How do we do this? Make Canadian manufacturers hungry to make use of them. It's that old analogy that you can lead a horse to water, but you can't make it drink. They have to want to make use of those helping hands.

When we look at all of these different programs that we have out there, we want to make sure that the purpose of them is to solve the needs of industry rather than trying to push out a new idea onto the industry. If we look at where we see the most successful things, like business incubators and that, it's about strong, good relationships between business and our post-secondary institutions around solving the day-to-day problems that our businesses are facing.

Third, invest. I don't think it's any surprise that Canada's productivity performance has not been stellar for a long period of time now, going on 20 years, so we need to invest more in equipment and ICT, and those sorts of things. If you look at our manufacturing sector right now, we're capacity constrained. We are running flat out with our existing capital. If we're going to grow more, we need to invest more—and don't forget about investing in people. It's not just about machinery. For example, we've seen growing use of certain types of technicians and technologist jobs in manufacturing. We want to make sure that the people are there to meet the needs of manufacturers.

Finally, don't forget about services. What I mean by that is services are becoming an increasingly important part of the value proposition for manufacturers.

• (1555)

A really interesting study I saw quite recently talked about the aerospace industry, for example. They looked at various aerospace manufacturers. Basically, the higher the share of their revenues that came from services, the higher their profits. They were more profitable if they were using services to make their products more valuable to their customers. All that is to say that if you're looking at manufacturing, it's important to understand the linkage between the services, whether in transportation, engineering, all these sorts of things—all the things that enable our manufacturers to be worldclass.

Thank you.

The Chair: Thank you, Mr. Burt.

We're going to go right to Mr. Arya. You have seven minutes.

#### • (1600)

**Mr. Chandra Arya:** Thank you, Mr. Burt, and Mr. Smith, for the excellent presentations you both gave.

First, Mr. Burt, do you see potential for advanced manufacturing in Canada? Where do you see this advanced manufacturing five years down the road or 10 years down the road?

**Mr. Michael Burt:** It's very hard to pick winners, but we certainly have core strengths—photonics, and pharmaceuticals was mentioned by Scott. There is a variety of areas in which we have key strengths. Even in less technology-driven industries, it's still possible to have success by thinking about where our value propositions are.

I mentioned food manufacturing as being a key success story. It's not a really technology-driven industry, but it has very strong linkages to our clear strengths in agriculture in Canada. We're a large global maker and grower and exporter of agricultural products, and so it's leveraging that strength in agriculture and using it to make higher value-added products.

There are a great many potential areas for growth. It's very hard to pick winners, but I would say we're probably better off to focus on globally oriented things, because the Canadian market is fairly small. We've seen the most success with Canadian businesses in areas that are usually able to...some of them are even born global—their first customers are outside of Canada.

**Mr. Scott Smith:** If you look at some of the industries we have in this country, pharmaceutical and agrifood were both mentioned, but we also could look at auto or aerospace—any number of industries. One thing we need to keep in mind is that basically all companies now need to be technology-driven, and one of the most important things to consider is investment in that technology.

We have advanced manufacturing now, and if you look down the road, what's going to be the impact of something such as 3-D printing or new materials? Using 3-D printing as an example, there are not very many companies currently using it in their manufacturing processes; they're using it for things such as prototyping. But one thing we could see down the road with the advent of consumer demand for 3-D printers is a change in replacement parts, as an example, whereby people start to print their own. Some of the things we need to be considering are around what we do with our intellectual property laws to make sure that this gets looked after.

**Mr. Chandra Arya:** For several years I lived and worked in the oil-rich Arab countries. I was there promoting industrial investment, investing in manufacturing companies. Every single day a new manufacturing company is being set up there. Name any sector, name any product, they're setting it up. They're not waiting for the most advanced innovative product; they're using commercially available technologies. As long as there's a market somewhere in the world, they go after it. One of the main reasons for them to set up so many manufacturing companies is that they have a very clear industrial policy that is backed by the industrial development banks, which are there to support new manufacturing companies.

Mr. Burt, you mentioned the need for more investments. I know that in Canada we have a lot of support for innovation. We have great programs such as STRIDE, IRAP, SADI, and many other programs for innovation and research and development, but personally I feel that the availability of funds to set up, say, a new small manufacturing company are quite limited.

What is your take on that?

**Mr. Michael Burt:** Scott mentioned our innovation measures earlier. Canada scores very well globally in terms of the ability to start up a new business; it's one of the best in the world. There are many, literally thousands, of new manufacturers who start a business in Canada every year.

It's not so much about start-ups; it's about how we turn those into high-growth firms that become globally successful. That, I think, is where some of our challenges are. According to our research, much of it boils down to developing the management skills to be successful, to have the knowledge around getting access to markets, to have knowledge around marketing—all these sorts of things. It's about having our entrepreneurs possess the full set of skills.

That's one reason I talked about global value chains. It's a way to leverage the knowledge that existing multinationals have.

• (1605)

Mr. Chandra Arya: Mr. Smith.

**Mr. Scott Smith:** There are three things. One advantage we have in this country is a skilled workforce that is actually certified, which gives them a nimbleness that doesn't occur in some other jurisdictions. For instance, if you look at Mexico or India, you find they don't have the same certification processes as those that allow our people to be more flexible and to adapt.

The second thing is that we are so close to the U.S. market that it tends to be a crutch that we rely on. To your point about setting up in other countries, we tend to go to the U.S. first because it's the behemoth that we all know.

I forget what my final point was. My apologies.

**Mr. Chandra Arya:** I have a very short time left. Specifically, what measures do you both think the Government of Canada should take that will be effective in the short, medium, and long term?

**Mr. Michael Burt:** You talked about all the different programs that are in place. I think one of the biggest things would be to start assessing the effectiveness of those programs.

There are a lot of programs, and some of them are very effective. I think we need to start having better practices around learning what is and is not effective and focus on what is effective and maybe deemphasize what's being less successful.

The Chair: You have 30 seconds.

**Mr. Scott Smith:** I think we need to rationalize some of the existing programs that we do have and focus on the idea that some of the large companies out there are really an anchor. If you talk about services and talk about the value chain, those are what build the manufacturing capacity around this country, and we really need to think more closely about what we might do for some of those larger companies.

The Chair: We will move over to Mr. Nuttall.

You have seven minutes.

**Mr. Alexander Nuttall (Barrie—Springwater—Oro-Medonte, CPC):** Thank you for the presentations today. I certainly appreciated the information.

I'll just pick up from where Mr. Arya left off.

You talk about rationalizing, about looking at our existing programs. One of the frustrations I've seen since I got here is the lack of measurements, or at least publicly disclosed measurements, of the success. What are the measurements? How do we determine whether a program internally is effective or not effective? What criteria do we use?

Could you tell me the three most important criteria you would use to determine whether a dollar spent is worth it or not?

**Mr. Michael Burt:** Different programs have different objectives, so it would have to be based on a particular program's objectives. If you talk about, for example, accelerators or those sorts of things, the questions would be how many businesses have you started, how much have they grown, and how many markets are they in?

It's about trying to find things you can quantify. Consider the SR and ED program. Broadly speaking, Canadian R and D has been falling over the last 15 years. I'd say that's a starting point; it's probably not being very effective at driving R and D.

I think it would have to be driven by the purpose of the program.

**Mr. Scott Smith:** Among the things we need to think about in the incentive programs that are out there for growing R and D and the relationships between post-secondary institutions and business is that we probably need to rethink our expectations of the return on an investment.

For instance, new science is important to do, and 30 to 50 years down the road, who knows what it might generate? It also allows us to accumulate a large number of really highly skilled people, but you're never going to be able to say how many things we have commercialized out of it. You're never going to be able to say how much money we actually made out of it. I think that's a wrong way of looking at it.

If you look at some of the incentives for smaller businesses— IRAP, as an example—then the example of how many grants were made, how many businesses were developed out of it, how many products were shipped, what our export ratios are.... Those are all good measures.

**Mr. Alexander Nuttall:** One issue I've heard about consistently in the manufacturing industry concerns energy costs. Obviously Ontario represents a large percentage of our manufacturing industry. We've seen skyrocketing costs over the past 10 to 12 years, with the last five years showing the most dramatic increases.

The innovation agenda that's being communicated so far from the federal government seems to be going toward similar investments to those that were made in Ontario in terms of renewable energy. The flip side of that investment in renewable energy, however, is higher energy costs. Have you been able to rationalize what type of investment it would take by a government to not increase the energy costs while still maintaining the transition into renewable energy generation?

• (1610)

**Mr. Scott Smith:** I may have a bit of an advantage, having worked in the energy industry for a little while. The reality is that the new generation of renewables is no more expensive than building new infrastructure for conventional fuels. The challenge is that it's expensive to build everything now. It's less about what the new generation costs are and more about what our long-term infrastructure for delivery of electricity is. We have a crumbling infrastructure in this country, and we have challenges surrounding interprovincial intertie. It's easier to send electricity to the U.S. than it is to send it across provinces. Those are certainly some issues we need to consider, because electricity can be produced in some provinces a lot more effectively than in other provinces and still meet the same requirements for GHG emissions.

**Mr. Alexander Nuttall:** One of the things that I have consistently heard is that the transition in Ontario away from hydro-electricity projects toward other forms of renewable energy has left us in a position where there is nowhere to go but higher energy costs. That creates an environment where it's much more prohibitive to get the job done.

In terms of access to capital, how do we rank against other jurisdictions? If you're starting a manufacturing business in the States or you're scaling up, how do we rank? Do you think we have a good record to date? Are there improvements that can be made? Are there opportunities we can take advantage of to provide more capital to those firms that are looking to scale up? What's the lay of the land?

**Mr. Michael Burt:** Generally speaking, there's not a shortage of capital. We do have an active and effective small cap equity market in Canada, the Venture Exchange, which is successful compared with what you see in many other countries. Venture capital is less available here than in countries like the U.S., but it's also tied to the mix of products we're making here. We do have an effective crown corp in the BDC.

**Mr. Alexander Nuttall:** Are you supportive of higher thresholds for equity crowdfunding, for peer-to-peer lending, those types of initiatives? Are those things you would see as supporting the free flow of capital within the marketplace?

**Mr. Scott Smith:** The issue with capital in this country is more about risk than it is about the volume of capital that's available. I think you're opening a bit of a can of worms with respect to crowdfunding and the rules on disclosure. That makes things a lot more complicated for small businesses if they are attempting to scale up.

The real issue for most small businesses is at the scale-up stage, where there is a significant requirement for capital for things like proof of concept. Once they get past that, the scale-up becomes much easier.

The Chair: Mr. Masse, you have seven minutes.

• (1615)

Mr. Brian Masse: Thank you, gentlemen, for being here.

Mr. Smith, just so you know, it's a regular occurrence for us to receive documents in just one language, given the shortness of time. So it's not your fault; it's just a process. We always insist on having them in both languages. This is not normal. I want to make it clear that it's not your fault that the document is not being circulated at the moment. We will be getting to that later on.

With respect to 3-D printing, I thought it was interesting that you talked about the process in terms of parts and service, that we could become a leader in that newer technology. When we have newer technology like that coming into play and there's a gap like that, what can Canada do to jump on that opportunity to get into that area, which will be growing industry in terms of servicing.... I think there will be a variety of 3-D printing, because it's still just in its infancy. So I'd like to learn about that.

**Mr. Scott Smith:** If anyone is listening right now, I think the first thing to do is to invest in an extrusion company, because that's going to be something big in the next five to 10 years. If we're going to jump on the technology, we need to tackle it from an intellectual property perspective, as the parts that are generated will be virtual instead of tangible and deliverable. You're going to see a disruptive shift in how those parts are distributed as replacement parts. For instance, if your washing machine needs a new seal or a new bearing, you're going to be able to print those on your own at home. What does that mean for local parts industries? It means that they need to shift their mindset into how they are producing their materials.

Mr. Brian Masse: That's interesting.

Before I get into my second question, I want to thank the Chamber of Commerce for working with me on Bill C-221, the single-event sports betting bill. The elimination of crime and costs from that bill is one thing, but the jobs will also be very important in allowing this product to be chosen by provinces if they want to. It's been interesting to have the Canadian Chamber of Commerce and the Canadian Labour Congress supporting a bill. That's been very important to me.

One of the things I struggle with a little is that we talk a lot about small business and helping them, but we can't forget some of the larger businesses. Some of them now are foreign owned, so it's hard sometimes to justify some type of a subsidy or tax relief. I'm very much more for training, for example, or moving toward some type of environmental stewardship. Those are public policy goals, to support the infusion of some capital from us. But what's the case for us not to forget some of the larger organizations, even if some of them are actually foreign? What's the decision-making for R and D and stuff like that, which can help other businesses? I open that to both of you because I think it's important for us not to forget.

**Mr. Scott Smith:** We live in a global community. There are a multitude of branch plant businesses in Canada. There are also some fairly large businesses in Canada that have branch planted out to the rest of that global community. The decision-making that a large company or global company will make in entering a market or granting a mandate or making an R and D investment is largely about things like: What's the rule of law? Am I likely to be nationalized? What's the state of the currency? What is the skill level of the workforce in that country? Am I going to be close to market? What is the value chain close to where I'm going to be producing?

Those are the key factors that companies are thinking about when they make those decisions, and it's less about taxes and incentives. What does that do for this economy when we have large-scale businesses locating here, delivering a mandate here? In other words, they've decided to assemble new vehicles or assemble airplanes or make pills here. That means a very large investment of capital, and it means an investment in the services and the supply chain immediately surrounding that. Communities like Windsor or Oshawa, where those large plants are, are going to benefit significantly from having that investment there—and not just from that one company, but from all the smaller companies around them, and that's how those start-ups grow.

### Mr. Brian Masse: Mr. Burt.

**Mr. Michael Burt:** If you're talking about the issue of how companies make those decisions, it's an unfortunate truth that in some industries like aerospace and auto parts, they're more prone than others to look for government assistance of one sort or another. Rightly or wrongly, it's part of playing the game if we want to be in those industries. Broadly speaking, you start getting into the realm of picking winners when you're doing that: why are we focusing on this rather than that over there? Generally speaking, the research shows that picking winners is a poor use of government resources. But all of this is to say that I agree that it's a public policy trade-off. When you bring a large plant into a community, it can have very large spin-off effects for the community, so you want to make sure you're maximizing the benefits a community gets if you're getting into that game of helping them with their investments.

# • (1620)

**Mr. Brian Masse:** We're probably only in that game because of poor trade agreements that allow other states to offer incentives, either at the state level, the provincial level, or the federal level outside of Canada, because that's what's happening with the automotive industry.

The Chair: You have 30 seconds.

**Mr. Brian Masse:** With regard to energy and costs through government incentives, Mr. Smith, is it very complicated for companies to access some of the government incentive programs? Do these need to be simplified and still be accountable? Is there a better process so they don't have hire accountants and lawyers to get through the process.

**Mr. Scott Smith:** Anything to streamline the regulatory process or the procurement process is absolutely a good thing.

The Chair: Now we are going to go to Mr. Longfield. You have seven minutes.

**Mr. Lloyd Longfield (Guelph, Lib.):** It is great to see both large organizations here to help us with our manufacturing study. We are just beginning this and, again, we are focusing on manufacturing, so I am going to relate my questions to some of the pillars we are looking at within the budget that is before the House of Commons right now.

The budget is being presented as leading to "a more innovative Canada". How do we create jobs within the middle class, in this case relating to manufacturing? My favourite page of the whole document that is in front of the House is page 110, which gives the pillars of investment: creative and entrepreneurial citizens; science and technology; innovation infrastructure; and supportive business environment for commercialization and growth.

I want to focus on the first pillar, which is "Creative and Entrepreneurial Citizens".

Mr. Smith, you mentioned in your presentation the opportunities for students. We are looking at federal tools to help support internships and youth work experiences, such as apprenticeships, as well as trying to improve the immigration policy. Could you expand on the Chamber of Commerce network's take on how we develop that important asset in the innovation agenda, in terms of developing our workforce?

**Mr. Scott Smith:** There are a couple of things. You mentioned immigration. We had something called the temporary foreign worker program. That had some challenges with it. It wasn't a perfect program, if you could even call it a program. The way the chamber looks at it is this. Why would we turn away the highest and best people, the skilled people we need for specific jobs?

For instance, if you have a proposal from a company for billions of dollars of investment coming in to support a specific industry, on the condition that they can bring the people they need to do those jobs, why would you say no? If the individuals are not available here in this country, why would you say no to that? It is important to make sure that you have the right people with the right skills. My boss uses this example: If the best goalie in the world is from Sweden, and he is going to go play for the Leafs, would you say no?

**Mr. Lloyd Longfield:** Thank you. I am going to get to Mr. Burt in two seconds. I just want to extend that a bit, in terms of the chamber.

As you know, I have been a member of the chamber network for many years, and I know that this issue has been on the agenda, in terms of literacy, numeracy, and digital skills that are limiting our productivity. How do we, as a federal government, help to build the literacy, numeracy, and digital skills? Just for our report, we need to try to gather information.

#### • (1625)

**Mr. Scott Smith:** There are a couple of things. You asked how do we bring industry and the education system closer together? I think part of the answer is to start young and make sure those skills are taught at the entry levels, in elementary school.

In terms of digital literacy, if you follow the example of Germany, Switzerland, and Israel and the apprentice programs that exist there.... I am not sure they call these apprentice programs, but they are essentially such programs, where people are integrated into the workplace directly while they are still in school.

Mr. Lloyd Longfield: Great, thank you.

Mr. Burt, the Conference Board of Canada has looked at productivity and the productivity gap that is growing in Canada. I think we have slid from 15th to 22nd now, and it is not improving. What investments in productivity do you see? Complementing what we are talking about, developing skills, but also.... We have heard that there is a lot of cash in Canadian businesses that isn't being invested in equipment. Has the Conference Board of Canada looked at that?

**Mr. Michael Burt:** There is no doubt that we could invest more. For example, if you look at the rate of investment in information and communication technology relative to sales for Canadian businesses, it is almost half of what we see with our neighbours to the south. We are not making full use even of the technologies that are available out there right now, so that is a key thing.

Broadly speaking, I don't know how we incent businesses.... Oh, you asked about cash. That was the other thing I was going to talk about.

Right now, cash levels are elevated in businesses, compared to what we would have seen prior to the financial crisis. It is not clear how much of that is due to concerns about access to cash, because there were shortages of that prior to the financial crisis.

**Mr. Lloyd Longfield:** Quite possibly some programs to help free that cash into the economy to create the middle-class jobs that they're trying to create....

**Mr. Michael Burt:** At least assurances around businesses that they will have access to cash when they need it if another financial crisis comes....

**Mr. Lloyd Longfield:** In our budget and in terms of our strategy going forward, there are six sectors that we've been focusing on investing in. We're looking at clean technology, health care, advanced manufacturing, digital technology, resource management, and agrifood. You mentioned agrifood a couple of times in your presentation, and also advanced manufacturing, automotive, aerospace. You've mentioned plastics.

We're trying to peel-in on a manufacturing strategy. In Guelph, we see that 26% of our workforce is in advanced manufacturing, and about another 20% of our workforce is in food and agrifood. We see those as two key areas that we need to develop, but our employers are having trouble getting access to talent. They're growth restrained

The Chair: You have 30 seconds.

Mr. Lloyd Longfield: Can you help us, either one of you guys?

**Mr. Scott Smith:** I'll just reiterate what I said about immigration and the express entry idea where you can bring in the people who you need, and it's not just on the technical side. I think we need to look at the sales and marketing side as well.

We need the talent to be able to grow our companies, and if it doesn't exist here, we need to be able to look for that and bring it here.

Mr. Lloyd Longfield: Perfect. Thank you very much.

The Chair: We will jump over to Mr. Lobb. You have five minutes.

**Mr. Ben Lobb (Huron—Bruce, CPC):** I agree with a lot of what you have to say.

The real question on the actual manufacturing.... If you look at, say, the large auto manufacturers, or even the assemblers, the labour agreements that they have struck with Unifor, or any other union, I think that at this point in time they've both done as well as they're going to do. In my discussions with Ford and GM, electricity is said to be one of the big hindrances moving forward with any growth in capacity, specifically in Ontario.

Really, what can manufacturers do? I used to work for a foundry, and that's all electricity, and I guess raw input. Steel mills in Hamilton would have the same experience with high electricity costs.

What way around that is there?

• (1630)

**Mr. Michael Burt:** We've talked about the cost of electricity. It's definitely a problem. There are really two things you can deal with if you're not happy with the price you're paying for electricity.

One, try to find ways to improve your efficiency. There are many examples of businesses that, actually, when they sat down and tried to audit how they're spending, where their electricity is being used, they can find ways to cut back significantly.

The other thing that we've seen a lot of manufacturers do is move increasingly towards co-generation, where they basically generate their own electricity, maybe even more than they need, and are selling it back to the grid. So that's another way that manufacturers can try to address it.

Broadly speaking, it's not just true of electricity. I've seen many manufacturers, if they're having a problem with a supplier, move down the supply chain and actually get into that business themselves.

**Mr. Ben Lobb:** On co-generation, obviously the only people who are going to look at co-generation are the ones who have already invested the tens or hundreds of millions of dollars in plant equipment in the country. No new business is going to set up shop and say, "Oh, by the way, you have to do co-generation." That's probably not in the—

**Mr. Michael Burt:** It's a reality in the forestry industry right now. If you want to build a saw mill in Canada, you pretty much have to build a co-generation plant.

**Mr. Ben Lobb:** Well, okay, but I was thinking more on the manufacturing side than the saw mill.

Mr. Michael Burt: Well, that is a manufacturing side.

**Mr. Ben Lobb:** On the temporary foreign worker side of things, from both of your outlooks, is it a short-term solution? I understand the highly-skilled people, the C-level executives, who have to come in and conduct themselves in this country. No one around this table is going to question that. But, say, for example, it's the person who's working in a turkey sausage processing plant or in a large-scale processing plant in this country. In your opinion, are temporary foreign workers a long-term solution or a short-term solution?

**Mr. Michael Burt:** Most of the businesses I've spoken to about temporary foreign workers would be happy to find ways to transition them to permanent status. They are happy with these people; they want them there. The problem often is that the programs that are in place to move those people from temporary to permanent status are not well adapted to their needs.

A lot of our permanent immigration programs are aimed at people with university degrees, high-skilled workers, and many of the temporary foreign workers we're bringing in are not necessarily in that category. If they could transition them into permanent status, I think many employers would.

**Mr. Ben Lobb:** The unemployment rate is 7% across the country. There are many workers who have given up hope altogether. There are people who are on social assistance of one form or another, who would simply love to have the chance to tune up their skills a bit, to improve themselves a bit, to give themselves a shot to get their foot in the door. Is this something that the government should look at through the EI program, to bring some of these people up—instead of handouts, give them a hand up, retrain them, and get them back into the workforce?

I get your point about bringing in temporary foreign workers, but when we have people at home wanting a chance, shouldn't we take a look at them first?

# Mr. Michael Burt: Certainly.

The Chair: You have 30 seconds.

**Mr. Michael Burt:** I talked earlier about the decline in manufacturing employment in general. There are a lot of people whose skills may be out of date. If we want to make full use of our workforce—and many employers talk about not being able to find people—we need to find ways to retrain them. I talked about that in my opening comments, that we need to make sure that we have the right skills with our workforce. There is a need for certain skills among employers. How do we get that alignment with the people we have? That's definitely something in which there's a role for government.

The Chair: Mr. Baylis, you have five minutes.

Mr. Frank Baylis (Pierrefonds—Dollard, Lib.): I have a quick question first of all.

If I were to ask you, Scott, about your large companies and your small companies, what would be the number one thing we could do for a large company, and what would be the number one thing a small company would ask us for?

**Mr. Scott Smith:** For a small company, it's probably assistance in getting into a global value chain. If they're not there already, that's going to be their ticket to scaling up. That's how they're going to get

Mr. Frank Baylis: Into the global value chain, okay.

**Mr. Scott Smith:** For large companies, I'm not sure I can give you one thing because it really depends on what the sector is.

• (1635)

**Mr. Frank Baylis:** The large company would be more sector specific. If I'm a Bombardier, I need something totally different from a BlackBerry or whatever. It would be very specific, because I don't need all the basics to get me into a value chain or anything.

**Mr. Scott Smith:** That's right. For Bombardier, if you're going to use that example, the current situation in the global market for aerospace products is such that other jurisdictions are throwing money at their local—

**Mr. Frank Baylis:** Can we say other jurisdictions are supporting their industry?

Mr. Scott Smith: Yes, we could say that.

Mr. Frank Baylis: We'll say it that way. Fair enough.

I'll ask the same question of you, Michael, but not from the point of view of coming from a company making a request. What would the Conference Board say they would need? It may be the same answer or it may be something different, but what would the Conference Board say that a small company needs, and what would it say a large company needs?

**Mr. Michael Burt:** I don't know if I'd have an answer for small versus large companies. I agree wholeheartedly on the global value chains. It's a key way for us to make up deficiencies that we might have in our own management skills, our own skill sets, and those sorts of things.

The other thing I would say is that we need more effective partnership between our education community and our business community in terms of both the research side but also the skills side. We were talking about the labour issues. One of the key problem for any young Canadians coming out of school is that school-to-work transition, and how you get them more effectively into the workforce.

**Mr. Frank Baylis:** That ties in a bit with what Mr. Lobb was saying, too. In fact, he's looking at it as a tune-up of skills, but if we're going to call a spade a spade, we're not going to be able to take someone who's going to give us access to global markets and just take someone who's in one industry and give him a little tune-up and suddenly he's going to have that skill set. That kind of dovetails into the need to be able to bring in that expertise if it doesn't exist, because it's not something that can just be.... Am I correct in saying that?

**Mr. Scott Smith:** Yes, I'd say that you're absolutely correct. One of the things we often forget is that business-to-business sales is very personal. The reality of entering those global value chains is the ability to travel and get to the companies that are around the world, and to figure out how you're going to work with them. The idea of making a sale over the phone doesn't exist. You need to make those personal connections, and that's expensive.

Mr. Frank Baylis: Mr. Burt, would you agree with that?

# Mr. Michael Burt: Yes.

**Mr. Frank Baylis:** Then you brought up a separate point, which is the link between universities and industry. There are two parts to that. It is the ability to educate people, which takes time. Again, coming back to gaps, it's not something where we can take someone in for six months, tune him up, and put him back out there. We need to be aligned in that sense.

You also mentioned that we need to be supported more. Do you see issues with transfers of information technologies out of universities to industry? Is that a gap that you see?

**Mr. Michael Burt:** At the Conference Board, we often talk about the commercialization problem. We do really good primary research, but it doesn't often turn into business practices or business products. That's again part of what I alluded to in my initial comments. We probably work too hard at, "Here is a bright idea. What do we do with it?" It's more around getting businesses involved very early on and saying, "I'm a business, and this is my list of problems. How can you potentially help me?" and get our research activities around dealing with kind of real world problems. I think we'd be much more effective at commercializing our ideas if we did that.

**Mr. Frank Baylis:** So, in a summary or overall view, somehow we need to have better links between the universities and industry so that we're developing skill sets that are needed and we're also helping bring some of that technology out. You're saying that interface is not strong enough.

Mr. Michael Burt: Yes, I would definitely say that. Yes.

The Chair: You have 30 seconds.

**Mr. Scott Smith:** I would say that the challenge is the dichotomy between intellectual curiosity and market demand, and that we still need to make sure that we are satisfying intellectual curiosity. There are hundreds of brilliant things that have come out of our university structures, but when a business is being asked to support a research project that is not answering their immediate needs, the reluctance to spend money on that research project is quite large, so we need to think down both channels and make sure that the programs that we have designed that are supporting our post-secondary institutions do both things.

The Chair: We're moving on to Mr. Dreeshen for five minutes.

**Mr. Earl Dreeshen:** I know that Mr. Masse talked earlier about some of the great work that had been done by the Chamber of Commerce. Of course, I agree as well, coming from Red Deer, that the support the Canadian Chamber of Commerce gave western Canadian farmers for the elimination of the Canadian Wheat Board monopoly was certainly important. It gives us an opportunity to take advantage of the trade deals that are so important to agriculture and manufacturing. We're seeing all of that happening right now, and people are anxious to see where that's going to go. We do have the new Canadian Wheat Board as another competitor within the marketplace, so that has worked well.

Of course, when we're dealing with trade, it's so important to make sure that we have our industry ready for when the time comes. I remember that in 2014 I had an opportunity to be at a trade mission in London where we had taken a number of businesses and manufacturers, many of them food manufacturers. We sat down with distributors going into the European Union to look at what the needs were and how they should be thinking in order to prepare for the actual requirements they have. I think that's an important issue that our industries are going to have to look at in the future as we go into the Asian countries in our trans-Pacific partnership. These are critical issues, and I think they are perhaps things that the industry is looking at. I'll start by asking this question. Do you have that type of engagement within the organizations? Are you looking forward to ways in which you can help industry and manufacturing in order to be geared up when the time comes for these trade deals to actually take effect?

• (1640)

**Mr. Scott Smith:** As a matter of fact, the Chamber of Commerce network has been vocally supportive of all of the trade deals that have been floated over the course of the last few years, particularly CETA and the TPP, recognizing that there will be some challenges for certain industries. For instance, in the auto sector there are a few things in the trans-Pacific partnership that may hinder our local production with the differences in transition between Canada and the U.S. That said, regarding the overall benefits of an agreement like TPP for the rest of Canadian industry, we need to make sure that is satisfied. Being outside of an agreement with 17 countries is not going to benefit Canadian business.

**Mr. Michael Burt:** I would say that we're generally supportive of the free trade agreements that we've been party to in recent years. We have been actively working with our members through our networks, those sorts of things, to try to educate business leaders about the opportunities. We view these trade agreements as opportunities; they are a way for Canadian businesses to get better access into these markets.

**Mr. Earl Dreeshen:** Certainly, it ties into what you were talking about before, which is actually knowing your customer and recognizing that you have to build for the customer, and not just for things that seem to work well for you when you're cranking out materials.

Another thing that I believe you mentioned was access to cash in case we have another global meltdown. I think most people recognize that what happened in 2008 and 2009 was a different type of recession and that we had different type of stimulus that was asked for and planned throughout the world. Canada did its part in two ways, first of all by putting dollars back into the pockets of Canadians by reducing taxation—that nearly took the 2% GDP investment by itself—but also by putting out dollars via shovel-ready projects, which was the other component, in order to make sure that balance had taken place.

We see now, as you just mentioned, that it's not the case in 2016 that banks are twisted around in a knot such that there's no credit available. We're in a situation where there are dollars, and they just want to make sure that they're going into things that are going to be productive and where there's less risk.

Again, one of the issues we have.... In so many ways, we have amazing start-up, as you've mentioned. Our marginal effective tax rate on new manufacturing investment in Canada is 9.1%. The OECD average is 19.6%. Take a look at the United States, where it's 31.7%. We have done a good job in that regard to help small industries and businesses get started, but it seems as though once you get to a certain size, we're prepared to let that to go until somebody else buys us out. That seems to be as far as we want to be. It's as though we're satisfied. Four million dollars might be a good number. We should be able to look after ourselves if we have that much, instead of \$17 billion or wherever you might be able to take things. I'm just wondering about it. Is there a way? You talked about the ways in which people have to get the—

• (1645)

The Chair: You're going to have to get a question in there.

**Mr. Earl Dreeshen:** —full entrepreneurship into that. How can we encourage that?

The Chair: Be very brief.

**Mr. Scott Smith:** I think we both talked about this a bit in our presentations. It's the idea that we need to remove some of the disincentives to growth. For instance, there are ideas around tax structures that might work for both small and large businesses. An innovation box is an example, or flow-through shares, where you've taken the risks or the challenges away from those small businesses and allowed them to grow to get to a specific point where they can scale up and be competitive.

The Chair: Mr. Jowhari, you have five minutes.

**Mr. Majid Jowhari (Richmond Hill, Lib.):** Thank you, Mr. Smith and Mr. Burt, for joining us today. I want to end this round of the discussion by focusing on international trade.

I had the opportunity to get access to the report that your organization, Mr. Smith, put out in April of 2016. I strongly recommend that we get a copy to the clerk's office and have it distributed, because regulatory barriers were identified as the biggest threat to our international trade.

I have two questions. One, can you talk briefly about what those barriers are and what the recommendations are? Two, what we can do to help small businesses connect to the global value chain that you're specifically talking about?

Mr. Burt, could you also shed some light on that?

**Mr. Scott Smith:** I'll start by saying that as far as the committee's access to this report goes, it's available on our website in both English and French. It's easily accessible. The links are there.

The challenges for business around regulatory harmonization can be a multitude of things. Primarily, it's around things like labelling requirements, where they're different in each province. That is a challenge for a number of businesses.

You're testing me here, because this is not my report. I did read it, but before it actually came out. I haven't really looked at the recommendations recently.

I know that there are challenges for businesses, both in importing into Canada and in exporting out of Canada. As I say, there can be a number of them. Some of them are around environmental regulations that are different here than they are in the U.S. or in Europe. There are also some growing challenges with the delivery of goods and services with respect to things such as privacy legislation, which is changing around the world.

**Mr. Majid Jowhari:** What can we do as a government to be able to help the small businesses, especially advanced manufacturing and SMEs, to be able to get connected to the global value chain?

**Mr. Scott Smith:** In terms of regulatory harmonization, a good example would be how the automotive sector has been able to harmonize regulations for vehicle sales across North America,

whereas 25 years ago the emissions regulations and standards were different. It's about solving some of those problems across the board.

# Mr. Majid Jowhari: Mr. Burt.

**Mr. Michael Burt:** In terms of getting access to global value chains, I'm not sure if there's an easy answer to that.

We've done some work with the aerospace industry. One of the key things that the smaller suppliers in that industry talk about is a lack of integrators, the companies that are the subcontractors. For the contractors, they build all of the different pieces that go into making one particular aircraft. How do we develop domestic expertise, to use that example, around integrators as part of it?

From the businesses I've personally spoken with, when they do go international, they speak loudly and proudly about the success of the trade commissioners. Can we find ways to make better use of that program to help our companies get access to global value chains for markets in Canada? Can we better connect our Canadian suppliers with the large multinationals that we target?

Okay, we're good at making this, and we want to sell to so-and-so, or we want to be part of so-and-so's value chain, so how do we develop that relationship?

## • (1650)

**Mr. Majid Jowhari:** How do you think the trade commissioner service is doing?

Go ahead, Mr. Smith.

**Mr. Scott Smith:** I wanted to add to that point. You asked the question I was looking to answer.

From the discussions I've had with some of the trade commissioners, a lot of small companies are not ready to enter markets. They haven't done their due diligence in terms of their product, knowing their market, and knowing their customer. A lot of that education needs to happen before they get to the trade commissioner service to help them enter a new market.

There needs to be an interim stage to educate those companies on where they should be entering, when they should be entering, and what their product needs to look like. They're not ready for it yet.

**Mr. Majid Jowhari:** Where do you think that's going to come from?

Interestingly, you talked about the key elements or pillars: skilled executives, internationally oriented executives, and international network market knowledge. Those were mainly focused on the executives of the SMEs, or the companies that they want to grow and want to go international.

Where is that service going to be provided to be able to help them?

The Chair: You have about 10 seconds.

**Mr. Michael Burt:** You hit the nail on the head. A key part of our being successful internationally is having the right management skills and right entrepreneurial skills.

Where do they get that from? Often it's not from traditional sources. They've travelled, or they've worked overseas, and those sorts of things.

**Mr. Majid Jowhari:** They may not all have it. We need a body that would be able to help.

The Chair: Monsieur Boulerice, for two minutes.

[Translation]

Mr. Alexandre Boulerice (Rosemont—La Petite-Patrie, NDP): Thank you, Mr. Chair.

I'd like to thank the witnesses for being with us today. I'll try to keep it brief.

We talked a lot about manufacturing jobs and productivity gains. A Quebec research institute by the name of Institut de recherche et d'informations socio-économiques recently did a study. And it showed that productivity as measured by GDP per hour of work had gone up 32% in Quebec between 1981 and 2010. Keep in mind, here, that we are talking about Quebec.

During that same period, however, worker incomes rose by only 15%. Had the increase in incomes been commensurate with the increase in productivity, every worker in Quebec would have earned about \$6,000 more.

Do you think it's problematic that higher productivity does not go hand in hand with proportionally higher incomes for the men and women creating the country's wealth?

[English]

**Mr. Scott Smith:** Unfortunately, I have not seen the study you're referring to.

The only thing I would say that in being able compete globally, Canada has difficulty competing on labour rates and energy rates. Anything that can reduce those costs, which means increasing productivity, only allows those companies to continue to do business. If the idea is that you're going to have a match between productivity rates and increasing labour rates, you may be pressing yourself out of the business by doing that.

Is it fair? Perhaps not, but at the end of the day, they still have a job.

**Mr. Michael Burt:** I haven't seen that study either, but in the long term you would expect to see a link between productivity growth and wages, in the sense that wages, their share of all income, should be relatively constant over time. That's been somewhat less true in recent years.

I would also emphasize that Canada's not had the same income inequality problems that we've seen in other developed countries in recent years; Canada's done quite well in that regard. Maybe workers aren't getting quite as much as they should, but we are still doing well compared to our peers.

The Chair: We're going to go to round two and rejig some of the numbers so it's fair for everybody. We're going to do a first round of five minutes.

Mr. Longfield, you have five minutes.

• (1655)

**Mr. Lloyd Longfield:** It's great to be able to continue the conversation.

I'm going to stay on the theme of our creative and entrepreneurial citizens and how to get the skills that we need in the workforce. A few years ago, the Canadian Chamber ranked that as the number one issue facing Canadian business, that a barrier to growth was access to labour. The retirement wave was mentioned at the time as a major threat to business. We're probably well into that threat by now.

How good is our information on the labour market? Is there anything the government can do to improve the labour market information, to be more specific for kids looking for careers?

**Mr. Scott Smith:** You are alluding to one of the points I made in my opening statement. There's definitely a challenge with an aging workforce in this country. I'll put a placeholder here on the ranking of skills. Many of you have probably seen that we don't rank our top 10 products in any particular order. That said, it has been in the top 10 since its inception four years ago. Access to a skilled workforce continues to remain a problem.

In terms of your point about how we deal with labour market information, there is definitely a role for government in the collection and distribution of those statistics We need to find ways to generate that labour market information, first of all. On a very localized basis there's a connection—the manufacturing GPS initiative or something like that type of program. From a mapping perspective, the businesses available, the skill sets they need, versus who's in that area, is an important thing to do.

**Mr. Lloyd Longfield:** Do the Chamber's networks have any information that you can provide for our study on what might be done in the Canadian workforce? There's a report I haven't been able to find online that the Canadian Chamber published in May 2015, "How good is Canada's labour market information?" The library at the House of Commons indicated that it was available. The other report is on Canada's "Top 10 Barriers to Competitiveness", 2016. It is online, but for the purposes of our study, I'd like to make sure that we have access to that so we can include it in the study.

Mr. Burt, the productivity of Canadian businesses has been sliding. There's a myth out there that there are no jobs left in manufacturing. We've lost so many jobs. You commented that the dollars out the door are about the same as they were pre-recession or that we had recovered in terms of volumes. It would seem to me that there are still good jobs in manufacturing. I'd like to include a statement on that if you have something to say about it.

**Mr. Michael Burt:** I don't have the exact number in front of me. I think it's 1.7 million people who work in manufacturing in Canada. It's not a small number.

We have seen a decline in employment, but what's happening also is that the job mix, what we do, is changing. We are seeing, as I said, more things like technologists and technicians. You look at industries like textiles and apparel in Canada, and it's much smaller today than it was, say, 15 years ago. What's left here is very high value. It's marketing and design and those sorts of things. So there are definitely still good jobs in manufacturing, but the type of work that we're doing is changing. **Mr. Lloyd Longfield:** My career was in machine automation, and I know there's always a shortage of technicians, technologists, and engineers in support of that part of the industry. I just wanted to try to bookmark that and make sure that we catch it.

Industry-academic collaborations, either one, if we've got-

The Chair: You have 30 seconds.

**Mr. Lloyd Longfield:** Could you talk about how that could maybe stimulate both jobs and technology.

**Mr. Michael Burt:** We talked a little about this a couple of times earlier. I don't know if I have a silver bullet for you. I do believe we can do a better job of preparing young Canadians for the workforce. It's a key problem really getting them into their first job, and we aren't necessarily training the right mix of people. We're doing too much of one thing and not enough of another. In terms of the research side of it, I really do think it's that pull versus push analogy I gave, where you're going to businesses and saying, what can we help you do?

Mr. Lloyd Longfield: Solving problems. Thank you.

• (1700)

The Chair: Mr. Lobb, you have five minutes.

**Mr. Ben Lobb:** I want to go back and talk about small to mediumsized companies—call it the high-tech industry—specifically around SR and ED and reports on that, and so forth. Is there any way we can simplify the reporting? To one of the groups that we had in last week, I asked a question about simplification. Of course, it's government money and you have to account for all of this, but my guess is that most small and medium-sized companies with smallish finance departments have to hire companies like Deloitte and KPMG to fill out their SR and ED reports to be audited. Does that really make sense? It seems ridiculous to me that this is the situation in the country right now.

**Mr. Scott Smith:** There's a lot of back and forth within the chamber community about the value of SR and ED, and whether that's the appropriate tool for research and development funding. I'm going to leave that part of it alone, and just speak to the criteria and the application of the criteria.

The feedback that I have from most businesses is that they've moved away from using SR and ED credits, because there is no guarantee they will actually be able to realize the credits that they're applying for, because it's applied differently by CRA depending on which agent is reviewing their material.

It's less a question of about how complicated it is and more a question of about we can't rely on it.

Mr. Ben Lobb: Okay. I think that's a pretty fair analysis.

It's been many years since a large new auto assembler has put a greenfield plant in this country. We really have no Canadian fund to be able to match what would be offered by Mexico or the United States. Is this something that Canada should look at doing, to establish a greenfield auto assembler in this country?

**Mr. Scott Smith:** That's a really tough question to answer. We have excess capacity right now within our current plants, so the idea of creating a fund to build a new plant—

**Mr. Ben Lobb:** To be honest, though, Volkswagen and Hyundai aren't going to build their cars in a General Motors plant. We know that, so that's more my point.

**Mr. Scott Smith:** That's a fair assessment, although my understanding is that there is some crossover between certain companies, depending on what they're looking for. I can't say that a Volkswagen is going to be built in a GM plant, for instance, but I know there is some crossover in terms of capacity.

**Mr. Ben Lobb:** So I take it that you're leaning towards a no, and I'm not saying that you're right or you're wrong but that you're leaning towards no.

Does it make sense then for Canadians, and Canadians wanting well-paying jobs, to sit back idly and watch the U.S. and Mexico consistently get these huge employers? We know that the economic spinoffs are five to one or six to one, whatever it is. Does that make sense? The small business people get the benefit down the chain.

Mr. Scott Smith: Yes, you certainly have a point.

**Mr. Ben Lobb:** The other question I have is on our good friend China and currency manipulation, on and on and on. One of the former companies I worked for competed with them on auto parts manufacturing. Obviously, their currency manipulation, their low labour rates, and on and on, played a part.

What are we going to do? We want trade, we want free trade, but oftentimes it's not even close to fair trade. What do we do with countries like China that we're competing with, that we're making investments with, yet there's still currency manipulation going on many years after the fact?

Mr. Scott Smith: I would say two things in answer to that question.

First is around the trans-Pacific partnership. The fact that China is not a partner in that trade agreement gives us, if it's ratified, some leverage with China, with a larger number of trading partners.

Second is that we really do need a strategy on China, and I think that's going to be one of the reports coming out from the Chamber of Commerce over the next couple of months.

• (1705)

**Mr. Ben Lobb:** Okay, and not to critique anybody's degree at all, but I think to some degree in some fields of education we've reached what you would maybe call "peak degrees" in certain fields. I won't list them, but we can all think of a few we may have reached peak degrees in.

At our university and college levels, do we need to start to decrease the number of openings that are available and increase openings in other areas, to encourage kids to get into technology, to consider getting degrees where there's actually a job, instead of some of these other ones? Is that something we need to do, to start directing the kids into some of these areas now?

The Chair: Very quickly, please.

Yes, and I've said this to somebody earlier, I think we have a misalignment between where our education resources are being devoted and maybe where we have the skills needed. It's probably a worthwhile exercise to try to assess whether or not we should devote more resources to X, or whatever it is.

The Chair: Monsieur Boulerice, for five minutes.

[Translation]

Mr. Alexandre Boulerice: Thank you, Mr. Chair.

I'd like to stay on the same topic I brought up earlier.

In this era of globalization, when every country is trying to come out ahead, play certain cards, and promote certain assets, it's clear to everyone that declining, or very low, wages are not necessarily an issue Canada has put much energy into. Some Asian countries will keep coming out on top of us on that front.

In order to increase exports and be competitive in the international arena, what strengths do you think Canada should leverage to achieve comparably favourable benefits in terms of creating and keeping jobs here, in Canada?

#### [English]

**Mr. Scott Smith:** I think we have a number of strengths in this country. Although we've talked about the lack of skills here, we also have a very strong skill set here. We also have something that a lot of other jurisdictions don't have, and that is certification. Certification allows a lot more flexibility in terms of advanced manufacturing and the ability of our people to be able to deal with complexity. Those are the sorts of things we should be promoting when we're looking to attract investment here.

In terms of our educated workforce, we can look to build STEM skills. That said, it's largely about productivity, investment in new technology, the ability to compete on things that are not labour or wage related, not input related. If we have the ability to improve our engineering, our marketing, our senior management, our branding, and our sales skills, those are the parts of the manufacturing continuum that we probably have not paid enough attention to and could capitalize on.

**Mr. Michael Burt:** I guess my comment on that would be, and I'm as guilty of this as anybody, we all have a competitive advantage. We're talking about manufacturing as a sector, but it's about individual businesses, right? Competitive advantage is built at the business level. The report I mentioned earlier—that I shared with the clerk, and hopefully you can get access to it—was basically talking how Canadian businesses build global competitive advantage. It can be happening in many different ways. It can come from your supply chains. It can come from the skill set you have. How each individual business does it is different. I think we have many Canadian companies that are successful on the global stage. The issue is about trying to understand the ingredients that lead to their building that competitive advantage, and how we can help more companies grow that competitive advantage.

## [Translation]

**Mr. Alexandre Boulerice:** In recent years, we've seen the number of temporary migrant workers skyrocket. They come here to work for six months or a year, sometimes a bit more.

A moment ago, we were talking about students and young people. It sometimes seems as though, had there been a better structure in place, people from here could have been trained in advance in order to put Canadians to work, first and foremost, in sectors with labour shortages. Instead, we seem to be taking the easy way out. Indeed, rather than investing, employers bring workers in from outside the country. They work for however long is needed and are then sent back to their countries.

How can we make use of the temporary foreign worker program in a way that fosters a better structure for training Canadians?

• (1710)

### [English]

**Mr. Scott Smith:** I think we could start with better labour market information. Some of the challenges you've referred include: do we know who's out there, and have we connected the right people to the right jobs? In a lot of cases we haven't.

The other side of it is that it's important to be fast to market. If you're going to be competitive, you have to be the first there. If it's a challenge to bring in a person locally who is capable of doing a specific job and easy to bring in somebody else in, you're probably still better off to bring somebody else in.

Mr. Michael Burt: My comment on that would be that I just finished doing a very—

I'm sorry, are we out of time?

The Chair: Yes.

Mr. Michael Burt: Okay. That's fine.

The Chair: I tried.

Mr. Baylis, you have five minutes.

**Mr. Frank Baylis:** I'd like to swing back and talk a bit...we talked about large and small companies, and focused on the 90% that are the small and medium-sized companies. Prior to being a politician, up until six months ago, I ran my own business making and developing medical devices. One thing that happened was that we got access to a very good medical lab in the University of Toronto network. That had a huge impact on us, because we could then do a lot more studies. As opposed to having to fly down somewhere in the United States, we could do it in Toronto, where we had a plant, and I could have five, six, or seven engineers come in. If something got cancelled, we'd come back the next day. It had a huge impact. I call this access to equipment. Obviously, if you're a large company, you don't have those constraints, because you can build your own labs.

**Mr. Scott Smith:** I think that goes back to what was announced in budget 2016 and the idea of developing infrastructure around a postsecondary institution. I think that's great. It's the opportunity to access labs to be able to do the kinds of things you need to do, and the testing you need, to be able to develop a product. That would be prohibitively expensive if you tried to do it on your own. It's much more efficient if you're building those communities of collaboration. I think that's a great idea.

**Mr. Michael Burt:** I think it's a great idea too, in the sense that, if you look at successful partnerships between post-secondary institutions and businesses, they take take time to build. It's a long process, but that's a key way of doing it. if you can get businesses more directly involved with post-secondary institutions in solving their day-to-day problems and can build that confidence that they are able to help them with, then that's great. I think you have long-term payoffs associated with that.

**Mr. Frank Baylis:** You would agree then that the work that we might do or propose as a committee on how to help these small and medium-sized companies access these infrastructures—which may or may not exist, whether at the NRC, universities, or whatever—at a reasonable cost could have a positive impact?

Mr. Michael Burt: I would think so, yes.

**Mr. Scott Smith:** The only thing I would add is to make sure that when developing the plans for these infrastructure investments, you are building in the flexibility to meet the needs of a broad cross-section of needs and wants.

**Mr. Frank Baylis:** I'll switch over to talk a little about innovation and IP. You mentioned that for innovation you have to own the IP, and then once you own it, you have to actually make something with it, or else you're just owning IP.

This relates to a concern that we have on two fronts: dissemination, and whether you're seeing enough of that coming out of universities; and also, I think you mentioned, Mr. Burt, priority patenting in the U.S.A. first. Do you see this as a problem or an issue?

**Mr. Scott Smith:** I'll start with the number of patents sitting on a shelf in post-secondary institutions. That's a challenge, and it's recognized pretty well, even within post-secondary institutions themselves. They recognize that there's huge value in the patents that exist there; so technology transfer, yes, is a challenge. There are probably things out there that could easily be commercialized if they were just readily available in terms that a company could access.

A patent filing is not necessarily enough to make a decision on whether or not you have a valid potential product or not. You certainly need more information than that. Often patent filings are a little limited. So the relationship between the patent filing and what the journal entries or the citations are, or how that product might be used, or the projections, is important as well.

I think that maybe an arrangement between government and postsecondary institutions—and industry, for that matter—to create some sort of index where these could be accessed easily would do a lot for technology transfer.

### • (1715)

**Mr. Michael Burt:** I think I said this earlier: it really boils down to commercialization.

You're right. We do have patents; we do have raw research. As we move away from the researchers towards actually turning it into a product, we generally fall down as a country. As my president would say, we have a good engine, but not necessarily a good transmission to turn that into drive.

What is the cause of that? It's really hard to put a finger on it. Is it because our businesses are not looking at these opportunities that are available and figuring out how to commercialize them? Is it because our researchers are content with the research element, and not wanting to take it, commercialize it, and turn it into a revenuegenerating product? It's very hard to say.

Usually when you talk about the innovation process in Canada, the key weaknesses are with taking ideas and turning them into processes and products.

The Chair: We're keeping it tight. Mr. Dreeshen, you have three minutes.

**Mr. Earl Dreeshen:** Of course, the analogy of the engine and the drive is important. Sometimes government acts as a burnt clutch in the middle, so that can cause some issues.

I know you were talking about determining the effectiveness of different research programs. You spoke of the accelerator issue, you spoke of the SR and ED program and IRAP. I think it's critical that look at that and make sure that those dollars are being spent wisely. There was \$1.5 billion put into the Canada first research excellence fund to support research commercialization, which becomes one of those areas where you want to make sure that you're seeing some results from, because a lot of dollars were put into that.

I wonder if you could talk about some of the initiatives that came from that fund that helped companies to be do research commercialization.

**Mr. Scott Smith:** I think the jury's still out on the Canada first research excellence fund. Much of the funding, again, is focused on academic research as opposed to commercialization. It's going through the same granting agencies that are disseminating funds. All I can say is that the feedback that I've had from some companies that are trying to access some of the research dollars, or partnering, or helping to fund some of these studies is that they could be interesting, but aren't necessarily solving the problems these companies need help with in the short term.

**Mr. Earl Dreeshen:** Is that the issue, then, between the applied funding...and perhaps more of it should be going into applied?

I have two colleges in my riding, Red Deer College and Olds College. The partnerships they have with the community and taking applied funding...that's where the cohesiveness is. I'm just wondering if that's something we should be emulating. **Mr. Scott Smith:** I certainly hear that from the applied research institutions. A lot of good could come from relationships between universities and applied research facilities in demonstrating what they can actually do with these products.

• (1720)

The Chair: We're going to jump to Mr. Arya.

**Mr. Chandra Arya:** Mr. Burt, you spoke about Germany and Israel. Is there any case study that we can look at to see what we can learn from them?

**Mr. Michael Burt:** I can follow up with you on that. One of my colleagues was recently writing about the BIRD program in Israel. They identified that a key weakness of smaller Israeli firms was that they didn't have sufficient market access or marketing skills. The program suggested that they partner with an American company to complement their skill sets. This was part of getting the funding associated with the program. They were able to leverage their skill sets to become part of their global value chains. Of course, there are trade-offs. Obviously, if you're part of the global value chain, you're not necessarily capturing all the value associated with your product. Still, it was a good way to start developing some key strengths.

**Mr. Chandra Arya:** A lot of good points have come from both of you, which is great. Thanks a lot.

For me there are three things. Number one is soft skills for executives and entrepreneurs, which they need to improve to get to know their international market and to position their product. They should also have the skill set to grow from small regional companies to large international companies. Number two is talent. We need skilled labourers, like CNC operators. We need a movement from social sciences to STEM, and maybe some apprenticeships. Number three, there is a growing manufacturing segment in pharma, food, robotics, etc.

Is there anything you can add to this?

**Mr. Scott Smith:** The only thing I might add is that we need to expand our horizons of what manufacturing actually is. This came up a couple of times in agrifood. We don't traditionally think of that as manufacturing. We had a pretty large place in ICT for a long time. How do we translate that into something new when some of those industries are in a bit of decline right now? I think those are points that we should probably capture.

**Mr. Michael Burt:** My one comment in response to that, like my last comment in my opening statement, would be not to forget services. A key part of being globally successful as a manufacturing firm is knowing that you're not just selling a product, but all of the services that go with it, maintaining it, and all of these other sorts of things.

**Mr. Chandra Arya:** If you have any relevant information, you can send it to the clerk. That would be great. Thank you.

The Chair: Mr. Nuttall.

**Mr. Alexander Nuttall:** I'd like to ask Scott some follow-up questions, because I'm finding some of the answers difficult to swallow—or maybe to understand.

Paragraph (b) of our study is about is "reviewing the causes and consequences of manufacturing job loss". My work with manufacturers has always shown that energy costs are going up, and that this is being driven by a change in approach by government and the types of energy its been generating. Someone said that the cost of renewable energy is the same as the cost of everything else. I don't see this in a  $44\phi$  per kilowatt hour in Ontario for solar and  $3\phi$  for hydro.

**Mr. Scott Smith:** I will qualify that. The price of solar generation is higher than it is for something like wind or new hydro, which are both renewable energy sources. The costs of developing new generation is around 11.5¢. That's about what new contracts are being allotted for those sources. Solar is the outlier there, but it's also a very small part of the overall capacity in the province. That said, energy prices are absolutely rising in Ontario. You've gone from an average of 5.5¢ a kilowatt hour in 2005 to almost 18¢ a kilowatt hour at peak demand today. That's a huge increase, and for companies that are high users, it's prohibitive.

**Mr. Alexander Nuttall:** I have one other question, and Mr. Burt from the Conference Board of Canada almost went toward saying this. One of the things that was in the minister's mandate letter, and that was also said by the Prime Minister before coming into office, was about transitioning away from manufacturing in southwestern Ontario. Do you guys agree with that, or do you think it's not a direction we should move in? It didn't really say where it was going, but one could assume it's the service sector, as there's not much else there. Do you agree with that? Do you think that's a bad approach, to give up on the manufacturing sector?

• (1725)

**Mr. Michael Burt:** I don't necessarily say that we should give up on it. I'm not exactly familiar with the passage you're referring to, but one possible interpretation would be that that since we have people who are not being fully employed in that region as a result of some changes that have happened in the manufacturing sector, can we find ways to employ them gainfully in other sectors than manufacturing? I guess what I'm saying is that it's not necessarily the wording of making a strategic decision to move away from manufacturing, as opposed to the fact that if manufacturing is not growing for these people, let's see if we can find other ways to employ them.

I do think there are opportunities in manufacturing, but as I said in my opening comments, services are 80% of the economy. It's where a lot of the growth has been, so it's something that's worth looking at as well.

The Chair: Mr. Jowhari, you have three minutes.

**Mr. Majid Jowhari:** I want to acknowledge the fact that the statement in the mandate letter was that we need to reinvest in manufacturing, not divest from it. So I want to thank you for qualifying that.

I want to go back to the chamber's report—another great one—on "How to Boost Canada's Venture Capital Industry", September 2015, which talks about stimulating Canadian innovation. That report talked specifically about the North American venture capital rating and how Ontario is now eighth as of 2014, Quebec is ranked twelfth, and British Columbia is ranked sixteenth. Combined, Canadian provinces or the focus area has come to about \$2.3 billion as compared to somewhere like California that's about \$30 billion. As part of your solution, the chamber recommends that we need to make Canada an adventure capital powerhouse. Can you expand on that or shed some light on how we can close that gap, and what are some of the barriers to our being able to close the gap from \$2.3 billion to about \$30 billion for us to become a powerhouse?

**Mr. Scott Smith:** There was a lot of talk a few years ago about Canada, particularly the Waterloo region, as being Silicon Valley north, which is still a viable way to look at things. The challenge there is that there are not enough companies at that start-up level to attract the attention of U.S.-based VCs. We actually have the opposite problem, where a lot of those start-ups are now going to the U.S. to look for capital. It's easier to do. One of the things we should probably be looking closer at is developing a larger or central hub for that start-up community.

**Mr. Majid Jowhari:** Specifically, your industry report talks about low rates of returns for venture capital funds as one of the issues keeping our VCs lower than what's happening in the U.S. Can you expand on that one in the short time I have left?

The Chair: You have 30 seconds.

**Mr. Scott Smith:** One of the challenges is that the number of companies that scale up in this country is a lot lower than what comes out of northern California, where there are a larger number of companies that are making more money. How do we deal with that? Well, it's finding ways at the end of that venture capital series and about what's the next step, how do you bring us to that next level where we're building a global company that's worth several billion dollars?

The Chair: Thank you. Well done.

[Translation]

It is now over to Mr. Boulerice for two minutes.

Mr. Alexandre Boulerice: Thank you, Mr. Chair.

I'll try to keep it brief.

CED has a role to play in helping small businesses get off the ground and grow. Export Development Canada helps them invest in international markets. In your opinion, Mr. Burt, what should the next decisions of these two agencies be in terms of helping SMEs get started, grow, and export? These are, after all, two rather important organizations from the federal standpoint. They already do a lot, but what more could they do?

• (1730)

[English]

**Mr. Michael Burt:** They already have a fairly large role. We were talking about venture capital. BDC is the largest venture capital player in Canada. You're already at risk in some ways of their crowding out private investors.

I don't know if I have a quick answer. I'd say that probably the biggest role they can provide is that of lender of last resort. BDC did an excellent job in the last recession of funding companies that were perfectly viable but just had cash flow issues. They were able to help them get through that rough period during the recession.

**Mr. Scott Smith:** I'd concur with that. There have been occasions where the BDC, as an example, would be directly competing with venture capitalists.

To the question about returns on investment, maybe BDC should be looking at ventures that potentially, in the short term, have more risk.

The Chair: That takes us to the end, with a couple of minutes to spare.

I'd like to thank our guests for coming in today. There was lots of great information. Thank you very much. We may have to bring you back again. You guys are good to go.

Before we go, we have a point of order from Mr. Nuttall.

A voice: Thank you for having us.

Mr. Alexander Nuttall: Mr. Jowhari.... I'm sorry, I'm not going to say your name right.

Mr. Majid Jowhari: That's okay.

Mr. Alexander Nuttall: Forgive me, please.

The Chair: We call him M.J.

Mr. Alexander Nuttall: Perfect.

M.J., I just want to put on the record what was actually written in the minister's mandate letter, which reads:

For those communities that have relied heavily on one sector in the past for economic opportunities, investments that support transition and diversification may be appropriate. Communities that have relied on traditional manufacturing are likely to require specific strategies to support economic growth.

This is following in behind transition, which is where we get that in the mandate letter. There may be somewhere else where it says there should be large investment in manufacturing, but it's not in this document.

Mr. Majid Jowhari: Fair enough. Just leave it with me.

The Chair: What a friendly group we are today.

Thank you all very much.

Don't forget that on Thursday we have Colleges and Institutes Canada, Universities Canada, and Georgian College. It sounds as though it will be very cerebral.

Thank you all very much.

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