

Building the 21st Century Economy

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The Honourable Paul Martin, P.C., M.P.

Check against delivery

Mayors, Chairs of the Board and Junior Board of Trade, distinguished head-table guests, ladies and gentlemen. I'd like to start by thanking my old friend Benoît Labonté for his introduction and for sharing with us the challenges that we face as a nation.

I would also like to thank the Board of Trade of Metropolitan Montreal for inviting me to come speak with you. At a time when the great economic issues of the day demand attention as rarely before, the fact that the Junior Board was also part of this invitation symbolizes, for me, the unity of thought and action that will be critical if we are to succeed in any of the great ambitions we have for Canada.

I was asked to speak, today, about the economy. And, of course, I accepted with pleasure. But, if you'll allow me, I'd like to take this opportunity to speak especially about the *new* economy – the parts of our economy that are based on the potential of transformative technologies which are going to be the real economic engines of the years to come.

I would like focus on that for two reasons. First, because I'm here, at home, in Montreal: a city of great universities, hospitals and research institutes. A city that is increasingly building a high tech future. A city that is at the cutting edge in life sciences, multimedia, and aerospace.

And secondly, because the recent, troubling decision by Shire Pharmaceuticals to close its Montreal laboratory reminds us that in a world without borders, we can't take anything for granted.

We live, today, in a period of new and deeply divergent economic trends. We are witnessing, on the one hand, the spectacular rise of China and, on the other, the stagnation of many major industrialized economies. This is an uncertain time for some countries, but it is a time of enormous potential for Canada.

I believe that we will fulfill this potential, if we meet three conditions.

First, it is absolutely essential that we lower our national debt load, in order to keep our interest rates low, continue to lower taxes, and keep the flexibility we need to respond to an unpredictable international economy. In concrete terms, that means continuing to cut the debt-to-GDP ratio from 71 per cent, where it was in 1997, past 40 per cent, where it is today, back towards the 25 per cent level that Canada had in the late 1960s.

Governments must never forget the lessons of prudent fiscal management. That means always keeping a firm grip on spending – especially in the uncertain times now facing the global economy. It means a commitment to an ongoing program review. It means focusing on results, on outcomes, on improving programs that work and bringing those that don't work to a deserving end. The fact is Canadians have come too far, worked too hard and sacrificed too much to go back to the era of deficits.

Second, we must never forget that an innovative society rests on strong social foundations. A learning society like Canada understands, for example, the fundamental importance of early childhood development and of lifelong learning, which starts in infancy and continues well after the final degree or diploma is granted. It also understands the importance of a progressive immigration policy and of a health care system in which we all have confidence. In other words, we must understand the following: when we strengthen our social fabric, we also strengthen our economy.

Third, Canada must build a 21st century economy. An economy driven, above all, by individual ingenuity and creativity.

We cannot rest on our laurels. If Canada's economy is to fulfill its potential, we must stop congratulating ourselves, and get on with the new job at hand.

This is true for business, it is also true for government.

We have achieved many of the conditions required for incremental growth. Now we have to build on that foundation, to ensure that Canada is firmly positioned at the cutting edge of a global economy whose pace is set by new technologies, new start-ups and most of all by the creativity and ingenuity of individual endeavor.

These are the forces that have the power to transform whole industries.

This means supporting basic research, it means a much greater effort to commercialize applied research, and adopting cutting edge technologies so that Canadian businesses don't ever settle for things that work just well enough.

That means our capital markets have to help our most innovative entrepreneurs develop their businesses— especially in fields where global demand is growing and where Canada already has a competitive advantage.

This third condition of growth – the need to build a 21st century economy – is what I would like to focus on here.

What is important is to create the necessary conditions for sustainable, long-term economic growth – the kind of growth that can create new jobs year after year. We have to act now. Let me give you some examples to explain why.

First: university research.

One of the most important decisions of recent years was to make our universities and colleges the centres for Canadian research and development.

Since 1998, the Canadian government has announced enormous investments of more than \$11 billion for research and innovation. We obviously have to maintain

that investment. One of the primary responsibilities of a government is to finance basic research.

Basic research is crucial in order to push back the frontiers of knowledge. But having said that, basic research is not, in itself, sufficient to generate the economic results we need. Quite simply, we need to understand that research funding is also, often, an investment – whose return is measured in part by the number of new companies and new jobs created. In short, we have to commercialize that research. That's precisely where Canada still has work to do.

For instance, in spite of all our progress, the most recent data suggests that every dollar invested in research at a leading U.S. university still produces around 50 per cent more in license income than a dollar invested in research at a leading Canadian university.

One reason for that, is the fact that almost every Canadian university has its own rules for managing intellectual property. That makes it more difficult for private companies to build partnerships that weave together many ideas and bring them from the laboratory to the marketplace.

One very promising effort recently got underway in Western Canada. It is called Westlink and involves the cooperation of 25 different universities, colleges, and research institutes that have come together to essentially pool functions relating to technology transfer.

That effort deserves real encouragement. But we have to go even further. Quite simply, the fact is that we need a fundamental change in the way that our research institutions assess the economic potential of their discoveries.

That said, we need a culture change beyond the lab, too. The other obstacle is the dearth of private capital to invest in Canadian start-ups at the earliest of stages, when they are still in gestation. Government can facilitate the development of this kind of capital. But it really has to come from the private

sector, from those who know how to develop new discoveries commercially, how to identify opportunities in the marketplace and how to build a solid business plan before the next round of financing.

Clearly we have to change the way we do things.

The second example that I would give you where we have gaps to fill if we are to live up to our potential, flows from the first example. It is the need to facilitate the way that small and medium-sized businesses operate within the new economy.

Tomorrow's multinationals are the small and medium-sized enterprises of today. And these future multinationals face two significant challenges.

The first challenge is that small and medium sized businesses don't always have all the resources they need to do research and development on a new product.

We have to provide the missing link. For example, we need structures that allow our small and medium sized businesses to sub-contract their research needs to regional, national and international laboratories.

We already have a good foundation for this: the 19 institutes of the national research council, and the IRAP program that continues to play a key role. But we have to go farther.

Other countries have put structures in place to fill these gaps – Batelle Corporation in the U.S. and Fraunhofer Institutes in Germany, for example.

We should do the same in Canada. Our goal should be to give our small and medium sized businesses the kind of support they need: from research to commercialization, from protecting their intellectual property to helping with financing.

Another gap affecting our overall economic potential, but most particularly that of our small and medium size enterprises is the need to seek out best practice technology on the one hand, and to invest in improving the skills base of our workforce on a continuous basis on the other.

Look at Australia. Throughout the 1990s Australian companies invested enormously in new technology, much of which was produced abroad. With what result? Australia's productivity growth rate was the second highest in the OECD, outstripping Canada's and even that of the U.S.

Wherein lies the answer?

Some believe that government must ensure that the depreciation rules of the tax act reflect the changing life cycles of technology.

And I agree. But fundamentally, the only lasting answer will be found in the unequivocal recognition by the private sector that the key to increasing productivity is to invest in people and technology on a continuous basis.

And for those among us who are still skeptical about the need to increase our productivity, the recent rise of the dollar provides ample evidence of just how important productivity really is. For our companies who face the volatility of international currency markets, it is not merely a "nice to have" option among so many others, it is an absolute necessity.

The third point I would like to raise is access to capital.

I don't need to tell you that financing is fundamental. It's the oxygen of university research, just as it's the oxygen of entrepreneurship. It is what allows businesses to go from a start-up stage to maturity.

If Canada is to be an incubator of dynamic new companies – and not merely a breeding ground of good ideas for others – we must do even better at getting resources into the hands of Canadian entrepreneurs at the right time and in good measure.

There is a debate in Canada as to whether there is a shortage of venture capital in absolute terms, or whether, in fact, venture capitalists are still so traumatized by the dot-com bomb that they are actually reluctant to invest the cash they do have.

But one thing is clear, regardless of the reason, Canada's technology industries are suffering a financial squeeze of major proportions, and no better example can be cited than the Canadian biotechnology industry.

Canadian venture capital has succeeded in supporting solid, early stage ventures, but it has too often failed to convert them through later stages of funding and growth relative to global leaders. As a result, Canada's middle market biotechnology companies are significantly underfunded compared to their global peers. The problem goes beyond biotech. As does the fact that all too often Canadian start-ups do not receive the value-added coaching, development and marketing support that their U.S. counterparts do. The fact is that for our bio-tech companies, an area where we are as good as anyone in the world, the crunch is on, and it is on now.

The Canadian biotech industry is one of the best in the world. But it is also fragile. More than half of our public biotech enterprises face a severe cash crunch.

The issue is simple: either these companies shut down or get bought out, or they flourish and have the means to buy other companies out. The choice is ours.

What are they doing elsewhere? Consider the United States.

The U.S. biotech sector also has financial problems. But at last count, there were 41 American states that had a public program of some sort involving biotech. Some, such as California and Wisconsin, draw on their pension funds. Others, such as Michigan, North Carolina and New Mexico, draw on direct investments.

So, what must Canada do?

Some have suggested that the public and private sectors work together to provide the risk capital and the expertise that our companies need. And I agree with that.

Let's be clear: if government has a role to play, it must only be as a catalyst. It cannot be the final answer. Canadian pension funds provide 20 per cent of venture capital in Canada, while in the United States, they provide roughly 50 per cent. I ask you this question: how can we build an economy in the 21st century, if we rely on a concept of risk that dates back to the 19th century?

Fourth Point: Canada is well established in two of the most important transformative and enabling technologies: information and communications technology and biotechnology. Both are going through a difficult time and we have to stand by them. However, we have to understand that there are other sectors where we have barely scratched the surface.

From nanotechnology, which is still in its infancy, to established fields of endeavor where their export potential is far from being realized, the opportunities for Canada are unlimited. What is important is to grasp that because our domestic market is small and our expertise is great, it is crucial that we use both

as a launch pad to the markets of the world. Not just the American market, but also China, Brazil and India, who together, represent one-third of the world's population and continue to grow rapidly.

Allow me to give you two examples of what I mean: environmental and medical technologies.

First, environmental technologies.

Whether you are talking about improving air quality, water quality, or waste management, Canadian companies have an enormous opportunity to make their mark.

Take energy for example.

World energy consumption is forecast to rise 60 per cent by the year 2020.

Even for the countries that did not sign the Kyoto Protocol, it is clear that the new regime will change the way we think, and will stimulate the world's demand for clean energy. It is also clear that, no matter what happens in the first phase, the world cannot meet the objectives of Kyoto's second phase without a technological revolution.

Few realize the truly innovative work that is happening in the environment sector right across Canada. In Quebec, one company in the Gaspé is positioning itself to be the leader in the area of wind energy. An Alberta company is focused on the production of clean energy from cow manure. More than 20 British Columbia companies are working in the area of fuel cells.

There are literally hundreds of companies pursuing such projects across the country. Is it in our interest for them to succeed? The answer is yes.

Do they need our help? The answer is again, yes, and especially when they are in the early stages of development.

But how do we help them? There are many ways. For example, two years ago the government created a foundation to support certain environmental technologies. I believe that the moment has arrived to expand its mandate to include all green technologies.

And since the government has stated its intention to sell its remaining shares in Petro-Canada, why not invest part of the proceeds in that foundation to ensure Canada becomes a world leader in the environmental technologies of tomorrow?

Another example where Canada has a huge domestic market and a great opportunity is in the development of new healthcare technologies.

I believe very strongly in the Canadian system of public and universal healthcare. It is a moral statement of our values as a people. I also believe that Dr Henry Friesen, the founder of the Canadian Institutes of Health Research, is right when he says we are not taking full advantage of the economic benefits our system could bring. This has nothing whatsoever to do with privatization. In fact, I believe that the more we take advantage of its economic potential, the stronger our public system will be.

Today, we spend more than \$112 billion every year on health care in this country – almost 10 per cent of our GDP. But we buy most of our medical products and equipment from abroad. In fact, the sector represents one of our largest trade deficits – some \$6 billion a year and growing rapidly. Canada can do much better than that.

The fact is that there is an enormous – and growing – worldwide market for these products and services. And Canada is ideally positioned to capture a substantial share.

Today, Canadian researchers are on the leading edge. Genome Canada, for example, is doing revolutionary research in areas as diverse as infectious diseases and isolating the genes responsible for obesity, hypertension, cystic fibrosis, and asthma.

In Montreal, researchers are doing incredible work on Alzheimer's.

And scientists in Vancouver discovered what they believe to be the genetic code of SARS virus.

Clearly, we need to keep doing research in many areas. But the key of any good strategy is to concentrate on your strengths. We need to pick segments where we can really build a competitive advantage in the global market – whether in bio-pharmaceuticals, medical devices, consulting services, or others.

To that end, Dr Henry Friesen has proposed the creation of a Health Innovation Council to advise on how we can increase the productivity of our health system, reduce our reliance on imported medical goods and services and develop new Canadian diagnostic tools, therapies, technologies and services.

Regardless of the mechanism we choose, the important thing is that we move quickly to leverage our existing strengths, so that we can gain the greatest advantage from the fact that our system is based on a single-payer principle – and make health care not just a powerful force in society, but a growing force in our economy.

On this, just one further point. I have talked about environmental and health technologies in the context of penetrating foreign markets from a Canadian base. But let me talk about them as well from another point of view. We have a responsibility to ourselves, but also one that goes well beyond our own self-interest. We have a responsibility to deal with the problems of those in the world who cannot deal with them themselves.

Focusing on R and D is critical to dealing with the challenges we face. If this is true for Canada, it is true for the developing world as well – and yet there, the needed research is virtually non-existent.

For example, according to the OECD, many potential remedies to address some of the worst diseases in developing countries are ready to be developed, but lack the necessary financing to bring them through the final stage of clinical trials. This is unacceptable.

Why not develop a specific, and perhaps commercial, expertise here in Canada and create new technologies, new therapies and new services that can be taken advantage of by developing countries.

For us in Canada, it is an opportunity to do that which is right.

Well the time has come for me to bring these remarks to an end. Let me do so, by expressing one further reason why I wanted to cast my perspective on the economy the way I have today.

I believe government is about change – that good governments don't react to change, they anticipate it. If this were ever true, it has never been more true than today. We live at a time when grade school children are taking the genetic material out of an apple and running it through sequencing machines; when

computing power is doubling every 18 months, and bandwidth even faster than that.

My message, as a result, is: it cannot be business as usual. Nor, I might add, can it be government as usual.

There is no doubt that we are living in one of the most exciting times in history, when human creativity is multiplying exponentially, when each new discovery contains within itself the DNA of another revolution.

Over the course of the last decade, the choices we made have resulted in an unprecedented fiscal turnaround. We must protect these gains, but at the same time, we must also go to the next level.

The changes we are witnessing represent a profound shift in the way economies operate, in how jobs are created and in how people and countries prepare themselves to succeed.

As a nation, we have everything that we need to achieve this. We have the confidence, we have the talent and we have the will. Our objective is clear: to be a true land of innovation. A market teeming with new products and services, a country where the quality of life never ceases to grow.

The fact is that very few countries will lead the world of tomorrow. My message is simple: Canada will be there.