

**Remarks by David Dodge
Governor of the Bank of Canada
to Humber College Institute
of Technology & Advanced Learning
Toronto, Ontario
30 March 2005**

Canada's Competitiveness: The Importance of Investing in Skills

Thank you, Michael, and good evening. I am honoured to be here with you to kick off this lecture series. Once again, I want to thank Humber College and the Canadian Foundation for Economic Education for this opportunity.

It's a bit daunting to try to deliver a lecture this late in the evening. But the subject that I want to discuss tonight is one that should be of interest to all of us—the importance of investing in skills to improve productivity growth.

As most of you know, this lecture series was announced by the CFEE at a dinner here in Toronto in November 2003. At the conclusion of my speech that evening, I said that, in an increasingly complex and competitive world, furthering our national economic welfare will depend importantly on the quality of our labour force. I also said that improving skills will require concerted efforts from all of us who are involved directly or indirectly in education: parents, educators, employers, community organizations, and policy-makers.

It is this shared responsibility that I would like to emphasize this evening. I will begin with a brief discussion about some of the factors influencing Canada's productivity performance. Then, I will review some of the larger forces at work on the world economy and their implications as we strive to improve productivity. Finally, with these forces in mind, I will offer a few thoughts on how we can best develop Canada's human resources.

What drives productivity growth?

Productivity plays a critical role when it comes to our national standard of living. Productivity growth is *the* main element that contributes to continued improvements in real incomes and overall prosperity. Rising productivity lets businesses pay higher wages, while keeping costs down, employment high, and profits coming in. That's why economists like me spend a lot of time thinking about ways to improve the productivity of our economy.

There are several factors that help to raise labour productivity—by which I mean the amount of goods and services produced per worker per hour. These factors include the education, training, and experience of the workers and the amount and type of equipment available to them. Productivity can also be raised through technological innovation, and through changes in organizational and management practices.

All of these key determinants of productivity influence how "smartly" human and capital resources are used. And these determinants are, in turn, influenced by broader factors such as competition, openness to foreign trade and investment, macroeconomic policies, and the efficiency of financial markets.

We all recognize that improving productivity is the key component to raising the standard of living of Canadians. From 1996 to 2002, output per hour worked grew at just over 2 per cent, on average, a little faster than our undistinguished performance of the previous quarter century. This provided some reason for optimism. But over the past two years—while economists, business leaders, and policy-makers have talked about the need to raise productivity—output per hour has been essentially flat. While we're talking the talk on productivity, we are not doing a good job of walking the walk.

We have to do better. And over the next decade or two, we will be working to improve this country's productivity amid significant global economic change. This evening, I'll focus on three important and ongoing elements of this change: technological innovation, globalization, and demographic shifts. Then I'll discuss the implications of these trends for skills development.

Technological change

Let me start with technological change. It's difficult to untangle and measure the individual components that contribute to productivity growth. But we do know that one of the most important factors in recent years has been the adoption of new technologies. Key among these has been information and communication technology, or ICT. It is by no means the only area where transformative technological advances have been made, but it is the one on which I will focus tonight, for two reasons: first, because ICT offers a useful example of the sweep and the impact of technological change; and second, because it relates to the other two broad trends that I will discuss this evening.

The productivity potential of new technology is only realized when companies and institutions reorganize their business and management practices to integrate the new technology. Our lacklustre productivity record suggests that Canadian firms and public sector institutions are moving too slowly to adopt these new technologies and business practices.

Let us also remember that technology not only creates opportunities to change work within a firm, it also creates opportunities to change the nature of transactions across firms. Technological innovation lowers transactions costs and facilitates productivity improvements through increased specialization. Specialized firms can build expertise by developing specific skills and then trading that expertise with other firms that offer complementary advantages.

Globalization

Technological change is hastening the second trend that I want to discuss tonight—and that is globalization. Travelling or shipping goods around the world now takes hours, not days. Information and ideas are available simultaneously to anyone who has access to the Internet. Wireless technology has brought telecommunication to places where phone lines cannot reach. In short, technological advances have allowed markets to expand as never before. In many ways, technology is the enabler of many of the trends leading to globalization, by slashing the costs and the time it takes to reach across borders and continents.

Today, we're all shopping in the same global village market. Consumers and businesses around the world have become the target customers of Canadian firms. At the same time, our firms are exposed to new sources of competition and new pressures to innovate.

Perhaps the most preoccupying element of this trend towards globalization is the emergence of China as an economic powerhouse. And India is not far behind. When you consider that China and India account for 40 per cent of the world's population—and that their economies are growing at annual rates of 9 and 7 per cent, respectively—it is not hard to see why they have such an impact on the global economy.

China and India are now major global competitors in labour-intensive industries. Increasingly, they're also flexing their muscles in skill-intensive industries. Asia's highly efficient production capacity is prompting a transformation of manufacturing and distribution processes around the world. And the skills-based software industry in India is transforming that sector globally.

So we're seeing tremendous competitive pressure on industries that are the traditional mainstays of the Canadian economy in general and of Ontario in particular—such as automobiles and parts, steel, and other manufacturing industries. We're also seeing competitive pressures transform Canada's high-tech sector, which has only recently emerged as an engine of growth.

But the income and wealth created in China and India are increasing the ability of these countries to buy goods and services from abroad. So, their integration into the global economy represents both a competitive challenge and a tremendous opportunity. These emerging markets are just that—markets. China is already one of the world's largest importers. This growing demand can provide a real boost to the Canadian economy, if we gear up to meet the challenge.

So, how do we meet those challenges? One way is to integrate low-cost components from other regions of the world into our own production processes, through direct investment or joint ventures. This can help to keep costs down and free up our resources to concentrate on those areas where we have a competitive advantage. Second, we can focus on activities that embrace and facilitate technological advances. I'm

thinking of activities such as industrial design, marketing, customization, packaging, and high-quality, individualized service. Humber College and similar institutions are helping to develop and maintain the skilled labour force that Canada needs to be a global player in these activities.

At the same time, we can't ignore the fact that refocusing activity will likely mean job displacement in certain sectors. There will be some activities, particularly those that are labour-intensive and lower-value-added, where Canadian firms will not be well placed to compete with lower-cost producers in Asia. Adjustment will require shifting resources into expanding, higher-value-added activities where Canadian firms can exploit the new opportunities presented by the changing world economy. By making these adjustments, we will be able to increase productivity and raise our standard of living over time.

Demographic trends

The third significant trend that Canada and other industrialized countries face is the aging of our populations. Right now, about one Canadian in eight is aged 65 years or older. By 2026, that ratio will be one in five.

So, we can expect reduced growth in the labour force and a smaller, older workforce in proportion to our population. And let's remember that this aging of the workforce is taking place as Canada is shifting to a knowledge-based economy. Technology-intensive employers require increased emphasis on retraining and on continuous learning for all workers, including older ones. Studies have shown that older workers participate less than younger ones in job-related education and training. And those workers with less education or low literacy levels find it particularly difficult to adjust to the knowledge-based economy. They are at a higher risk of being laid off and have greater difficulty in finding new work.

The good news is that we still have time to prepare for the demographic shift. We have several factors working in our favour. First, technological change and increased use of ICT mean that participation in the labour force can be more flexible—through teleworking, part-time work, job-sharing, off-site consulting, and other innovations. Second, older Canadians are, on average, healthier than in previous generations, and could stay in the labour force longer. Third, the nature of many jobs has changed. There are more skills-based jobs, but they are often less physically intensive and therefore can be done by older workers. Fourth, since the baby boomers are better educated than the current cohort of retiring workers, they may find it easier to adapt to changing work environments.

All of these factors mean that the aging of our population over the next two decades need not have as serious an effect on economic growth as some fear. But we will need to increase productivity and to prepare our workforce and our economy for the demographic realities ahead.

A focus on skilled labour

This leads naturally to the subject that I will discuss in the remainder of my remarks tonight. These three global trends—technological change, globalization, and demographic shifts—must be central to our thinking as we prepare our workforce and our economy for the challenges that we face. So, in light of these trends, how do we best develop our labour force to boost our productivity?

As I said at the beginning, the key to achieving these goals lies in coordinated effort. Skills development is a shared responsibility of business, academic institutions, the public sector, workers, and students. We need a system of incentives for continuous learning and upgrading of skills, and an infrastructure that delivers the training. This has always been important. But, as I mentioned earlier, it will be particularly important in the next two decades, as labour force growth in Canada slows.

This system of incentives must benefit both workers and firms. If companies don't see the payoff from training and skills development for their workers, they won't make the investments. If workers don't see what's in it for them, they won't devote the time and energy to improve their skills.

The first step to improving skills is to build an excellent infrastructure for early childhood development, feeding into a school system that effectively teaches basic skills. For Canada to generate productivity gains in a world market that's embracing technological change, provincial education systems must continue to boost literacy and numeracy rates among students. There's no longer such a thing as an unskilled job. The workers of today and tomorrow need to know how to learn, so that they can continuously improve their skills after they leave school.

If we find more innovative ways to keep students engaged in their education, they will leave school with the enthusiasm they need to continue learning throughout their career. For some students, especially boys, school can feel like incarceration. One reason why drop-out rates are high is that some students don't see the connection between what they're being taught in school and what they want to do when they leave school.

In order to be motivated to learn math, language, or science, students need to understand that this knowledge is relevant to the careers they want—that these courses are the foundation on which they will build their skills and interests. No one who learns a musical instrument practices scales so that they can be really good at playing scales. They practice scales so that they can play the songs they like. And students need to see first-hand the opportunities that will open up for them by studying hard and staying in school. Colleges, and the industries that support them, play a key role in providing that motivation, through programs that give high school students a first-hand look at the career options ahead.

The flip side of the aging population that I discussed a minute ago is relatively smaller cohorts of young people. But that doesn't mean that we can stop focusing on the problems we face in preparing these young people for the workforce. Indeed, the fact that we have smaller cohorts means that we must do better—we can't afford to squander the potential of these young people.

Once they have finished high school, they need to learn the skills that will help them to become productive workers in the expanding sectors of the economy. I'm in the right place to be talking about this, because Humber College has an exemplary record of training in areas such as design, merchandising, high-end services, and product innovation. Of course, it will always be critical that Canada stay on the leading edge of advanced research and theory. But pure research always needs to be complemented by the ability to commercialize, customize, and market the products that result.

Service industries will also require increasing numbers of skilled workers. Older people buy relatively more services as a percentage of their overall consumption. The health care sector, for example, will require more medical technicians, therapists, nurse practitioners, and home care workers to meet growing demand. And as our population ages, the demand for leisure and travel services is increasing. The hospitality and tourism sectors can differentiate Canada from other destinations by delivering the exemplary service that only well-trained workers can provide.

In order to learn relevant skills, students should be trained to use the latest tools and production methods employed by the sector for which they're training. This means innovative partnerships between educational institutions and industry, to give students access to equipment and methods that are actually being used by leading-edge businesses. It means embracing the classic notion of apprenticeship to help make education and training as efficient and as relevant as possible.

One more word on apprenticeships. We need to focus on creating a new generation of skilled craftspeople to replace the generation that is retiring. This is not a new problem I was writing papers about it in the early 1970s, and it still hasn't been resolved. Existing shortages in some skilled trades are likely to worsen, particularly in those trades where Canada used to rely on imported skills to meet domestic demand. The time to train this new generation is now, so that they can gain from the experience of the older generation while learning the latest techniques.

I've spoken at length about our education system. But, as we improve the training of young workers, demographics will demand that we also make better use of older workers over the next couple of decades. And that requires continued and innovative on-the-job training.

Employers may be reluctant to invest in training older individuals because of the shorter period in which to recoup training costs and because of a perception that older workers are less "trainable." These are misperceptions. First, because of rapidly changing technology, the payoff period for any training has become shorter and the need

for the continuous upgrading of skills greater. Second, research suggests that successful training depends on the design of the training program, not on the age of the trainee. We should help older workers to continue to get the skills they need to remain in the workforce—should they wish to do so.

I've said that improving the skills of Canada's workers is a shared responsibility. So let me say a word about the role of the public sector. Boosting productivity requires microeconomic policies that encourage innovation in Canada's private and public sectors. As I mentioned earlier, sometimes this innovation results in the displacement of workers. Public policy should assist those workers to upgrade their skills—not just when they lose their jobs, but during their entire working life. That requires the right mix of policy incentives for individuals and employers to continue to invest in training. And it must be a continuing process, not just a remedial one.

Conclusion

Ladies and gentlemen, I don't for a minute believe that these are easy tasks. But the more flexible and efficient we can make our labour force, the better prepared we will be to improve our productivity and to increase the real incomes of Canadians in the years ahead.

So let me conclude with a challenge. I began my remarks by talking about the importance of productivity in our efforts to assure rising incomes and economic well-being. And just as we need to improve the productivity of our factories and enterprises, we also need to improve the productivity of our training and education system.

So I challenge Humber College and other educational institutions to constantly evaluate and improve the methods they are using to develop the skills of Canada's workforce. And I challenge subsequent lecturers in this series to come up with new ideas to help them achieve this goal. Creating the world's most innovative framework for education and training is not a simple task. But it's an extraordinarily important one. Because the more innovative we can be in skills development, the more innovative we will be as a nation. And that is the best way to promote sustained, long-term economic prosperity for Canadians.