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PROSPERITY INITIATIVE

Issues for Discussion

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PROSPERITY THROUGH COMPETITIVENESS



Government
of Canada

Gouvernement
du Canada

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COMPETITIVENESS:

n. ... creating an economy and a society able to sell goods and services in the world market in such a way that business makes a profit, pays fair wages, provides secure jobs and good working conditions, and respects the environment.*

** A definition arrived at by business and labour leaders at a consultative forum on competitiveness sponsored by the Public Policy Forum in Vancouver, June 1991.*

PREFACE

The two great challenges facing our country today are national unity and our future prosperity. The two are inextricably linked.

The Government's overall proposals for the renewal of Canada have already been set out in the document *Shaping Canada's Future Together: Proposals*. A related background paper, *Canadian Federalism and Economic Union: Partnership for Prosperity*, reviews the substantial benefits Canadians have gained from economic union, underlines the need to strengthen it in the face of an increasingly competitive international economy, and identifies areas where improvements can be made.

These constitutional proposals to strengthen our economic union, which are presently being reviewed by the Parliamentary Special Joint Committee on a Renewed Canada, represent only part of what is needed to ensure that Canadians can build a more competitive and prosperous economy for the 1990s and beyond.

With the release of this paper and *Learning Well... Living Well*, the Government of Canada intends to stimulate a national discussion on the factors that determine our current and future prosperity. This discussion will take the form of series of consultations designed to give Canadians the widest possible opportunity to be heard and to participate in creating a consensus on ways to generate stable income and employment and to assure our economic security and prosperity in the future. The goal is to develop a consensus on a national action plan for the balance of the 1990s to be implemented by governments, business, labour and individual Canadians. This is an ambitious undertaking. The Government of Canada is committed to seeing it through.

Over the past several months, we have worked to obtain the broadest consensus possible on the key issues for discussion and

the structure of the consultations. To this end, we sought the views of more than 60 business, labour, academic and social action groups, as well as of provincial governments. We wish to thank all those who participated in this process. Many constructive contributions and valuable insights were received and are reflected in this paper, thereby giving Canadians a better starting point for developing a plan of action.

Readers will note an absence of detailed recommendations and conclusions in this paper. Our thinking is that such results should be a product of the debate. This is why the paper asks a number of pointed questions on how we address the problem. Action based on consensus will be more effective than unilateral action by the federal government.

There are also important areas where the role of the federal government may be quite small or constrained by limited resources. Expensive new programs will require the reallocation of existing resources. Provincial governments have jurisdictional responsibilities in a number of these areas and a few of them have launched consultation exercises of their own. This paper, and the process it supports, are designed to reflect these facts. In short, there must be partnerships.

The word partnership appears frequently in this document and will be heard often during the consultations. Our success will require the cooperation of many, some of whom have profound differences. All these differences will not be resolved. We need to work together to identify areas where common ground exists, build a consensus and take action. The issues presented for examination are not only vital to our future prosperity but also should provide the basis for this consensus.

There are important economic issues that are not highlighted here; for example, the

exchange rate, interest rates and the deficit. Discussions on these issues will continue in a number of forums. However, our focus for the consultations will be the topics discussed here: learning, innovation, financing, domestic markets, trade and partnerships. These are the nuts and bolts of the real economy.

This is an economic paper; but should be seen in a broader context. Economic success, prosperity, is but a means to improving our quality of life. We want prosperity so that we can reach goals that are not measured in the Gross Domestic Product: strong social programs, a clean environment, a vibrant culture and interesting, well-paying jobs for all. With these goals, how we achieve prosperity is a vital part of the puzzle. Discussion, consensus and partnerships will allow us to improve our competitiveness and learning

systems in a manner consistent with our ultimate goals. Competitiveness, to some may mean harder work for less pay. This may be seen as contrary to our goals — this is not how we understand the term. Competitiveness means preparing Canada and Canadians for a high-skill, high-wage future. It means working smarter with better skills and greater technology. Improving our competitiveness will require change, some of it difficult, but these changes cannot be in the direction of worsening our quality of life.

There are signs that the old approaches to economic problems are not working. Making progress will require new thinking and approaches. This is what this paper and process are about.



Michael H. Wilson
Minister of Industry, Science and
Technology and Minister for
International Trade



Bernard Valcourt
Minister of Employment
and Immigration

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THE CHALLENGE:

PARTNERSHIPS FOR PROSPERITY

Canada's future prosperity depends on our ability to compete successfully both at home and abroad, which in turn depends on the willingness of Canadians to develop a renewed sense of partnership.

This chapter explores the global challenges before us, and identifies the key factors affecting our future prosperity.

PROSPERITY: THE NEED FOR ACTION

ALL CANADIANS KNOW THAT A STRONG, COMPETITIVE ECONOMY is essential if we are to have well paying, high quality jobs for ourselves and for our children. But a strong, competitive economy brings more than economic security. It also provides the means to maintain good schools, hospitals, parks, museums and other social services, services that enhance our quality of life and strengthen national unity. Indeed, in a very real way, a prosperous economy and a united country are mutually reinforcing — a prosperous economy allows us to build the collective institutions and provide the public services that reflect shared values; and a united country allows us to make the most of our economic potential.

“Competitiveness is really about the chance for every Canadian to have a decent paying job. And equally, it is about Canada’s continued willingness and ability to be a sharing society, with the resources to help our less fortunate citizens and regions. It...has just as much to do with the social character of the country as with its economic character.”

C.E. Ritchie, Chairman and Chief Executive Officer
Bank of Nova Scotia, 1991

“Workers and their unions, contrary to many misconceptions, have seen the development of the nation’s productive capacity as a critical objective. ... We do, however, put ‘productive capacity’ in a particular context. We see it as a tool to achieve other goals which extend beyond having more material goods and services to the kind of society we want.”

Robert White
National President
CAW, 1990

For decades Canadians have enjoyed one of the highest standards of living in the world, a reality reflected in our second place ranking in a recent United Nations study comparing the quality of life in nations around the world.* We have a nation with a rich diversity of regional economic strengths that has allowed us to capitalize on a wide variety of international market opportunities. But there are signs that we can no longer take our prosperity for granted. Over the last decade, profound changes have taken place in the global economy — changes that require a new approach to wealth and job creation. These changes include:

- the accelerating pace of change brought on by instant communications and rapid scientific advancement;
- the creation of a truly global economy, with transnational corporations increasingly shaping trade flows across borders through their production location decisions; and
- the growing importance of knowledge, rather than raw materials, to the creation of wealth, whether in the form of a computer software program, a new medicine, or a synthetic substitute for minerals and metals.

How Well has Canada Adapted to Global Change?

The global challenges facing Canada are profound, and a variety of indicators tell us that we have much to do if we are to ensure that changes become opportunities rather than threats.

Perhaps the most telling indicator is that the growth in Canadian real income (adjusted for inflation) has been steadily slowing since the mid 1970s. Today, young families have a hard time getting ahead. Too many Canadians, particularly children, live in poverty and too many workers, both young and old, face uncertain job prospects. This is in sharp contrast to the 30 years following World War II when real incomes rose rapidly and Canadians were generally able to fulfil their expectations of increasing incomes and an improving standard of living.

The reason for this decline in the income growth rate is relatively simple. It is due to a slowing trend in our productivity growth. Reversing this trend will be the key to increasing our real incomes and reducing poverty and unemployment. While Canada has achieved a relatively high level of productivity — the reason why our standard of living is so high — the rate at which it has been improving has slowed in recent years,

* Source: Human Development Report, United Nations Development Program, 1991, p. 15.

despite the significant capital investments made by industry in the last six years. While other nations have made major strides forward, especially in their manufacturing efficiency, Canada has lost ground in the race for global success and, as a result, Canada is less able to provide good, well paying jobs for Canadians.

Why has our productivity growth slowed despite strong investment by industry over the past six years? One can point to a variety of reasons. For example: we have been slow in developing and using effectively new technologies; our record on training and education is far from adequate; we have not paid enough attention to making our domestic markets work in ways that promote the growth of our industries and the expansion of employment opportunities; we have not linked the suppliers and users of investment capital well enough so that the available funds are put to the most innovative and rewarding use; and it is clear that governments, labour and business in Canada have had great difficulty in working together.

The Need to Adjust

If we are to maintain our standard of living and quality of life, we will need to respond more effectively to the profound changes taking place in the global economy. Firms will need to adopt new methods of production to improve productivity and develop new products and services for both traditional and new markets. In short, they will need to change the way they do business and with whom. People will need to adjust to new technologies not only in the workplace but in all facets of their lives. Workers will need to learn new skills and absorb new knowledge constantly throughout their working lives. No longer will they stay in one job or with one employer throughout their career — they will change jobs, even occupations, several times. Similarly, governments will have to adjust their policies in imaginative and flexible ways to support a competitive environment and reflect rapidly changing economic realities.

From a small town garage in the 40s, Bombardier developed into a world wide conglomerate that now has plants in six countries and manufactures products that range from the ski-doo to aircraft and rail vehicles with sales in the billions on all continents.

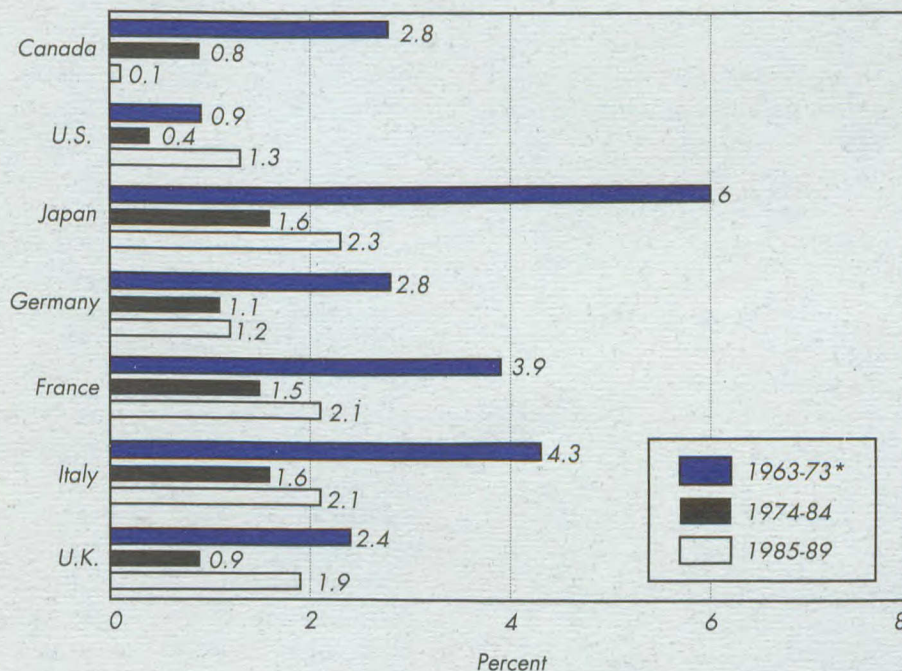
"...productivity growth is the most important factor that determines the growth in real incomes of Canadians ... much of the disappointed expectations of the 90s has its roots with the weak productivity growth."

Judith Maxwell, Chairman
Economic Council of Canada,
April 1991

"...productivity cannot be considered in isolation. In particular, it cannot be separated from the employment (and unemployment) issue. Labour will willingly participate in ventures that recognize that productivity efforts must give due recognition to the impact on workers, as well as employment in general."

Shirley Carr, President
Canadian Labour Congress,
1991

**TOTAL FACTOR PRODUCTIVITY IN G-7 COUNTRIES:
COMMERCIAL SECTOR
(Average Annual Growth Rate)**



* 1967-73 for Canada and U.S.; and 1964-73 for France.
Source: OECD and Department of Finance

The need to adjust is not a new phenomenon — countries have become more prosperous by constantly shifting people and resources to their most productive uses. While much of this happens smoothly, there can be difficulties for individuals, communities and regions. This is particularly true today because of the rapid pace of change and the pervasive need for adjustment in our economy. Recognizing this, Canadian governments have established a broad net of programs to facilitate adjustment and to mitigate transitional costs for individual workers or communities. Adjustment policies, however, must help, not hinder, the transitions that workers, regions and industries must make to be competitive in the future.

Laying the Foundation

Since the beginning of its first mandate, the Government has worked to create an environment that encourages economic growth in Canada within the context of the changing global economy. When it introduced its *Agenda for Economic Renewal* in 1984, the Government set out its vision of how the Canadian economy could be put on a more solid, future-oriented, outward-looking footing.

Through the remainder of the decade, the Government pursued and added to the ideas and actions set out in the 1984 paper. Although much remains to be done, major steps have been taken, including substantial deregulation of many sectors of the economy (e.g. transportation and energy) to allow firms in these sectors to make decisions more responsive to rapidly changing markets. Significant reforms have been undertaken to the income and sales tax regimes to improve the competitiveness of Canadian firms, increase fairness and limit investment-distorting incentives. Major efforts have been taken to improve the ability of our human resource development programs to assist individuals in adjusting to change. Under the Labour Force Development Strategy the Government has shifted away from passive income support toward more active employment measures by redirecting

about \$800 million in unemployment insurance funding to skills training and other human resource initiatives.

Policies to encourage direct investment in Canada have brought important benefits as the improved investment performance of the late 1980s shows. For example: Crown corporations have been privatized where state ownership was no longer necessary to achieve a public policy purpose; the Canada-U.S. Free Trade Agreement (FTA) was negotiated to improve access to our most important export market; and a new grassroots approach to regional development has been adopted using decentralized agencies more attuned to local needs and conditions.

The *Agenda for Economic Renewal* also stresses the fundamental importance of using budgetary and monetary policy to create a stable macro-economic environment conducive to investment and productivity growth. This requires bringing the public debt under control. It also requires lowering inflation. Inflation erodes the real purchasing power of earnings and savings and, when allowed to become entrenched, inflation raises the cost of investment funds and worsens productivity performance. International experience shows that lower inflation, faster growth in productivity and improved living standards go hand in hand.

Many observers suggest that a lower Canadian dollar would solve Canada's competitiveness problem. However, the record of the late 1970s and early 1980s shows that there are no quick fixes. When the fundamental inflation problem is not dealt with, gains from a lower dollar tend to be eroded by a vicious circle of rising costs, rising inflation and rising uncertainty. These factors work against improved competitiveness by discouraging investment and productivity, and creating pressures for further depreciation of the dollar.

Steps have been taken to achieve the goal of price stability — the key to long-term employment stability (a stable and productive economy is essential for stable and high levels of employment). The 1991 budget spells out the Government's commitment to lower inflation and sets out a series of targets to

help ease the transition to lower inflation. The ultimate target is for inflation to fall to 2 percent by the end of 1995. The 1991 budget also takes further fiscal actions to eliminate new federal borrowing in financial markets after 1993-94. To help achieve these deficit targets, mandatory spending limits will be legislated. The beneficial effect of these steps has yet to be felt, but should be evident within the next two years.

At the same time, the Government of Canada has begun the important process of putting the principles of **sustainable development** into practice, recognizing that growth based upon the environmental compatibility of industrial products and processes is not only possible, but essential if we are to maintain or improve our quality of life. Through the December 1990 *Green Plan*, an ambitious agenda has been set to change the way we make decisions that affect the economy and the environment.

Sustainable development will require a change in economic behaviour at *all* levels of society. Businesses, for example, must closely examine their operations from a life-cycle perspective to ensure they are using energy and natural resources efficiently, and that their products and processes do not pollute the environment.

Equally profound from a Canadian perspective is the potential impact of environmental regulations on trade and investment patterns. For example, the growing requirement by many U.S. jurisdictions for newsprint to contain significant quantities of recycled fibre will affect the method of manufacture in Canada of products serving U.S. consumers — Canada's major export market.

The Key Elements of Canada's Future Prosperity

The Government of Canada believes that the 1990s can be a time of opportunity for Canadians — an opportunity to use this period of fundamental constitutional reform to improve our ability to compete in the global marketplace.

The key elements of prosperity on which we are seeking your advice and participation are generally regarded as the key contributors to national productivity and are areas where Canada is experiencing difficulties relative to our competitors. We believe our ability to address these issues in a coherent and systematic manner will determine our future economic success. Progress will not come quickly, nor will it come through grandiose schemes or solutions imposed by governments. Governments clearly have a role to play in the process, but too much government direction and costly new burdens for the Canadian taxpayer would do more harm than good. Progress will come through the cumulative impact of a large number of diverse changes, changes made possible by the deliberate investment of time, money and energy by many individuals, organizations and firms. Indeed, given the complexity and wide variety of the initiatives that are needed, unless those outside government take on a major responsibility for the changes required, we will not succeed.

Central to our prosperity is the issue of learning. Developing a well educated, skilled and adaptable work force is essential. All Canadian workers must be in a position to adapt to the new technologies needed to supply high quality goods and services to increasingly demanding markets — the basis for interesting, high-wage jobs. The challenge, described in the second chapter of this paper, is to build a system of lifelong learning that provides all Canadians with relevant skills. The Government of Canada has released a more detailed discussion paper, entitled *Learning Well ... Living Well*, to spur a national dialogue on this crucial issue.

"Sustainable development is not simply a matter of environmental policy. It is a recognition that if we continue human activities in their current direction, we will lose not only our environmental quality — but we will lose our economic progress as well."

Dr. David Johnston,
Former Chair,
National Round Table on the
Environment and the Economy,
1990

"The danger Canada faces is not so much that it will be undermined by developing countries where labour is less expensive, but rather that it will be overtaken by countries where technology is more advanced."

Richard Le Hir,
Vice President and
Director General, Quebec
Manufacturers' Association,
quoted in *La Presse*, Montreal,
May 14, 1991

The other key elements of Canada's prosperity discussed in this paper are:

Science and Technology — Research, innovation and technological adaptation are keys to success for companies in the global marketplace. The challenge is to find new approaches to improve Canada's performance in translating new scientific and technological knowledge into high quality products at internationally competitive prices.

Financing Investment — Investment capital is critical for sustained growth in productivity and living standards. The challenge is to ensure that we effectively link savers and investors to provide the funding we will need to finance a dynamic, growth-oriented economy.

A Competitive Domestic Market — Our long-term productivity, and the competitiveness of our firms, depend on coherent and coordinated domestic policies that allow Canadian human, physical and financial resources to be applied effectively. The challenge is to develop a more competitive and demanding Canadian marketplace so that Canadian firms can strengthen their ability to survive and compete both at home and abroad.

Trade — The elements mentioned above are directed at building our capacity to compete in international markets. However, the main source of incremental growth in our economy must come from making the most of our improved competitive position. Therefore, in response to globalization trends in industry and to the integration of domestic and international policies, the challenge is to improve access to foreign markets.

Working Together to Build Prosperity

Learning and these building blocks of competitiveness will form the basis of a series of consultations among Canadians. But to cement these blocks together, some mortar is necessary. The willingness of Canadians to work together in a wide range of partnerships — within and between firms; between management and labour; among all levels of government (federal, provincial, territorial and municipal); and between the public and private sectors — will serve as this mortar.

Making significant progress on each of the key elements of prosperity also requires that we work together to identify common objectives. This is not just a matter of business, the interests and concerns of all elements of society are at stake — the students in our educational systems and those who teach them; consumers; workers, unions and managers; scientists and researchers and those who make use of their findings; and government officials and those whose taxes support government investment in key services and public infrastructure.

Everyone involved (the stakeholders in Canada's future prosperity) needs to recognize that we are all in this together, and agree on where we want to go and how we are going to get there. We must come to recognize our need for new partnerships if we are to make progress. For this, a dialogue of national dimensions, focusing upon how to use our natural strengths to best advantage in the rapidly changing world marketplace, is needed.

The chapters that follow discuss the importance of learning and of the other central factors of competitiveness that we have identified and outline a number of the key issues to be addressed during the consultative process.

"...the growing trend for Canadians to do their shopping across the border represents a fundamental, long term change in the Canadian retail marketplace. Canadian retailers have always faced challenging competition from domestic rivals; they are now struggling with the need to be internationally competitive."

Retail Council of Canada,
1991

LEARNING FOR THE FUTURE:

PROSPERITY THROUGH PEOPLE

The base of any national economy is its people. Canada's prosperity starts with Canadians, our skills and knowledge and the way we work together to produce goods and provide services. If we are to grow as a nation, we must grow as individuals, maximizing the full potential of all our citizens. We must build on our past performance so that *all* Canadians possess the basic skills necessary to participate in our society and more Canadians than ever acquire advanced or specialized skills.

The following chapter discusses the challenges we face in creating both a system of lifelong learning and a learning culture, where all Canadians are encouraged to achieve their full potential.

ADJUSTING TO NEW REALITIES

AN INNOVATIVE AND MORE PRODUCTIVE ECONOMY IS ULTIMATELY a function of the skills and creativity of people. Technology is developed by people, and it can be exploited fully only if used properly by skilled individuals. Many firms have learned through expensive and painful experiences that new technologies cannot simply be adopted in isolation as a quick fix or add-on to improve the productivity and flexibility of their operations. The potential gains technology offer can be captured only with a high quality work force, and an innovative approach to managing the workplace that promotes creativity and initiative among employees. A highly qualified work force is, therefore, essential to ensure that all Canadians have better employment opportunities, more employment security and higher wages.

"In the '80s, we attempted to automate in order to achieve productivity, but we were wrong. The fundamental error was believing we could use electronics and machines to pave over processes that were fundamentally flawed and work cultures that were disappointingly unproductive...we found that the human element was, in fact, the fountainhead of creativity and productivity that we were searching for."

Dennis K. Williams,
Chairman and Chief Executive Officer
General Electric Canada Inc.,
1990

"Unfortunately, too many people are entering the labour force with insufficient skills to compete in today's complex economy. The result is frustration for these workers who cannot find work or employment and for employers who cannot find the skilled labour they require. The economy is also adversely affected of course through foregone economic output."

Paul Bugden, Economic
Council of Newfoundland and
Labrador, 1990

A strong argument can be made that Canada's wealth in resources, both material and human, has led to complacency about the importance of skilled and innovative workers. In the past, human resources have been treated as a relatively free good by industry, and investment in people has been seen as a public responsibility. This attitude is now being challenged by the wealth of evidence that connects a highly skilled work force to high wages and a prosperous economy.

The message is clear: to succeed as a nation, we must succeed as individuals. Prosperity starts with individuals, their skills and knowledge, and the partnerships they create. If we wish to maintain our prosperity, we must build on our past performance in education and continue to invest in the development of our people to help them produce valuable, high quality goods and services for markets at home and abroad. We face the challenge of:

- equipping all Canadians with the basic skills necessary for lifelong learning; and
- encouraging more Canadians than ever to acquire advanced or specialized skills, especially (as discussed in chapter 3) those relating to applied science and technology (S&T).

Working together, we must build lifelong learning systems that will enable individuals to develop their skills to the maximum.

The Job Market and Economic and Regional Adjustment

The demand for skilled labour is increasing, driven by rapid technological change, the rapid growth of information and the changing structure of the economy. Over half of the new jobs in this decade will require more than 12 years of education and training; yet some 60 percent of today's work force possess no more than a high school education. This is a particularly acute problem considering that two thirds of those who will be in the labour force in the year 2005 are already in the work force today. Given our declining birth rate, employers will be less able to rely on young workers, newly graduated from schools, to meet their skills requirements.

This phenomenon is not unique to Canada. The demand for educated, skilled and innovative personnel is increasing in all sectors worldwide as national economies upgrade their technological base. Increasingly, countries will be competing with each other to attract and retain skilled people.

Also, most of these new jobs will be in services. Today, 71 percent of workers are employed in services, compared to 60 percent in 1967. Within the service sector, business-services — which includes high skilled, high paying jobs such as scientific and engineering services and management consulting — experienced the fastest growth in the period 1967–1988, averaging annual employment gains of 7.3 percent.

Another feature of the job market is the aspect of constant change. According to the Economic Council of Canada, one out of three workers experiences a change of job or a period of unemployment in a given year. In this environment, highly educated and skilled workers have a greater chance of securing well paying jobs and have a greater ability of adjusting to change when the need arises. Individuals will increasingly need to invest in the development of their skills to ensure their future prosperity and security.

These new realities will also require that firms promote and facilitate internal adjustment through training and skills upgrading, and that they develop alternatives to cyclically caused layoffs. Employment planning must become a more central part of business planning, and employment adjustment part of the industrial restructuring process. Just as with price stability, so employment stability requires a determined and consistent effort on the part of all partners — governments, business and labour. New partnerships, from the shop floor to the national level, are required to achieve these objectives.

The impact of change is not borne equally by all members of our society, those least able to adapt often bear the greatest burden. Some Canadians will require support to adjust. Older workers, low-skilled workers and workers in single-industry communities often experience greater difficulties moving from one job to another. Further, some of our regions offer few alternative opportunities when their traditional sources of jobs go into competitive decline. Education, training,

regional programs and assistance in finding new employment opportunities are essential to ensure that Canadians have the opportunity to participate fully in the economy. We must take particular care to ensure that our regional programs address, not only the symptoms, but also the underlying causes of economic decline.

A determined and consistent effort on the part of all partners — governments, business and labour — is required to facilitate adjustment and achieve employment stability.

Issues for Discussion

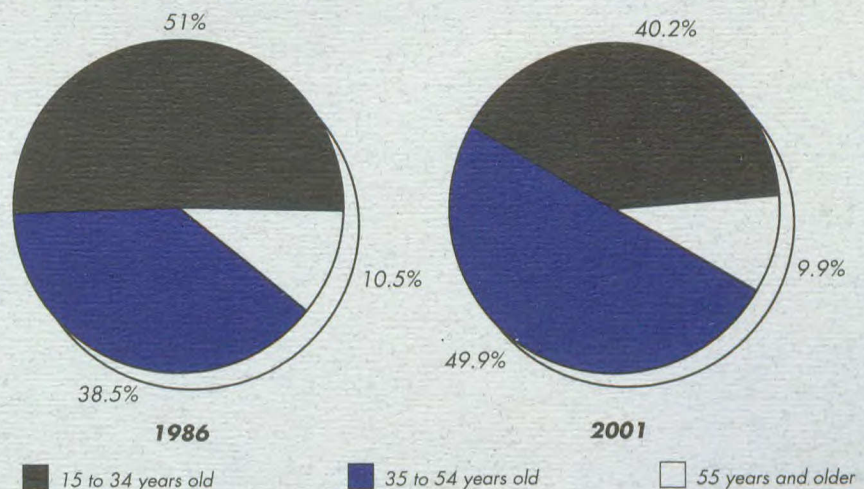
How can management and labour work together to facilitate work force adjustment through better training and skills upgrading in firms and longer-term approaches to the use and development of their work forces?

How can governments work together and their policies be improved in the areas of regional development, restructuring, and training to foster industrial competitiveness and to facilitate adjustment.

“The rapidity of the changes requires developmental skills — skills that reinforce continuous learning, which help workers adjust to new technology, which provide workers with more flexibility in moving to new jobs, and which mean greater worker input and influence over what is happening around us.”

Labour Perspective on Training — Canadian Labour Market and Productivity Centre Task Force on Human Resource Planning, 1990

THE MIDDLE AGING OF THE LABOUR FORCE



Source: Employment and Immigration Canada, 1990

"The average public school student watches 1 040 hours of television per year compared with some 900 hours of formal instruction."

Mark Holmes in *To Be Our Best: Learning for the Future*, Corporate-Higher Education Forum, 1991

TOTAL EDUCATIONAL EXPENDITURE AS A PERCENTAGE OF GDP, 1987

Denmark	7.57
Netherlands	7.33
Canada	7.12
France*	6.59
United States*	6.44
Japan*	6.38
Germany	4.41

* 1986 data.
Source: Education in OECD Countries 1987-88: A Compendium of Statistical Information. Paris: OECD, 1990 special edition

In 1975, the "hazard" index derived by the Economic Council of Canada stood at 119, which indicates that the unemployment rate for the poorly educated was 19 percent above the national level in that year. It stood at 148 in 1989.

Challenges to our Learning System

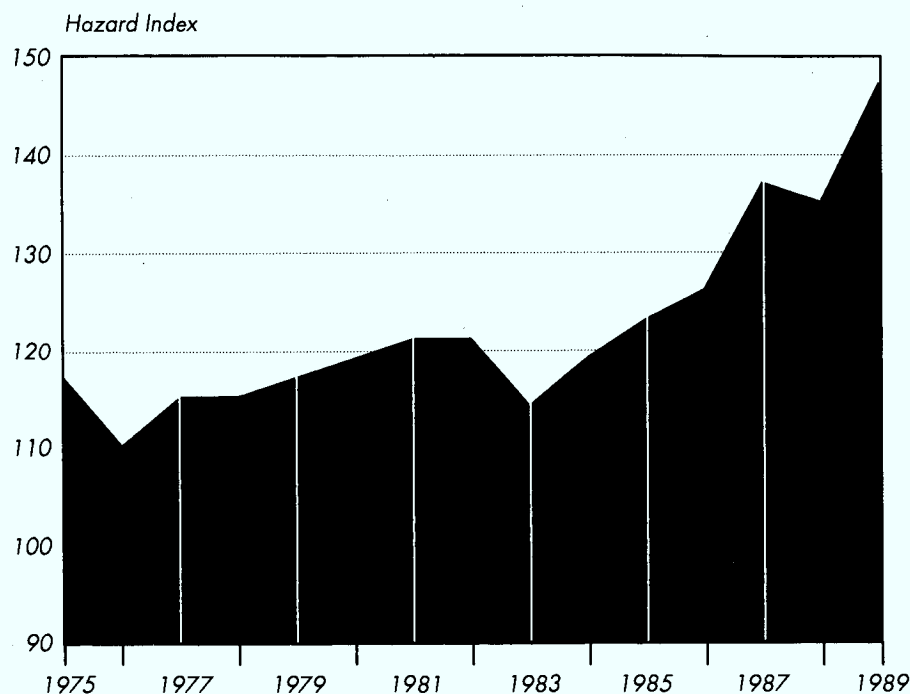
Compounding the problem of a shrinking labour supply is the fact that many workers, including those just entering the labour force, lack the basic capabilities required for the retraining and continuous learning that will be essential throughout their working lives.

Despite high participation rates and high levels of funding, some of the results of our educational systems have been disappointing. Our current educational systems are facing major challenges in areas such as high-school drop-outs, literacy and numeracy skills and vocational training. Some 38 percent of Canadians have varying degrees of difficulty with commonplace reading tasks. Among high school graduates, approximately 30 percent cannot meet most everyday reading demands. A similar percentage lacks the arithmetic skills to follow a simple sequence of numerical operations. Moreover, nearly one third of young Canadians drop out without even finishing high school.

These problems in our educational systems help to maintain a pool of unemployed young people who not only lack employment skills, but also are difficult to train because they have never developed the necessary learning and communications skills. This is a particular problem for disadvantaged groups, such as Aboriginal people, which have greater proportions of people with less formal education. With fewer young people entering school today, we can ill afford to lose those we have or ignore the potential social consequences of a generation of young people ill equipped to face the challenges of the future.

In some countries, the transition from school to work is facilitated by a number of mechanisms, including cooperative education (programs involving a combination of institutional learning and on-the-job experience), career counselling, apprenticeship programs at the secondary-school level and close links between employers and educational institutions. In contrast, Canada does not have a well developed system to teach skills during

UNEMPLOYMENT "HAZARD" INDEX* FOR WORKERS WITH LESS THAN NINE YEARS' SCHOOLING, CANADA, 1975-89



* Unemployment rate for workers with less than nine years of schooling divided by the aggregate unemployment rate, multiplied by 100.
Source: Estimates by the Economic Council of Canada, based on data from Statistics Canada

the school-to-work transition period — school and work are effectively divorced.

Declining enrolments in trade and vocational programs have worsened the problem. Further, our apprenticeship programs have been unable to respond to employers' new and changing training needs. Course curricula have not kept pace with modern technologies that are becoming commonplace tools in traditional trades.

With public expenditures under constraint, post-secondary institutions face the major challenge of trying to expand private sources of revenue for university teaching and research. They also face the challenge of adapting curricula to the changes discussed in this paper. For example, there have been calls for newly graduated engineers and scientists to have a better understanding of general management, communications and international business skills, and for business graduates to have a better understanding of the management of technological innovation.

If we are to meet the demands of a technology-driven economy, and provide good employment opportunities for Canadians, we must upgrade our educational systems in terms of quality, relevance and responsiveness. Governments, educational institutions, industry, labour and parents must act together to ensure that our educational systems are providing students with the skills they will need to obtain good jobs

APPRENTICESHIP LEVELS IN SELECTED COUNTRIES, 1987

Country	Total Apprentices	Percent of civilian employment
Austria	245 000	7.4
Germany	1 800 000	7.1
United Kingdom	314 000	1.4
Canada	128 782	1.1
France	220 000	1.0
United States	340 000	0.3

Source: Report of the Canadian Labour Market and Productivity Centre Task Forces on the Labour Force Development Strategy, 1990

and earn a decent living. We need to explore how we could strengthen cooperative efforts, not only to ease the transition from school to work, but also to encourage young people to stay in school to complete their studies by providing them with meaningful work experiences.

The provinces have constitutional jurisdiction over all levels of education in Canada and, as such, they have a critical role to play in ensuring the relevance of our educational systems. All provinces are aware of the dimension of the challenge facing their educational systems and many have launched initiatives to address these issues. They are also working together through the Council of Ministers of Education to develop educational achievement measures, and through the Council of Science and Technology Ministers to develop human resources and promote a science culture.

The federal government also recognizes the importance to prosperity of a highly skilled work force, and the need for reform in our learning system. As announced in the *Speech from the Throne*, the federal government is issuing a companion discussion paper on learning, entitled *Learning Well ... Living Well*, to stimulate and focus discussion on the challenges facing our learning system. The Government recognizes that education is a provincial responsibility under the Constitution, but is also aware that Canadians are concerned about education, and would like to see a consensus developed on establishing Canada-wide goals that would guide the actions of all partners, including the federal government, over the next decade.

Skills training for the labour market and education are inextricably linked. Like education, skills training is a program area that should be delivered at a level that is close to industry and communities. As set out in *Shaping Canada's Future Together: Proposals*, the federal government is proposing a constitutional amendment to recognize that labour market training should be an area of exclusive provincial jurisdiction. At the same time, recognizing the importance of training to Canada's

"...Canada's education [sic] systems must meet two imperatives. The first is to ensure that basic levels of competency are universally held: all Canadians must have literacy and numeracy skills and, more generally, the analytical tools to 'navigate' in an information-based society. The second imperative is to pursue a standard of excellence through the development of highly educated individuals."

Economic Council of Canada,
Good Jobs, Bad Jobs, 1990

"The astounding explosion of knowledge, the globalization of many economic, social, and political activities, new multidisciplinary approaches to deal with complex problems, recognition of the arts and social sciences as essential aspects for solving present social problems, the increasingly complex nature of a multicultural Canada, and the legitimate demands for greater social equity — all speak to the need to re-examine university program offerings."

George Pedersen, "The Challenge for Universities," *Canada at Risk? Canadian Public Policy in the 1990s*, 1991

"Canadian industry spends less than half as much on training its employees as American industry does, a fifth as much as the Japanese and an eighth as much as the Germans."

Speech From the Throne, 1991

"The business community must ensure that the mainstream of the work force is productive and competitive. It is the responsibility of individual employers and employees to 'put business into training.'"

Report of the Focus 2000 Task Force on Education and Training, Executive Summary & Recommendations, Canadian Chamber of Commerce, 1989

In some industries, new approaches have been adopted to address the need to upgrade the skills of workers. For example, industry and labour have together established an Automotive Parts Sectoral Training Council to develop curricula and training programs, and to work with educational institutions to implement them. The curricula would be for both educational institutions and in-house training programs for employees.

competitiveness, leadership in the area of skills standards should be exercised jointly by federal and provincial governments.

The private sector can, and to a certain extent has started to, play an important role in improving our educational and training systems. Meeting these challenges will require the active collaboration of governments, industry, labour and educational institutions for many years to come.

Developing a Learning Culture in Canada

In past decades, Canadians expected to go to school, complete their education and then enter the work force. This era of front-end education and training is now over. With the pace of technological change increasing steadily as each year goes by, the skills that are being learned now, and in the future, will become obsolete at a pace more rapid than ever before. Training is characterized by a series of learning experiences that constantly update a person's knowledge base, and, in some cases, radically transform it. However, the need for continuous training is growing, and Canadian industry is not well prepared to meet this need. Strong labour force growth, reliance on immigration to remedy skill imbalances, and the large number of small businesses in Canada — that often do not have the flexibility and financial resources to provide training to their employees — have all contributed to the low level of formal training being carried out in this country.

For these historic reasons, Canada lacks a learning culture. Some Canadian managers still fail to recognize that investment in human resource development is just as important as investment in plants and equipment. Others recognize its importance, but fear losing this investment as employees change firms. A Statistics Canada survey found that only 31 percent of firms in Canada provide formal training for their employees. Private sector spending in Canada on education and training falls well behind that of our major competitors. Despite some

important efforts to improve business performance with respect to training, most business people still appear to view investment in the development of people as a primarily public responsibility, an attitude that is now coming to affect Canada's competitive prospects.

To meet the challenges of a technologically driven economy, we must not only upgrade the skills of our work force, we must also foster a lifelong learning culture to encourage the continuous learning needed in an environment of constant change. Canadian governments have traditionally concentrated their training efforts on people who were at the margins of the work force, and have viewed training of the employed as the responsibility of employers. Employers face the challenge of fulfilling this responsibility by developing a strong commitment to employee training and on-the-job learning. The new Canadian Labour Force Development Board, which brings together business, labour, social action groups and training providers, will play a major role in forging a consensus on training issues, particularly between business and labour, leading to more workplace training. Through training and support to find new employment opportunities, we can ensure that all Canadians have the opportunity to participate fully in the economy.

Canada's private sector needs to develop a commitment to training excellence to provide individuals with the learning and retraining opportunities they will need in an environment of constant change.

Issues for Discussion

Why does Canada's private sector training effort lag behind that displayed by the private sectors of our major trading partners? What actions can the private sector take to overcome this problem?

How can we ensure that the skills and knowledge of workers remain relevant to new and changing needs?

INNOVATING AND ADAPTING:

PEOPLE AND TECHNOLOGY

Technology is the knowledge and know-how that people apply to their work. Whether in the form of new equipment or a new technique, technology is developed by highly skilled people, and it can be exploited fully only if managed effectively, and if used properly by well trained people.

Innovation made possible through investments in S&T is fundamental to productivity growth. As an advanced nation, in a world in which prosperity is increasingly dependent on such investments, the real risk for Canada is to be outperformed by countries with sophisticated technical capabilities and highly paid, highly skilled workers.

The following chapter discusses the challenges of promoting the development of technology by Canadian researchers and encouraging more widespread and more productive use of new technologies in *all* parts of Canada.

THE IMPORTANCE OF SCIENCE AND TECHNOLOGY

TECHNOLOGY IS THE KNOWLEDGE AND KNOW-HOW THAT PEOPLE apply to their work — from the executive, to the production worker, to the office clerk. It can be embodied in equipment or in new methods and techniques. It may be developed within an organization, or obtained from outside sources. Sometimes it is the direct result of a major scientific breakthrough; and it may cause a large scale change in the way an organization operates. More often, however, it takes the form of incremental improvements that are applied by people in their everyday jobs. Technological change constantly tests the resilience and adaptability of all facets of society. Business, labour and governments therefore must work together to ensure that we capture its economic and social payoffs.

“Improvement in the material standard of living in any society is linked ultimately to growth in productivity. Rising productivity in modern industrial economies is increasingly dependent on continuous innovation. Today, innovation and improved technique depend primarily on the systematic application of science-based technology in all facets of the economy.”

Science and Technology, Innovation and National Prosperity: The Need for Canada to Change Course, National Advisory Board on Science and Technology, 1991

By generating new skills and knowledge and by broadening the opportunities available to individuals and companies, S&T can improve the ability of the economy to adjust to changing circumstances. Innovation made possible through S&T investments is fundamental to productivity growth. It is the basis for new or improved processes, products and services, and for the creation of high-quality jobs. Innovation can also improve the quality of life through better health care and environmentally friendly processes.

The power of S&T to establish market leadership, dramatically demonstrated by Sweden, Germany and Japan in fields such as automobiles, machinery and consumer electronics, is now broadly recognized by businesses and governments in many countries — not only in manufacturing and resource industries, but also in services such as banking and transportation.

Our future prosperity will depend on our ability to respond creatively to the opportunities and challenges posed by rapid change in fields such as information technologies, new materials, biotechnologies and telecommunications. Such technologies are forming the basis for the growth industries of the 1990s, contributing to the restructuring of industries and labour markets, and transforming the production systems used in companies of all sizes in all sectors. Technological

leadership is now the driving force behind a host of international business alliances. It is also a central theme for government policies in the United States, as well as for the formation of the single European market in 1992.

For Canada, these developments foreshadow a world in the 1990s and beyond that is very different from the one in which we achieved prominence as a prosperous nation. The level of our past investments in S&T suited a post-war economy in which resource wealth and the manufacture of basic goods served us well. It is clear that a major transition is in progress, and will intensify in the coming years. The real risk for Canada is to be outperformed by countries with sophisticated technical capabilities and highly paid, highly skilled workers.

As an advanced nation, rich in natural and human resources, we have many strengths on which to build. Research and development (R&D), and the application of new technology and marketing know-how, can enable us to manage and process our resources more efficiently and convert them into higher value products that will allow us to maintain high wages. In addition, Canada's resource companies have often led the world in adapting technology to solve specific problems. Some of our most successful high technology industries, such as remote sensing, arose from the need to

manage our resources better. Many business opportunities and new jobs are related directly to our resource industries.

Canadians have proven that they can create products and services that are second to none in the world in terms of quality, provided we are willing to focus on quality as managers, employees and consumers. We are our own first customer. Canada's reputation abroad starts with the standards we set for ourselves.

Canada's traditional sources of strength — the resource industries being the prime example — can increase their contribution to the economy through their role as both a market for, and producers of, advanced products and services.

Issue for Discussion

What specific actions and mechanisms would promote an enhanced role for traditional industries in the knowledge-based economy of the future?

Building Capability in Science and Technology

The Foundation: Research and Development

Much attention has been focused in recent years on Canada's spending on R&D. While the amount we invest in R&D is important, who makes those investments, and on what, are equally important. Because we rely on the private sector to create jobs, the private sector should take the lead in making such decisions. Private sector investments in R&D increased by about 6 percent in 1990. Between 1987 and 1990, some industries — pharmaceuticals, pulp and paper, and wood — doubled their R&D effort. The Conference Board of Canada projects further growth across various industries through 1995.

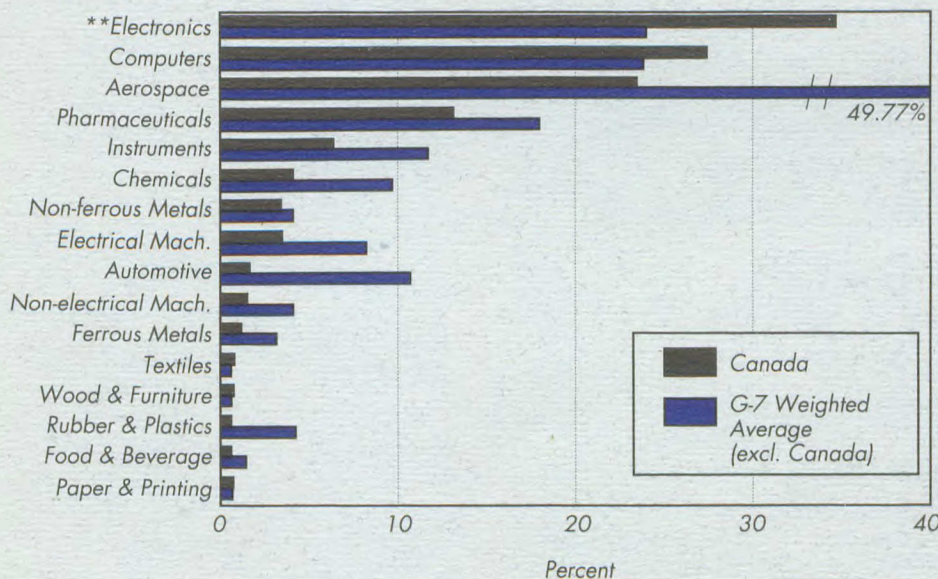
Still, industry's investment in R&D as a percentage of GDP declined to 0.74 percent in 1989 from 0.78 percent in 1986 — very low figures by industrialized country standards. While industrial structure, company size and foreign ownership appear to influence this performance, the fact remains

"Innovation must be defined broadly enough to encompass more than just the kind of technological advance that is embodied in new machinery and equipment. Most importantly, it must encompass developments in the enhancement of skills and know-how and in the organization and remuneration of work. Innovation in this broader sense is the essence of 'working smarter' in the knowledge-based economies of the information age."

Two Steps Forward: Human Resource Management in a High-Tech World, Economic Council of Canada, 1990

Sherritt Gordon Limited, a Canadian-owned company in Fort Saskatchewan, Alberta, has traditionally produced nickel and cobalt, specialty metal products such as the Canadian one dollar coin, and fertilizer products. In 1990 Sherritt launched WESTAIM, a five-year, \$140-million R&D program in advanced materials. WESTAIM combines Sherritt S&T with complementary technology from a variety of partners to create sophisticated products for tomorrow's markets, such as jet engines and electronic materials.

BUSINESS EXPENDITURE ON R&D AS A PERCENTAGE OF VALUE ADDED,* 1987



* Value added is approximated by sales minus the cost of material and service inputs.

** The manufacturing sectors shown accounted collectively for about 67 percent of Canadian business R&D expenditures in 1987. The order presented does not necessarily reflect the order of absolute sectoral expenditures on R&D. Source: OECD STAN data base; 1987 where available, otherwise most recent year

Over a 10-year period of R&D, INCO Limited has developed a new process for extracting ore that is both safer and more productive. INCO has developed special drills, explosives and machinery, including continuous loaders and belt benders (an automated truck is under development), that permit ore to be mined in slices from the bottom up. Several of these innovations have been successfully marketed by INCO to mining companies around the world.

"A system that can produce highly advanced technology may nevertheless fail to deliver economic and social benefits to society if there are constraints on the diffusion of new technology."

Kjell-Ölof Feldt, Former Swedish Minister of Finance and Chairman of the OECD's International Group of Experts on the Technology/Economy Programme, speaking at the International Policy Conference on Technology and the Global Economy, Montreal, February 1991

A recent series of in-depth interviews conducted by Industry, Science and Technology Canada with small and medium-sized companies reveals the main factors of success in the acquisition and implementation of technology. Management is at the top of the list; technology must be implemented in the framework of a strategic business plan that recognizes the far-reaching organizational effects. The skills base available to the firm, along with the ways in which skilled people are managed and trained, is a second key factor.

that, with a very few exceptions, Canadian industries, including resource sectors, invest proportionately less in R&D than their counterparts in other leading industrial nations. Meanwhile, our achievements in fields such as telecommunications, nuclear technology and medical science show that we can lead the world when we focus our efforts.

A number of major studies currently being undertaken, or recently released, by the Science Council of Canada, the Economic Council of Canada, the Monitor Company (in collaboration with Harvard University's Michael Porter) and others, will shed light on the reasons for Canada's successes and shortcomings in R&D. A critical issue to be addressed is the respective roles of governments and industry in fostering the innovative climate in which R&D can flourish.

Putting Technology to Work in the Firm

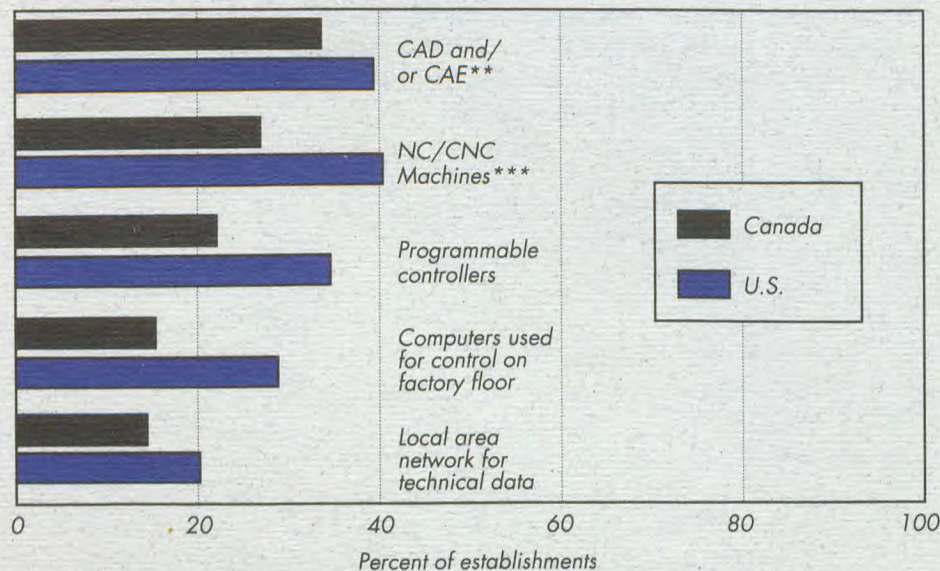
Those companies and countries that use technology for competitive advantage possess certain characteristics. They match judicious R&D investments with a sophisticated and well-organized system to diffuse technology

to users. They ensure managers and workers alike are equipped and oriented to use technology to an advantage. Also, they put in place policies and mechanisms to ease workers' adjustment to new technology. There is currently a general trend in industrialized countries toward policies that support technology management and use. This is an area in which managers, unions, workers, educators and governments share responsibility.

Although very few firms in Canada (only 1 700 of more than 40 000 manufacturing firms) do R&D, virtually all acquire technology from external sources, whether it is in the form of a computer, a piece of production equipment, an inventory control system, a licence to manufacture a particular product, or the know-how vested in skilled employees.

Generally, the extent of usage of new technologies by Canadian firms appears to be lower than in other countries. A 1989 Statistics Canada survey found that fewer than half of the manufacturing companies responding had implemented one or more of 22 leading manufacturing technologies. Moreover, these companies lag behind their

PERCENTAGE OF MANUFACTURING ESTABLISHMENTS IN FIVE INDUSTRIES* USING SELECTED TECHNOLOGIES, 1988



* Fabricated metal products, industrial machinery and equipment, electronic and other electric equipment, transportation equipment, and instruments and related products.
 ** Computer-aided design and/or computer-aided engineering.
 *** Numerically controlled/Computer numerically controlled.
 Source: Statistics Canada

counterparts in the United States, a country whose leaders are seriously concerned about their nation's performance in the commercialization and application of technology.

Difficulties in finding and applying technology have been particularly acute for small and medium-sized companies, which often lack technical resources. While such firms tend to rely on local and regional support systems, best practice technology is often available only from sources elsewhere in Canada or in other countries. As a relatively small economy, lacking critical mass in S&T in some regions, it is important that we strengthen our interprovincial and international linkages to make it easier for companies to draw on resources from outside their immediate area. The Welding Institute of Canada and the Canadian Plastics Institute are examples of organizations that perform this function.

Highly Qualified Personnel: Matching Supply and Demand

Maintaining a pool of highly skilled people, who can perform research and adapt new knowledge to products, processes and production systems, will be a particular challenge for Canada.

The number of research scientists and engineers in Canada (4.5 per thousand members of the work force) is well below that of our key international competitors, particularly Japan (8.1 per thousand). The low level of university and college enrolment in engineering and the sciences and technology appears to be based upon public attitudes that undervalue these fields as career options, particularly for women.

Increasing Canadian investments in S&T beyond their current low levels would drive up demand for highly skilled people. Current forecasts indicate that unless enrolments and training programs increase, companies could face severe shortages of scientists, engineers, technicians and technologists, particularly in key fields of advanced technology. Among other things, it is very important that educational institutions, individuals and parents

receive and respond to clear signals about future career opportunities. In addition, we will need to ensure that we have the facilities to educate and train such people.

Staying competitive with other industrialized nations will require that Canada increase its investments in creating, managing and using technology. Building innovative capabilities will require focused strategies that bring together industry, labour, universities and governments. Special emphasis is needed on investment in industrial R&D, on the acquisition of best practice technology, especially by small and medium-sized firms, and on the supply and employment of highly skilled people.

Issues for Discussion

What specific actions might boost the performance of firms of all sizes in R&D and in the acquisition, adoption, and implementation of best practice technology? How might business, educational institutions, labour and governments work together to strengthen the system for the commercialization and diffusion of technology in Canada?

What additional actions might be taken to encourage students to enrol in the sciences, engineering and technology and to encourage firms to create attractive career opportunities for these skilled people?

What international S&T partnerships or other activities based on domestic priorities would help us stay current with world-wide developments, participate in international industrial technology development projects and gain access to technology created in other countries?

Women account for over 50 percent of total university enrolment but only 32 percent of all natural science and engineering undergraduates; their representation in technology and technician courses at the community college level is even lower, only 21 percent.

Source: Statistics Canada

Four Canadian universities — Waterloo, Victoria, Simon Fraser and Sherbrooke — recently joined forces in a three-year pilot program to place senior Canadian science and engineering co-op students in Japanese companies. The program will develop a pool of young Canadian engineers and scientists with practical experience in Japanese industrial engineering practices and research related to Canadian industrial needs.

Pelorus Navigation Systems of Calgary initiated a three-pronged strategy for the development of its technological capabilities — acquisitions, strategic alliances and R&D. Today the company produces landing systems for airports in North America, Europe, Southeast Asia and the South Pacific. The firm recognized that to be competitive it needed to expand its technology base, strengthen its financial muscle and increase its production facilities. Pelorus increased its own R&D efforts and acquired a Norwegian company that owned the rights to technology that Pelorus required. It also formed strategic alliances with aerospace companies in Europe, the U.S. and Australia to gain access to new technologies and markets.

“We must meet the challenge of global competition and difficult economic times by constantly restructuring with the aim of reducing costs and increasing productivity. However, we will not cut expenditures on R&D or on training to reduce costs. These expenditures are the key to our increased productivity; they are our investment in the future of ABB.”

Peter Janson, President and Chief Executive Officer, ABB Canada, addressing his senior management during budget preparation, Montreal, November 1990

International Strategies

As a country with a population of some 27 million in a world of over five billion, Canada will obviously continue to rely on foreign sources for much of its technology. However, actions by other countries aimed at protecting a lead in advanced technology industries are causing international frictions that could constrain Canada's access to new technology. At the same time, technology development and transfer increasingly are carried on through international collaboration, including leading-edge industrial projects. Prudent strategies based on domestic priorities can help Canadian firms keep pace with developments outside Canada, participate in international technology projects and secure access to new knowledge and techniques.

Improving Public Sector Effectiveness

Governments in Canada are major performers and supporters of scientific and technological activity. The university research councils, federal and provincial tax incentives, and various other programs support and encourage university and private sector R&D. As customers (often the first) for new products and services, governments can also provide a real stimulus to technology development through procurement.

For 1991, Statistics Canada estimates that \$9.7 billion will be spent on R&D in Canada. Of this, some \$2.8 billion is to be directly funded by the federal government and \$700 million provincially funded. The higher education sector will spend \$2.5 billion, most of which will be provided by federal or provincial governments.

Some 55 percent of the federal funding is for work performed in-house. In many fields, government laboratories are the main performers of research. Various steps

have been taken in recent years to improve the relationship between this research and industrial competitiveness. These include increased contracting-out, incentives for laboratories to perform research for industry, and the establishment of advisory boards. Nonetheless, questions remain about whether the funds are being expended to maximum advantage.

Governments also play a key role through a wide range of policies in setting the climate in which S&T investment decisions are made. Economic policies, patent legislation, environmental policy, telecommunications regulations and product standards are examples. Policies promoting the use of university research funding for joint programs with industry can also stimulate private sector investment.

Governments also help provide the infrastructure through which technology is diffused throughout the economy. This infrastructure includes laboratories, technology centres, technical and business information networks, standards organizations, patent offices, and communications facilities. Maintaining and improving this infrastructure will be an important challenge for both the private and public sectors.

Business groups continue to emphasize the importance of making the S&T activities of government more relevant to their needs.

Issues for Discussion

What could governments do to make their own S&T activities more effective in building Canada's technological capabilities?

What government-controlled constraints on private sector R&D investments and the diffusion of technology remain?

FINANCING GROWTH:

THE NEED FOR INVESTMENT CAPITAL

Good ideas remain only that if they are not translated into reality through capital investment. It is through such investment that we put in place modern equipment and techniques that embody state-of-the-art knowledge. New investment is, therefore, critical for sustained growth in our productivity and living standards.

This chapter explores the challenges we face in financing our future investments.

THE NEED FOR INVESTMENT CAPITAL

INVESTMENT CAPITAL IS CRITICAL FOR SUSTAINED GROWTH IN productivity and living standards. More investment translates into an expanding economy with more and better jobs.

In the information society, as world capital markets become more integrated and domestic barriers to investment fall, investors are able to move large amounts of capital rapidly around the globe, increasing competition for investment funds. In order to obtain sufficient capital, the Canadian economy must have an attractive investment climate, including a tax regime that is in line with those of our international competitors.

A Balanced and Appropriate Tax Regime

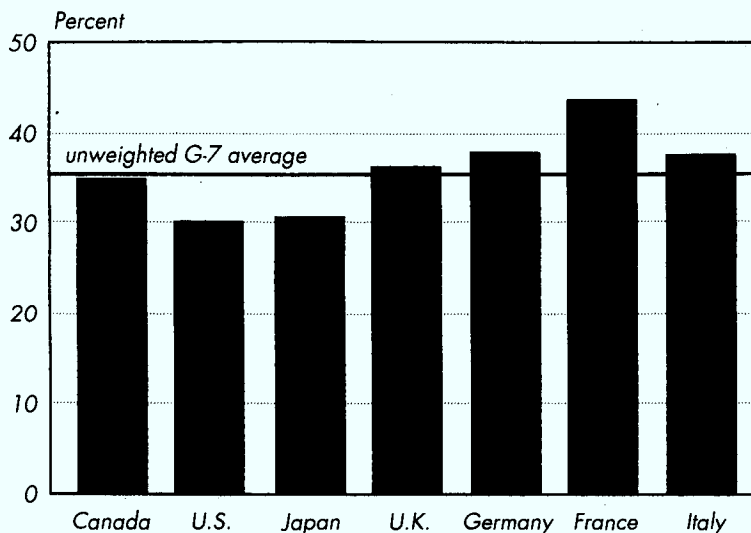
The tax system (personal, corporate, sales and excise taxes) is important for sustaining a stable environment conducive to investment. The effectiveness of our tax systems, at all levels of government, in promoting

Canada's competitiveness is related to the overall level of taxation and the mix of its individual components.

Apart from the management of its own fiscal position and the promotion of efficient markets, a major focus of federal government efforts to improve Canada's competitiveness has been the reform of the federal tax system. Over the last few years this reform has helped to broaden the tax base, lower federal statutory tax rates and minimize the use of market-distorting incentives. With reform, Canada's tax structure is now more in line with those of our competitors, and more oriented toward rewarding success rather than effort. The replacement of the Manufacturers' Sales Tax (MST) with the Goods and Services Tax (GST) — a value-added tax common to all G-7 countries except the U.S. — has removed the tax penalties imposed on domestic manufacturers, and has improved the competitive position of Canadian exporters. Further, tax reform has provided the federal government with a more secure and stable source of revenue to meet its spending needs and to reduce the deficit.

Despite the significant reform measures through which the Government has sought to improve the Canadian tax system, there may still be areas that could be adjusted to reduce impediments to the efficient operation of domestic capital markets. For example, the existing incentives to support R&D will be examined to determine whether they can be made more effective and easier to administer. It will also be important to identify areas where federal and provincial tax structures could be harmonized.

**TOTAL TAX REVENUES FOR ALL LEVELS OF GOVERNMENT
IN G-7 COUNTRIES: 1989
(as a percentage of GDP)**



Source: OECD

Canada's tax system must address a wide variety of objectives. It must provide sufficient revenue to support needed public programs and services, be fair and equitable, pursue the goal of promoting international competitiveness, encourage investment in business ventures and be relatively uniform in its application at both the federal and provincial levels.

Issues for Discussion

How can we ensure that the Canadian tax system does not contain impediments to competitiveness?

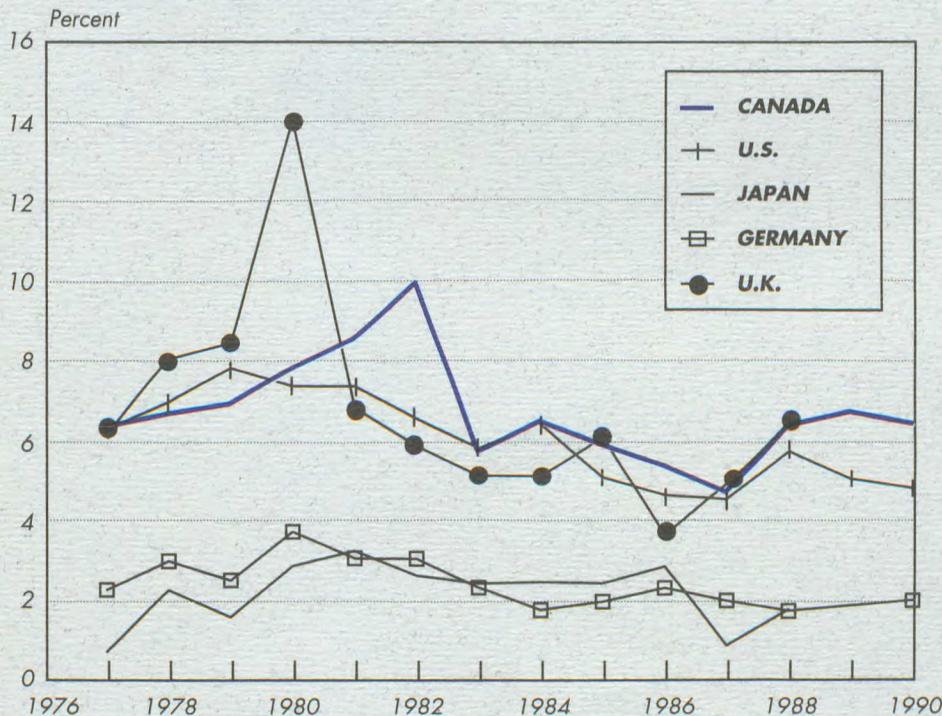
How can better tax harmony be achieved among federal and provincial tax structures?

Enhancing the Cost and Availability of Investment Funds

The cost of funds is also an important determinant of investment decisions. If the cost of funds is high, investment will be lower than otherwise and is more likely to be focused upon achieving short term gains at the expense of more strategic, long term goals. This is because a higher cost of funds tends to exclude from consideration projects with long and risky pay-back periods. Companies with access to low cost funds are able to concentrate more on long term strategies such as improving productivity performance, lowering costs, developing new products and expanding market share.

Both Canada and the United States have experienced relatively high costs of funds compared to major competitors such as Germany and Japan, and this has been a

REAL COST OF FUNDS INTERNATIONAL COMPARISON



Source: Department of Finance

The real (inflation-adjusted) cost of funds comprises the costs of both debt and equity financing. Equity financing includes share issues and retained earnings; the latter being the more important of the two. The major differences in cost of funds in different countries appears to stem from investment risk.

"The high cost of capital for research and development in Canada is coincident with the comparatively low rate of industrial investment in this area."

Final Report of the Committee on the Financing of Industrial Innovation, National Advisory Board on Science and Technology, 1991

"...Canada's traditional investor culture is not favourably disposed to financing soft-asset, knowledge-based companies..."

Brief on Focus 2000 Report Canadian Chamber of Commerce

source of competitive disadvantage. An important factor leading to the lower cost of funds in Germany and Japan is that investment in their economies has been less risky, partly due to greater economic stability and lower inflation. Government initiatives to control budgetary deficits, reduce inflationary pressures and increase savings relative to consumption will all help to lower the cost of funds, but it will take some time before these measures are fully effective.

In addition to the cost of funds, the availability of capital, particularly equity capital, is an important issue affecting some sectors of the Canadian economy. This issue has been raised repeatedly by small businesses and entrepreneurs in high risk (often high technology) sectors. Many reports suggest that projects and companies have difficulty getting access to the capital they require. For example, it has been suggested that venture capital pools are functioning less as venture funds as they pay more attention to traditional sectors and invest little in high technology areas.

Further, there appears to be a knowledge gap between financial institutions and entrepreneurs. While institutions have the expertise to evaluate traditional types of investments, particularly in the resource sectors, they often lack similar expertise in the high technology sectors. On the other side of the coin, entrepreneurs often do not approach financial institutions in the right way, that is, with the planning, financial and market information required to support their requests for funds.

Canada needs to encourage productivity-enhancing investments with relatively longer time horizons to carry out R&D and to take advantage of opportunities afforded by the FTA and other trade liberalization initiatives.

Issue for Discussion

What measures should be considered to lower the cost of funds in Canada in a sustainable way?

Canada needs a diverse system of business financing that provides greater access to capital for business investment and expansion.

Issues for Discussion

What changes to the Canadian financial sector would enhance the supply of capital, while ensuring that scarce financial resources are efficiently allocated?

What steps should be taken to reduce the apparent knowledge gap between financial institutions and their business customers?

Providing Competitive Financial Services

Efficient and secure financial institutions facilitate the flow of funds from lenders to borrowers and from savers to investors. To further improve Canadian financial markets, which are among the most efficient in the world, the federal government, in September 1990, launched a comprehensive program of reform for federally regulated financial institutions. The reforms include measures that will benefit both the users and providers of financial services. For example, the creation of specialized financing corporations will improve the ability of Canada's financial system to deliver venture capital.

While regulation is a necessary feature of any financial system, it has a cost. In Canada, the jurisdictions of the federal and provincial regulatory authorities overlap, creating the risk of excessive costs of compliance for our financial institutions. Failure to resolve jurisdictional issues risks placing our users of financial services and the institutions themselves at a disadvantage internationally, particularly when similar issues are being resolved in other areas, such as the European Community.

The Government's constitutional proposals address a number of these concerns by proposing a greater federal-provincial effort to reduce overlap and duplication, particularly in the area of trust company regulation, and to better coordinate, among governments, approaches to securities regulation and international negotiation and standards-setting involving securities matters.

Our regulatory framework must promote the provision of the most efficient financial services possible.

Issue for Discussion

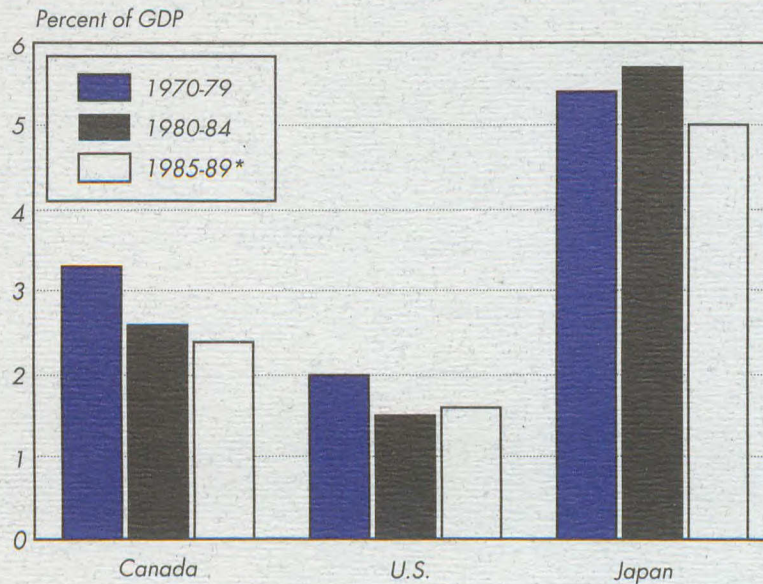
How can the costs of regulatory overlap best be minimized?

Financing Public Infrastructure

Investment by both the private and public sectors in physical capital and infrastructure is critical to sustained growth in productivity and higher living standards. Because there is a direct relationship between physical capital investment by the private sector and infrastructure investment (most of which is provided by provincial and municipal governments in Canada), attention must be paid to both in order to achieve enhanced productivity growth. For example, a well developed transportation system enables business to move goods and services to markets more efficiently; and a technologically superior communications infrastructure helps firms better serve their world-wide clientele.

Strong investment by the private sector over the last six years has not been matched by similar public sector investments. Some observers have pointed to this fact as a partial explanation for our lagging productivity growth. In the U.S., public capital investment, as a share of GDP, has been weaker, but Japan, a high productivity growth country, has devoted considerable resources to this type of investment.

**GOVERNMENT FIXED CAPITAL INVESTMENT
(1970 to 1989)**



* Data for U.S. available to 1988.
Source: OECD

While investment in core public infrastructure can enhance productivity performance, infrastructure improvement and expansion can be very expensive. Further, because governments rarely charge the full cost of the provision of infrastructure to those using it, it is often difficult to know whether the pattern of usage reflects society's real requirements; or simply the demands of individuals and firms making use of a relatively *free good*. Taking a more market-based approach to the prices governments charge for the use of public infrastructure could play a valuable role in helping to ensure that governments are providing the mix and quality of infrastructure goods and services that Canadians require. Cost recovery policies and initiatives such as the transfer of airports to local authorities are some of the means currently being undertaken to ensure that infrastructure investments are responsive to both public and private sector needs.

Having a strong and up-to-date system of public infrastructure is essential if an economy is to function efficiently.

Issue for Discussion

Given the importance of public infrastructure to our productivity potential, how might infrastructure investment priorities be set and how should they be financed, given the areas of responsibility and the fiscal constraints faced by all levels of government?

A COMPETITIVE DOMESTIC MARKET:

GETTING OUR OWN HOUSE IN ORDER

The ability of Canadians to compete abroad is determined at home. Many Canadians can cite examples of laws and regulations that they believe have thwarted their best efforts to become more competitive. Often, these rules have been enacted to achieve important goals, but it is clear that the cumulative impact of various laws and regulations can lead to counter-productive and contradictory results.

This chapter explores whether the existing rules governing the Canadian marketplace still make sense in today's changing world, or whether desirable goals can be achieved in more innovative ways, less in conflict with the goal of a competitive economy.

THE FRAMEWORK FOR COMPETITIVE SUCCESS

CANADA'S LONG TERM PRODUCTIVITY AND THE COMPETITIVENESS of Canadian-based firms depend on complementary and coherent laws and regulations governing the domestic marketplace, so that Canadian human, physical and financial resources are applied to best effect. That means that framework and regulatory policies must meet their objectives, while at the same time enabling firms to compete successfully at home and abroad. It means governments should provide public services in the most efficient manner possible. It also means we must finally eliminate the self-inflicted wound of interprovincial barriers to trade — barriers that put Canadian consumers at a disadvantage, and limit the ability of Canadian business to compete both at home and abroad.

There are a number of framework policies critical to meeting both our domestic and international competitive requirements. They are as follows:

Competition policy is a key element of the policy framework for a dynamic and competitive market economy. By promoting a healthy rivalry among firms, competition enhances choices for consumers and strengthens pressures that lead to continuing innovation in the provision of goods and services. Canada's competition legislation, the *Competition Act*, was substantially modernized in 1986. The legislation incorporates a set of criminal and non-criminal provisions to deal with business practices and transactions (including mergers) that may harm competition. It provides special treatment for export consortia, joint ventures and specialization agreements that allow Canadian firms to collaborate in ways that help them compete on a more equal footing with large foreign companies. As

trade liberalization and globalization progress and domestic markets become more open to competition from foreign goods and services, we will need to examine constantly what level of concentration is appropriate in particular Canadian markets to enable industries to compete successfully internationally and to maintain a strong rivalry in domestic markets.

Incorporation and bankruptcy legislation influences the operating environment for Canadian businesses. Together, the *Canada Business Corporations Act* and the *Bankruptcy Act* govern the creation and dissolution of corporations; the relationships among shareholders, between management and shareholders, and between debtors and creditors; and in the case of bankruptcy, the distribution of the insolvent company's assets. The Government has undertaken a review of these acts to ensure that they continue to support efforts by Canadian firms to compete successfully in markets around the world,

while promoting a healthy investment climate and protecting the rights of shareholders, creditors, etc. A reformed *Bankruptcy Act* has been tabled in Parliament. One of the areas addressed in the reform bill is that of the flexibility afforded potentially viable but insolvent debtors. The *Canadian Business Corporations Act* is being reviewed for possible amendments that could include the rules governing takeover bids and insider trading.

Intellectual property legislation (patents, trademarks and copyrights) is receiving growing attention internationally as economic activity becomes increasingly knowledge-based. Companies investing heavily in R&D naturally want to protect their proprietary rights; they argue that the quality of such protection has a direct impact on their investment decisions. Canadians also have an interest in reasonable and reliable access to technologies developed elsewhere. The key is to arrive at fair international and domestic rules that protect the rights of producers of intellectual property without unduly restricting access to technology by potential users and that are competitive with other industrial countries seeking knowledge-intensive types of investment.

Regulation of monopolies has a direct impact on the ability of the regulated sector to keep pace with rapid economic and technological change. Given that most businesses depend heavily on the products or services of regulated monopolies (e.g. telecommunications), ensuring the efficiency and innovativeness of such sectors is essential to the competitiveness of Canadian industry. The challenge in regulating monopolies (many of which are

undergoing rapid change due to new technologies) is to find new approaches to regulation that maintain other important goals, such as fairness, while ensuring that the industry functions in an innovative and efficient manner.

Foreign ownership restrictions and other investment barriers, and financial market regulations play a major role in investment decisions. Governments of industrialized economies have made progress in reducing formal barriers to investment, though, like Canada, most maintain effective restrictions in key industry sectors. The more informal barriers such as market structure, banking and ownership linkages, and state ownership, have yet to be addressed in a meaningful way by Canada's major industrial partners. A more liberal international regime would benefit Canadian firms by facilitating their ability to invest abroad as part of their strategy to develop Canadian-based global companies.

Framework policies play an important role in determining how well business can respond to market signals. They must also be compatible with our needs to build an economy capable of competing internationally.

Issue for Discussion

What further changes should be made to our framework policies to address the competitive challenges facing industry as a result of rapidly evolving technology, globalization and the opening of new markets?

"Stringent standards for product performance, product safety, and environmental impact contribute to creating and upgrading competitive advantage. They pressure firms to improve quality, upgrade technology, and provide features in areas of important customer (and social) concern."

Michael Porter,
The Competitive Advantage of Nations, 1990

Self Regulation in Action

"The theme...signifies commitment to the responsible management of the total life cycle of our products; from the very beginning in the laboratory, to the very end at ultimate disposal or destruction. It signifies the commitment of our full membership without exception and implies a broad commitment by our employees."

Responsible Care:
A Total Commitment
Canadian Chemical Producers' Association, 1990

Regulating Effectively and Efficiently

Governments regulate to achieve a wide variety of public policy objectives (e.g. economic, environmental, health and safety, and social). However, all such regulatory activity has a direct impact on the nature and level of economic activities and services, and can directly affect the ability of businesses to compete internationally. The type of regulatory process involved, the efficiency of that process and the manner in which economic activity is controlled or defined all have implications for Canada's competitive position. These implications are by no means all negative. For example, effective workplace safety regulations that reduce accidents can benefit employers because absenteeism and workers' compensation costs are lower. Similarly, environmental regulations that create innovative new markets for pollution abatement equipment and services can help to improve the competitive capability of Canadian industry.

Command and control mechanisms are the traditional means used by Canadian governments to regulate. There are, however, a number of other more innovative ways of achieving the same objectives. For example,

in the environmental arena, increasing attention is being paid to the use of market-based incentives. As opposed to traditional regulatory approaches, these market-based mechanisms encourage greater efficiency in pursuing our environmental goals. This is particularly important in Canada's resource sector, where many firms must make major investments to meet higher standards in the face of intense price competition in global markets. Examples of market-based incentives include tradeable emission rights, higher waste disposal fees to encourage recycling and reduce waste generation, and green taxes to reduce pollution and encourage fuel efficiency.

The ultimate objective of such market-based incentives is to encourage firms to incorporate environmental considerations into their normal business practices. A case in point is the Responsible Care Program of the Canadian Chemical Producers' Association, that requires that all members adopt a total life cycle approach to managing the chemical products they produce. Where such approaches are pursued, many analysts suggest they will act to improve long term domestic competitiveness rather than limiting it.

Governments now regulate a wide range of economic activities to achieve a number of policy objectives (e.g. environmental, health and safety, and equal opportunities). We must ensure such regulations are consistent with Canadian firms' ability to meet foreign competition.

Issue for Discussion

How might the design of our regulatory mechanisms be improved to achieve the policy goals that are important to the quality, safety and fairness of Canadian society in ways that are consistent with the competitiveness of our economy?

Integrating the Domestic Market

Most Canadian companies are created to provide goods or services in a local domestic market. As they achieve success and grow in size, they look to market opportunities further afield as a means to expand their sales and profitability. How the national market is organized, therefore, has a pervasive influence on the way companies develop, how they organize to take advantage of domestic and other business opportunities, and their ability to compete successfully.

Interprovincial trade barriers hindering the free movement of goods, services, capital and persons within Canada weaken the competitiveness of Canadian firms both at home and abroad, given that foreign competitors do not face the same obstacles in their domestic markets. In short, by allowing the continuation of such barriers, we divide and conquer ourselves.

Progress on reducing these barriers is being made, but only very slowly and only on an issue-by-issue basis. After a number

of years of effort, inter-governmental agreements are being implemented to reduce barriers in government goods procurement policies, beer marketing practices and agricultural and food products. In addition, the Western and Maritime provinces have implemented agreements on government procurement in the last two years.

In marked contrast, the 12 countries of the European Community have achieved sustained momentum to a fully integrated market, which is to be completely operational in 1992. In order to take advantage of the full competitiveness potential that even Canada's relatively small domestic economy can provide, we need to undertake a concerted effort to create a fully integrated internal market in Canada. Recognizing this long overdue need for reform, in its recent paper *Shaping Canada's Future Together: Proposals*, the Government of Canada sets out two distinct and complementary constitutional amendments designed to help Canada achieve this objective. Specifically, the Government proposes a modernized common market clause to ensure the free mobility of persons, goods, services and capital, and a new cooperative mechanism through which federal and provincial governments can take decisions together to improve the operation of the economic union.

The federal government is committed to working with provinces to bring down interprovincial barriers to the movement of goods, services, capital and people by 1995.

Issue for Discussion

What additional approaches are needed to promote inter-governmental cooperation to create a single integrated market by 1995?

Interprovincial trade barriers exist across Canada in a variety of areas including government procurement policies, liquor board marketing practices, public works projects, supply management boards, grant and subsidy programs, advertising, loan boards, trucking regulations, incentives for industrial development, and professional accreditation and practice.

"Interprovincial trade barriers make Canadians poorer, less united and less able to compete successfully in world markets. They can no longer be tolerated....The total estimated savings from the creation of a single market exceed \$6 billion annually."

"Canada 1993" A Plan for the Creation of a Single Market in Canada, Canadian Manufacturers' Association, April 1991

Delivering Government Services

Governments provide important services (e.g. education, health care, transportation and public utilities) that have a direct bearing on the competitive capacity of the economy and the people that work in it. Since 1984, the federal government has pursued a number of important initiatives in the management of programs, ranging from the privatization of Crown corporations and more economic pricing and cost recovery for government-supplied services and facilities, to greater flexibility for managers to introduce efficiency improvements in their services. Similarly, provincial governments have been seeking greater efficiencies. Clearly, given the challenges ahead, more needs to be done. It is important that governments seek creative new ways to ensure high productivity and efficient resource allocation in the services they provide. A first step in this regard has been taken with the announcement by federal and provincial finance ministers in January of this year of a study on the cost of government and expenditure management.

A second major step was taken with the federal government's constitutional proposals, which include a number of measures designed to streamline the delivery of government programs in order to provide more effective and efficient services to all Canadians.

The provision of efficient, innovative services from governments and institutions is important to Canadians.

Issue for Discussion

What measures would encourage greater efficiency in the demand for, and supply of, the goods and services provided by governments, including Crown corporations?

TRADING SMARTER:

MARKETS AND MARKETING

As a nation of 27 million citizens living on a planet with over five billion people, Canada's national prosperity is inextricably tied to the global economy. The previous four chapters focus on improving our *ability* to compete in this global economy, based on greater cooperation among Canadians and improved domestic policies. But even if we succeed in strengthening our ability to compete, our efforts may be for naught if we are denied the *opportunity* to perform.

This chapter explores ways to increase our opportunities to compete in foreign markets around the globe.

CANADA AS A TRADING NATION

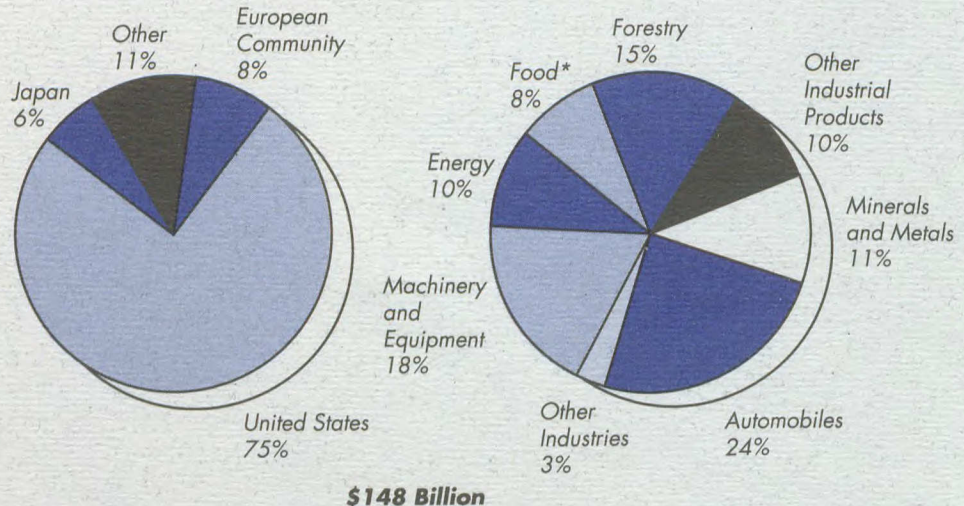
CANADA'S PROSPERITY IS TIED TO THE GLOBAL ECONOMY. SINCE World War II, the volume of world trade has grown twice as fast as global output and Canada's reliance on trade has doubled to reach over 30 percent of our GDP. Exporting is one of the main engines of growth and job creation in the Canadian economy and imports have greatly enriched the quality of our lives. Canada has benefited greatly from trade liberalization — we are the eighth largest trading nation in the world overall. At the same time, the increasing global orientation of industry and the interdependent nature of trade, technology and capital flows has resulted in an even closer integration of Canada's economy with those of our major trading partners and competitors. This growing interdependence brings with it increasing recognition of the importance of the international dimensions to domestic policies.

In Chapter 1 some of the profound changes taking place in the global economy are identified. Adapting quickly to such changes is particularly important for Canada because of our dependence on international markets, our relatively small domestic market size and our traditional reliance on resource-based industries. With 30 percent of our total GDP directly related to our ability to sell to customers outside Canada, our ability to meet the international competition is

much more important to us than it is to Japan (14 percent) and the United States (10 percent), our major trading partners. Canada also relies extensively on a single market, the United States, where 75 percent of our exported goods and services are destined. Resources and resource-based manufactured products are very important, representing some 48 percent of all goods exported. In terms of numbers of firms, Canadian production continues to be

Canada seeks a greater value-added component in its trade. In 1975 the bulk of Canada's exports to Japan were raw materials. The forestry industry supplied logs and pulp and the agriculture sector supplied grains and oil seeds. Today, some 40 percent of Canadian exports are processed goods: the forestry industry provides wooden components for pre-fabricated homes and the agriculture sector exports prepared microwave dinners and beverages.

**CANADA AS A TRADING NATION
1990 Canadian Exports**



*Numbers are rounded to nearest percent
Source: Statistics Canada

dominated by small and medium-sized firms with a largely domestic market focus. In fact, less than 100 firms account for more than half of Canada's exports.

Adapting Trade Policies to World Realities

Shifting Trade Patterns

Paradoxically, the 1980s was a period when the trend to lower tariffs in most countries was offset by a rise in non-tariff barriers to trade, including the growing use of unfair trade laws. While some of these non-tariff barriers were designed to protect domestic producers, others were clearly designed to encourage job-creating direct investment by global corporations within national markets, thereby reinforcing the development of increased intra-regional trading arrangements in Europe, the Asia-Pacific and elsewhere.

Canada's industrial structure and trade dependency argue that our response to these pressures must combine liberal trade, investment and technology policies, a collaborative approach to market and product development, and coherent strategies to gain and exploit access to new markets. This underlines the importance of ensuring that our domestic and international policies and activities work together to improve our competitive position. As we work with our global partners to reduce the frictions in the international trading system, we cannot afford to ignore similar frictions on the domestic front.

To protect our international trading interests, Canada has relied primarily upon the multilateral trading system, the General Agreement on Tariffs and Trade (GATT). Without a well functioning GATT, the economic superpowers would dominate international trade in ways based upon their

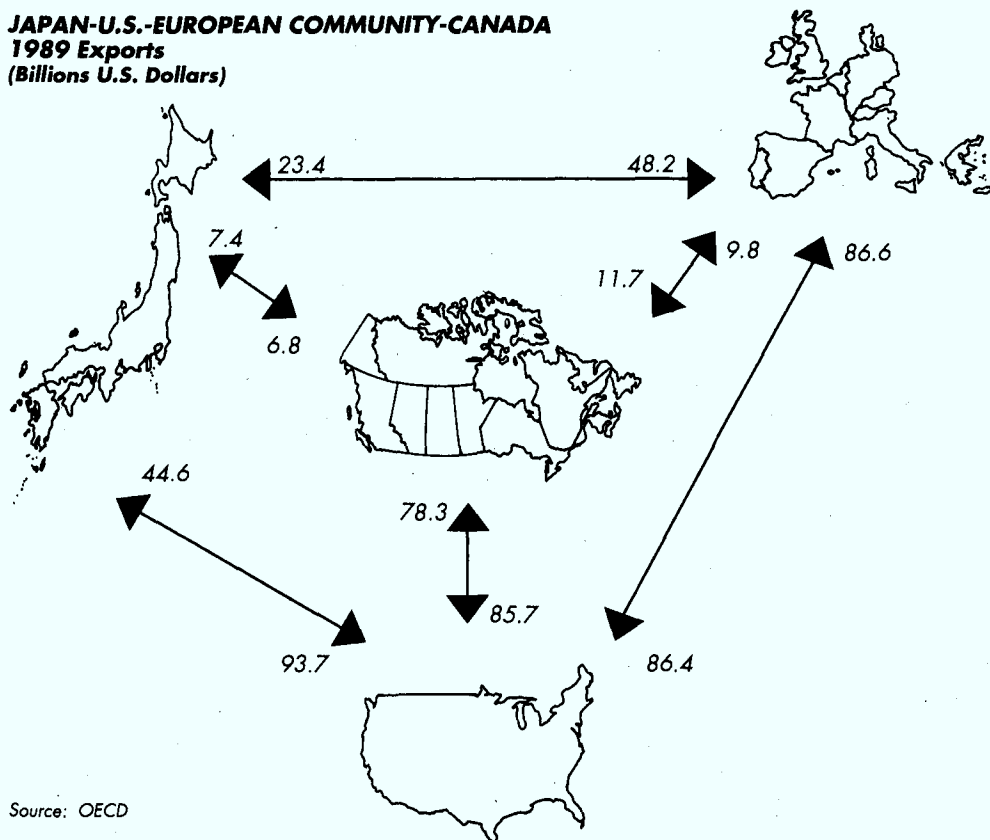
"For individual economies and for the world, trade liberalization is a 'good idea.' For the major developed countries, liberalization is the only way of securing a satisfactory global environment, especially because the possible alternative to liberalization is not the status quo but increased protection."

Martin Wolf
The Uruguay Round: A Handbook for the Multilateral Trade Negotiations, 1987
 A World Bank Publication

"All countries have specific problem areas which they would like to protect....But all countries also invariably have sectors in which they are competitive and where they stand to gain by increased market access for their exports. One set of weaknesses is, therefore, balanced by a second set of strong points."

Arthur Dunkel, Director-General of GATT, Tokyo, June 1990

JAPAN-U.S.-EUROPEAN COMMUNITY-CANADA
1989 Exports
 (Billions U.S. Dollars)



Source: OECD

"The most striking change in the international economy over the past four decades has been in the extent and nature of international linkage among countries. These ever-tighter and more complex linkages are pushing the focus for international policy, at least among the advanced countries, beyond the border, to domestic issues. It will be much more difficult to develop international rules for the game beyond the border than it was when the GATT was established to level the playing field for the movement of goods across borders."

Sylvia Ostry, OECD
International Policy
Conference on Technology
and the Global Economy,
Montreal, February 1991

A dramatic example of the potential gains to be made from export markets is Alias Research Inc. of Toronto. A manufacturer of computer-aided industrial software, its sales increased from \$1.2 million in 1986 to almost \$14 million in 1990. Ninety-five percent of Alias' revenues are derived from exports to 14 countries.

Canadians from diverse backgrounds have made unique business ties with their former homelands. For example, Canadian businessman Thomas Bata is doing business again in Czechoslovakia. Bata will open several hundred stores and three manufacturing locations, bringing to Czechoslovakia the marketing, administrative and organizational skills developed by the company in its home base in Canada.

power and self-interest. GATT rules and procedures attempt to impose discipline on the international market and support increasing trade liberalization. Canada remains strongly committed to the GATT and we are working to increase its ability to provide Canada, and other countries, with better and more secure access to foreign markets. As well, Canada remains in the forefront of efforts in the Uruguay Round of Multilateral Negotiations to improve GATT coverage, particularly with regard to agricultural subsidies, and to extend its disciplines to new areas such as intellectual property and trade-related investment and the increasingly important trade in services. The federal government has worked closely with the provinces and the private sector in developing each negotiating position, both to ensure agreement on negotiating strategies and to avoid potential difficulties in the implementation of a future agreement.

Canada's primary commitment lies in an effectively functioning multilateral system that provides the framework for our trade relations and provides useful constraints on potential unilateral actions by the economic superpowers. However, rapid changes in global trade patterns has meant that the GATT is no longer sufficient to manage all our trade interests.

The desire to increase our industrial competitiveness, to improve and secure access to our major export market for value-added goods and services, and to protect our interests in the face of growing American protectionism, led Canada to negotiate the comprehensive FTA with the United States in 1988. The FTA builds upon the elements of the GATT and goes beyond GATT disciplines creating bilateral mechanisms to resolve trade difficulties.

However, while the American market is vitally important to Canada, we cannot forget the rest of the world.

The recent decision to join with the United States and Mexico in exploring a tripartite commercial agreement is a logical

extension of our two-track (multilateral and bilateral) approach to trade. From a geographic perspective, the expanded market would be the largest in the world, with a total population estimated at 360 million consumers and a combined output of seven trillion dollars. Free trade with Mexico will also provide opportunities for Canadians to strengthen links with Central and South America.

Our trade with the European Community has declined in relative importance despite our historic and cultural ties to the continent. Western Europe is undergoing extensive change with its 1992 economic integration that, while developing a very large single European market, continues to raise fears among outside suppliers of increasing protectionism. The development of market-based economies in Eastern Europe and the Soviet Union also provides a special challenge to Canadian firms. Taking advantage of these emerging markets will require overcoming substantial economic and political uncertainties. Despite these difficulties, Europe's economic and technological transformation provide growth opportunities for Canadians that we cannot afford to ignore.

The volume of Canada's trade with the Asia-Pacific region now exceeds our trade with Europe. This region's economy is the fastest growing in the world. Japan has become our second largest export market. The Asia-Pacific region presents different challenges, with a more integrated business structure based on linked investments and burgeoning intra-regional trade. If Canada is to maintain or increase its share of the total trade in this dynamic region, a focused and well-coordinated approach will be needed.

The Role of Foreign Direct Investment

The new strategies of firms responding to the pressures of globalization, particularly the proliferation of transnational corporate alliances, will see the continued strong growth of foreign direct investment (FDI).

Investment flows will be a leading force for economic integration as FDI is one of the principal methods for facilitating the flow of technologies and management techniques across national boundaries. Indeed, foreign investment is rapidly becoming the strategic instrument firms use to assure themselves access to overseas markets. From 1983 to 1989, global flows of FDI grew at an average annual rate of 34 percent, more than three times the growth rate in trade. By 1989, Canadian cumulative direct investment abroad was valued at \$74 billion, two thirds of this was invested in the United States. In the same year, the total FDI in Canada was approximately \$119 billion. Globalization is forcing nations around the world to liberalize foreign investment policies. Although FDI unquestionably brings about significant benefits to the host economy, there remains concern that foreign firms may not maximize these benefits in areas such as R&D. While some restrictions remain in important areas such as culture, banking, transportation and petroleum, Canada has liberalized its FDI policies.

Canada needs to respond vigorously to protectionist pressures abroad as well as to aggressively enhance its participation in foreign markets. Also, we must ensure that domestic policies reflect best international practices and are not impediments to our international competitiveness.

Issues for Discussion

How best can we use the GATT, the OECD and other institutions to further liberalize trade and to address the importance of the international dimension of domestic policies? Should additional initiatives beyond the FTA and the North American Free Trade Agreement (NAFTA) be taken to build stronger ties with the new Europe, Asia-Pacific and Latin America?

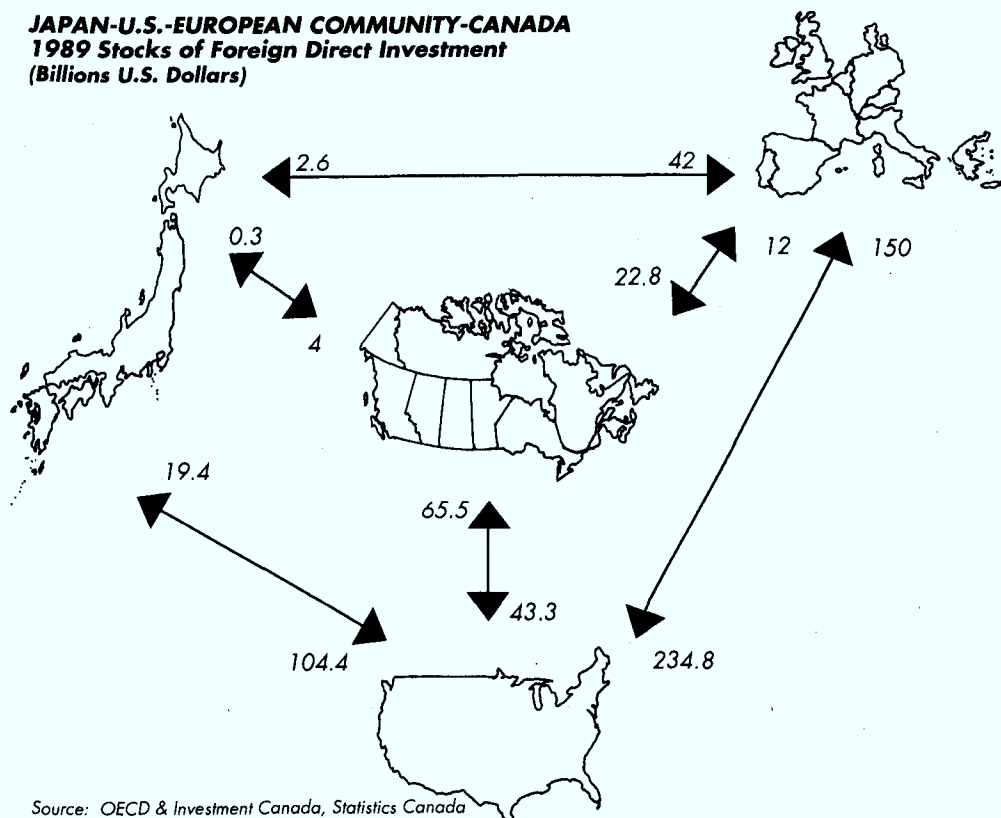
How can we ensure that Canada's domestic policies, including our import regime of tariffs, anti-dumping and countervail policies, other import barriers, as well as

(continued on page 36)

"We have to take a different approach to conquering foreign markets, one based on strategic objectives expressed through long-range commitments. To achieve these objectives, the following solutions must be used: opening offices in the target markets...forming partnerships with groups and companies in various countries ...and acquiring companies with technologies and markets that complement our own."

Guy Saint-Pierre, President and CEO, Groupe SNC, May 1991

JAPAN-U.S.-EUROPEAN COMMUNITY-CANADA
1989 Stocks of Foreign Direct Investment
(Billions U.S. Dollars)



Source: OECD & Investment Canada, Statistics Canada

competition and other policies, adapt quickly to international best practices and reinforce our economic performance?

Are we properly organized and do we have the right policies to benefit from the increases in global investment flows, both inward and outward, in a manner that advances our private and public interests?

Competing Effectively for Markets and Investment

While open and secure access is critical to developing Canada's international market potential, access alone does not guarantee success. Exporters require a sophisticated understanding of market conditions, barriers and opportunities if they are to realize their market potential. In this context, marketing covers a very broad range of activities, including intelligence gathering, recruitment of sales agents, strategic investments and technological partnerships. There are major costs associated with these efforts, costs that many of Canada's relatively small companies find difficult to absorb on their own. Both federal and provincial governments have recognized these problems and have established programs to assist Canadians in their pursuit of world trading opportunities. One such federal program is the five-year, cost-shared Going Global initiative that encourages cooperative arrangements and partnerships among Canadian firms and with their foreign partners on technology, investment and marketing. It also provides business services and promotes market, investment and technology development.

Market development techniques must be constantly reevaluated to ensure that they reflect the diverse needs of Canadian companies, and that they facilitate establishing bases for profitable, long term commercial presences in key markets. They must also take into account the competitive field of the financing of international trade, through

loans and credits. Cooperation between federal and provincial market development programs must be intensified to ensure they meet the special needs of Canadian firms, especially small and medium-sized enterprises, while avoiding duplication of effort and minimizing confusion in the export marketplace. The key is to encourage those Canadian firms that currently do not export to look beyond our own borders.

It is the combination of an efficiently operating trading system and the right kind of government support activities that will ensure that the private sector is in a position to take advantage of the export opportunities available in the international marketplace. Ongoing dialogue is needed among individuals, unions, firms and governments to ensure that we explore all options and engage the private sector fully in program design and delivery. To this end we should build upon the existing consultative mechanisms including the International Trade Advisory Committee (ITAC) and the Sector Advisory Groups on International Trade (SAGIT).

We need an innovation-friendly domestic environment that links trade, investment and technology flows and encourages the formation of strategic alliances that ensure access to the latest technologies, technologies Canadians will need to be competitive.

Issues for Discussion

How can we better encourage closer partnerships among business, labour, educators and governments at all levels to ensure that our trade, investment and technology programs are best directed to the needs and objectives of Canadians?

Do existing trade promotion mechanisms need revising to ensure closer private sector-government cooperation?

Can we make our existing technology and investment programs more supportive of our long term trading interests?

BUILDING PARTNERSHIPS:

AN INTEGRATED STRATEGY FOR CHANGE

The previous five chapters describe the key factors that need to be strengthened to increase our national productivity and competitiveness — the means to achieve increased national prosperity and more employment opportunities for Canadians.

All are important. None is revolutionary. What *is* revolutionary is the change in attitude that is required to build a more productive and prosperous Canada — a new sense of partnership among people. In short, we must recognize that our ability to compete with others depends on our willingness to cooperate among ourselves.

This chapter explores the challenge of building global competitiveness through domestic cooperation at all levels of Canadian society.

AN INTEGRATED STRATEGY FOR CHANGE

THE VARIOUS ELEMENTS OF PROSPERITY DISCUSSED IN THIS PAPER are each important, but addressing them individually is not likely to achieve maximum effect. Real progress will require the integration of all elements, forming a cohesive strategy. This strategy must recognize the different strengths, needs and concerns of all stakeholders — investors and managers, workers and unions, educators, governments at all levels and individual Canadians. It must also be a strategy that recognizes that actions are necessary at many levels in our society — at the level of the firm, the industry sector, the region and the country as a whole.

“Workers, businesses, unions, trade associations, and all levels of governments, including municipal governments, must urgently assume their common responsibilities in the adjustment process. If Canadians are to benefit fully from the FTA and...ensure Canada’s international competitiveness by the turn of the century, they will have to develop a collective will.”

Report of the Advisory Council on Adjustment, 1989

“Where there is unity of purpose among labour, management and government, each is free to turn its full energies to productive ends. For that process to work, the partners must share information and decision-making to a much greater degree than we see today.”

James McCambly, President Canadian Federation of Labour, 1989

We must find the means to overcome internal differences and develop broad support for important economic strategies and priorities. To do so, the key players must recognize common interests and mutual interdependence, and be prepared to enter new partnerships that are flexible and responsive to rapidly changing conditions.

Innovative Management

Competitiveness begins at the level of the individual firm. Many successful companies in Canada have recognized that enhancing competitiveness in the 1990s will require that all functional units within an organization, such as product design, production, marketing and finance, work well together. Partnerships extend not only to employees, but also to customers and suppliers.

This approach, sometimes referred to as Total Quality Management, was pioneered by Japanese companies, and many Canadian companies have adapted it to their situations. For example, Canadian General Electric has de-layered management, brought employees to the decision-making table and has actively involved suppliers and customers in quality

and product improvement exercises. Milliken Industries, a manufacturer of carpet tiles, has involved the entire corporate structure in its aim to implement quality as the driving corporate goal. Unfortunately, these companies are not typical of Canadian business norms, which still lag behind our international competitors. This suggests that there is a need for improved management training that provides prospective business leaders with a greater awareness and understanding of international developments, of S&T and of innovative workplace practices.

Business-Labour Relationships

The ability of companies to implement technological change, new management practices or different workplace roles requires a labour force that is skilled and flexible enough to adapt, motivated to accept change, and understanding of its own interest in improving working relationships. This partnership is critical — management and labour each must understand that they can no longer achieve their individual goals in confrontation with each other. Only by working together can both move forward successfully.

Innovative firms recognize that workers very often have valuable insights based on their practical experience, and invite them to contribute their ideas, knowledge and experience. This requires open communications with, and the direct involvement of, workers when implementing new ways to work.

Business, Labour and Educators

Traditionally, neither business nor organized labour have had much direct involvement with formal educational systems. However, businesses can no longer rely upon public educational systems to provide a steady stream of new workers with the specialized abilities and skills they require. In addition, all of us must recognize that training and retraining will be a constant part of our entire working lives.

As skill requirements increase, partnerships must be developed: to ensure that educational systems remain relevant to new needs; to improve the transition from school to work; to provide the scientific and research personnel and facilities essential in a knowledge-based economy; and to support essential workplace training activities.

Examples include joint industry-school initiatives such as cooperative education programs, the development of specialized course materials, student scholarships and the provision of meaningful work experiences. The Conference Board of Canada, recognizing the need for corporate support for education, established a National Business and Education Centre. The goal of the Centre is to help member companies become involved in educational projects.

Business Working with Business

Inter-firm rivalry is essential for improved productivity and the proper working of the economy. However, there are circumstances where inter-firm cooperation can help to

overcome the limitations of individual companies competing in the global marketplace. For example, strategic alliances or joint ventures designed to achieve specific goals such as access to technology or marketing and distribution networks, or through research consortia that pool limited R&D resources to resolve shared problems. Also, many firms have found that developing and implementing business plans in close working relationships with their suppliers and customers enables them to improve the efficiency and effectiveness of their operations. Canada's competition law, therefore, must strike a balance between protecting inter-firm rivalry and permitting cooperation where this would be in the broader public interest.

Cooperation among Canadian management, labour and educators is needed to improve management, upgrade employee skills and stimulate innovation in the workplace.

Issue for Discussion

What measures might be taken to encourage greater cooperation between management and labour, and between industry and educational institutions?

Coordinating the Activities of Governments

As in other countries, the specific roles of different levels of governments intersect in many important economic areas. As the issues that affect the Canadian economy and business community become more complex, Canada needs better inter-governmental collaboration in a number of areas, including:

- developing fiscal, tax, regulatory and other framework policies that are compatible, fair, and do not work at cross-purposes;

"If Canadians are to stay in business, it is critical that (labour and management) work together to preserve long-term mutual interests."

Gary Johncox, Vice-President, Human Resources
MacMillan Bloedel Limited,
1990

A partnership involving Arctic College, Atii Training Inc. and numerous business and community-based organizations in the Nunavut region of the Northwest Territories was established in order to develop culturally appropriate and practical approaches to management training for the Inuit. This included special curricula materials and a series of workshops and seminars for delivery in remote locations.

Selected from the *National Awards for Excellence in Business-Education Partnerships, 1991*, sponsored by the Conference Board of Canada and the member companies of Telecom Canada.

The Institute for Chemical Science and Technology (ICST) is an example of positive inter-firm cooperation. Through ICST, Canada's leading petroleum refiners and chemical manufacturers, together with a number of universities, work on pre-competitive research projects and improved waste management.

- implementing consistent industry sector policies that instill confidence among investors in the domestic business climate;
- minimizing excessive competition among jurisdictions for infrastructure, research and S&T investments; and
- developing a consensus on the goals and priorities that could guide reform of educational and training systems in Canada.

To address some of these areas, a principal thrust of the Government's constitutional proposals is to improve the functioning of the economic union by strengthening inter-governmental coordination and collaboration and offering the provinces a new partnership for the management of the economic union.

Canadian governments at all levels (federal, provincial, territorial and municipal) must improve the coordination and synergy of their policies, programs and objectives.

Harmonizing Public and Private Sector Objectives

A greater degree of partnership among the principal stakeholders in the private and public sectors is required to achieve a more innovative Canadian economy. Other countries, including Japan, Austria, Norway and Sweden, have established institutional mechanisms to promote national dialogues on key aspects of economic policy. However, successful partnership models involving the public and private-sectors are not easily

transferred from one jurisdiction to another, since they are highly dependent upon social attitudes, culture and history. Indeed, given that regional and cultural diversity is such an important characteristic of Canada, a full consensus on all issues is not realistic or required. However, Canada can build upon its experience with a number of successful consultation processes involving the public and private-sectors to generate a broader degree of consensus and understanding on key economic issues.

There is a need to develop wider understanding and consensus among Canadians on economic challenges, priorities and strategies.

Issue for Discussion

How can we improve stakeholders' understanding of each other's concerns and perspectives on economic challenges, priorities and strategies? Are there institutional improvements to be made?

CONCLUSIONS:

MAKING IT WORK TOGETHER

PARTNERSHIPS, PRODUCTIVITY, PROSPERITY

THE PEOPLE OF CANADA HAVE BUILT ONE OF THE MOST PRODUCTIVE and prosperous societies in the world. Hence the bewilderment of foreign observers as some call for the breakup of our country. Indeed, in the words of one foreign diplomat, "Canada is a solution in search of a problem."

"Canadians will have to demonstrate the political will to resolve problems in a cooperative effort. The transition to a more effective economic policy framework can only come about if federal and provincial governments, along with business and labour leaders, are prepared to admit that there is something fundamentally wrong with the way we have tried to solve economic problems in the past."

Annual Review, Economic Council of Canada, 1990

All Canadians who have travelled abroad recognize the basic truth in this observation. For it is undeniable that our problems pale in comparison to those of other nations around the globe. We have much to be proud of, much to be thankful for, and much to lose if we take our good fortune for granted and ignore the threats posed by global economic change.

Seen in this light, the nature of our national challenge becomes more clear. The challenge we face comes less from abroad than from within. Our challenge is to end our complacency and achieve our full potential as individuals and as a nation; to ensure that *all* Canadians have the chance to contribute to, and share in, our prosperity; to build on our past success and our present strengths so that Canada is not just a good place to live, work and raise a family, but the best place.

This paper discusses the key factors that must be strengthened to increase our national prosperity and create more employment opportunities for Canadians.

All are important. None is revolutionary. What is revolutionary is the change in attitude that is required to build a more productive and prosperous Canada — a new sense of partnership among people. In short, we must recognize that our ability to compete with others depends on our willingness to cooperate among ourselves — cooperation among Canadians at all levels of society.

Partnerships and working together hold special importance in Canada because of our federal structure and regional diversity — we must ensure that our national policies and programs are responsive to regional realities and aspirations.

Common sense tells us that pulling together toward common goals can best guarantee progress. To assist in the creation of a common sense of purpose, the Government of Canada is proposing the following wide range of national goals to guide our collective efforts:

- the creation of 2.5 million additional jobs in our country by the year 2000;
- the setting of inflation targets to secure price stability — the key to long term employment stability;
- learning targets, discussed in the Government's companion discussion paper, *Learning Well ... Living Well*, to spur success in private sector training and the creation of a highly literate society;
- the legislation of federal government spending limits to protect hard-pressed taxpayers; and
- the increasing of real incomes of Canadians by at least 25 percent by the turn of the century.

These goals are ambitious, but they are achievable, if we are willing to work together in common cause. Our children and future generations of Canadians deserve no less.

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