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AN OVERVIEW OF SELECTED STUDIES

On Canada's Prosperity
and Competitiveness



Industry, Science and
Technology Canada

Industrie, Sciences et
Technologie Canada



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AN OVERVIEW OF SELECTED STUDIES

**On Canada's Prosperity
and Competitiveness**

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An Overview of Selected Studies on Canada's Prosperity and Competitiveness

In recent years there have been numerous studies, reports and statements published by both public and private sector groups that document a growing international challenge to Canada's future prosperity. These publications warn that Canada must prepare itself to face the challenges posed by rapid technological advancement and the globalization of trade, and they put forward a large number of recommendations directed toward business, labour, educators and governments.

In October 1991, the Government of Canada launched a national discussion on the factors that stimulate Canada's prosperity. The broad framework of this initiative is outlined in two consultation papers, *Prosperity Through Competitiveness* and *Learning Well...Living Well*.

This report provides brief summaries of a number of published reports and their recommendations. A selective bibliography and an annex also are provided. The annex contains a chart indicating the main subject areas addressed by each report.

In preparing this publication, every effort has been made to reflect accurately the original authors' findings. However, readers are advised to consult the original sources to obtain more detailed explanations. More information can be obtained by contacting the authors of the studies listed at the end of each summary.

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National Economic Priorities: Challenges and Opportunities

Business Council on National Issues

January 25, 1991

Overview

The Business Council on National Issues' statement, *National Economic Priorities: Challenges and Opportunities*, describes the current economic situation facing Canada and outlines a seven-point strategy for national economic renewal. In the statement, business leaders acknowledge the seriousness of the dramatic decline in economic activity in Canada, and point to inappropriate fiscal policies as the major source of the current problem. Canada's high interest rates, the statement concludes, are in large part a symptom of a much more profound and enduring set of inter-related problems: fiscal laxity, and its legacy of persistent deficits and soaring debt; inflation pressures, many due to public sector policies and decisions that have pushed up costs; and excessive reliance on monetary policy to contain inflation. The costs of following an unbalanced macro-economic policy mix over the past several years are showing up in foregone production, declining competitiveness and employment losses.

Addressing these problems will require a bold program of economic renewal involving all governments and key economic players, as well as the support of the Canadian public. According to the Council, the goal should be to make Canada the strongest performer among the G-7 nations by the year 2000 in terms of economic growth, productivity and investment. To achieve this goal, the Council calls for a three-pronged policy for economic renewal.

Recommendations

The report recommends:

1. Canadians face the fiscal problem squarely. To turn around the fiscal situation, sacrifices must be made by everyone, except those on low incomes. The Government* should provide leadership by placing a time-limited moratorium on overall program spending, while dedicating a portion of Goods and Services Tax (GST) revenues to a special deficit reduction account. Federal initiatives should be matched by the provinces.
2. Canadians grasp a competitiveness agenda. The seven strategies put forward by the Council focus on:
 - A fiscal recovery strategy resulting in higher employment, lower deficits, lower interest rates and a realistic value for the Canadian dollar.
 - A constitutional renewal strategy that will lead to a more viable and efficient federation with a reduction in the overall burden and costs of government.
 - A common market enhancement strategy that would include a rapid integration of provincial tax systems with the GST; and the complete elimination of provincial barriers to the movement of goods, services, capital and labour.
 - A human resource strategy designed to ensure that Canadians receive superior education and skills training.

*Throughout this publication, Government represents the Government of Canada.

-
- A social policy strategy that is progressive but affordable, centred on the principle that the poorest and the neediest in Canadian society must have first call on scarce public resources.
 - A trade strategy directed to continuing strong support for multilateral trade liberalization, building on the Canada-U.S. Free Trade Agreement (FTA); and to a concerted, joint private-public sector effort to forge closer economic and business ties with key nations in Asia and Europe.
- Complementary private sector initiatives in support of strategies aimed at achieving improved results among Canadian companies in productivity, technological innovation and export penetration.
3. Canada should place economics before politics, including allowing economic imperatives to help shape the outcome of the next constitutional round.

**For more information or copies of this report, contact:
Business Council on National Issues, Suite 806,
90 Sparks Street, OTTAWA, Ont., K1P 5B4,
Tel.: (613) 238-3727.**

Canada at Risk? Canadian Public Policy in the 1990s

C.D. Howe Institute and contributors given below.

January 1991

Overview

Domestic and international cross-currents are tearing at the fabric of our fundamental institutions and values. The policies and institutional structures of the past may not be appropriate for the challenges ahead. This report, sponsored by the C.D. Howe Institute, assesses the current and future role of the Government at a time when there is an unprecedented sense of malaise about the Canadian body politic. This work is a collection of papers written by David K. Foot, Richard Simeon, Robert A. Young, Robert Z. Lawrence, Ian A. Stewart, Bruce Doern, Richard Gwyn, Thomas J. Courchene, Harvey Lazar, David McQueen, George Pedersen, John S. MacDonald, William D. Coleman, Robert Paehlke, Robert Evans and is edited by Bruce Doern and Bryne Purchase.

Exploring Canada's political and policy environment as the confusing and uncertain year of 1990 drew to a close, required an understanding at three analytical levels: the rhetorical and symbolic level; the temporal level; and the level of ongoing actions in several important policy fields. All three are valid in different ways, and each must be looked at both separately and in combination to obtain a realistic sense of where Canada has journeyed in the past decade, and where the battered national ship of state may be or ought to be steering in the 1990s. All three levels are also essential in locating oneself along the continuum of optimism and pessimism, that peculiar political space where each of us judges whether the Canadian glass is half full or half empty.

The work involves two basic kinds of analyses. The first analysis deals with broad, cross-cutting issues and parameters that shape and reflect the overall conduct of Canadian public policy. It concerns economic globalization, the pace of which has been bewildering, and addresses the following related questions. What effects has it had on the nation state? Is a new *sorting out* of relationships between states and markets occurring? Has government been shrinking while markets grow, or has a realignment of governing and market functions begun to occur?

The second analysis deals with several important policy fields by looking back over the 1980s and earlier and projecting developments into the 1990s. It embraces the rhetorical and practical characterization of the relationship between economic and social policy. The conventional business and economic view is that markets create wealth, which society can then redistribute. In this sense, markets and good economic policy are the engines that power social policy. But to what extent is this true? What does the evidence from numerous policy fields tell us about this, as opposed to the conventional rhetorical labels that are attached to this relationship?

**For more information, contact the C.D. Howe Institute,
125 Adelaide East, TORONTO, Ont., M5C 1L7,
Tel.: (416) 865-1904.**

For copies of this report, contact Renouf book stores.

The Innovative Society: Competitiveness in the 1990s

C.D. Howe Institute

February 1991

Overview

The 1991 *Policy Review and Outlook* focuses on national competitiveness and its linkages to innovation and productivity. The report is the work of the Institute's Senior Policy Analyst, **Bryne Purchase**, and its recommendations are those of the author. The major theme presented is one of balance in the competitiveness debate; that competitiveness is about productivity growth and increasing the real incomes of Canadians. Despite its stated intentions of balance, the report concentrates on **public policy issues and solutions**, with only passing reference to the role of business, labour and other groups. The key to competitiveness, according to the report, is the effective deployment of trade, investment and innovation policies. **Competitive Government** emerges as a constant theme.

Competitive Government is needed to create advantageous conditions for economic efficiency and innovation: efficiency in program delivery, in the choice and implementation of policy tools, and in the clarification of federal-provincial responsibilities. The report also sees limits for Government involvement and is highly critical of the Ontario Premier's Council and the type of strategic industrial policy that targets firms for subsidies and special treatment.

The report also issues 19 detailed recommendations regarding trade, investment and innovation policy, and argues for strengthened public sector efforts on business climate issues (expenditure reduction, human resource development, institutional education and health care reform and efficiency measures, interprovincial and international trade access, and continued deregulation).

Recommendations

The report recommends:

1. Strict anti-inflationary policy through control on growth of M1 and M2 money supply be continued.
2. Canada participate fully in multilateral trade talks involving the U.S. and Mexico.
3. Canada's trade access be enhanced in further FTA negotiations.
4. The use of subsidies generally be restricted.
5. Competition law be harmonized with the U.S. to deal with predatory pricing practices now dealt with under anti-dumping legislation.
6. Softwood lumber be brought under the terms of the FTA.
7. Issues related to domestic resource pricing and subsidies be clarified, including environmental resources such as air and water.
8. A business-favourable climate be provided for multinational enterprises and small, innovative firms.
9. Foreign investment and takeovers not be discouraged.
10. Competition policy be pursued aggressively.
11. Business framework policies and public infrastructure of direct benefit to business — intellectual property, research capability of Canadian universities, telecommunications facilities, information data bases — be strengthened.
12. Innovation activity, including R&D, be regionalized and oriented toward hard results (e.g. new high-technology corporate startups).
13. Financial regulation and tax reform be reviewed on an ongoing basis to ensure tax regimes do not treat innovative enterprise unfairly.

-
14. An integrated approach to human capital formation and adjustment be designed, one that emphasizes lifetime investments, and that supports individuals rather than institutions or governments.
 15. The Government's expenditure-reduction strategy continue.
 16. Mobility and a stronger Canadian common market (review of barriers to interprovincial trade of goods, services, capital and labour should be enhanced).
 17. Federal-provincial transfers be reviewed to increase spending efficiency.
 18. More efficient and innovative public sector mechanisms in health and education be developed (e.g. school core curriculum, results-oriented institutions, federal support for post-secondary education to be directed through student vouchers, health facilities adjusted from fee-for-service to health-maintenance organizations).
 19. Federal and provincial governments establish independent regulatory review agencies to assess all regulatory proposals.

**For more information, contact: C.D. Howe Institute,
125 Adelaide East, TORONTO, Ont., M5C 1L7,
Tel.: (416) 865-1904.**

For copies of this report, contact Renouf book stores.

Grassroots Initiatives, Global Success: Report of the 1989 National Technology Policy Roundtable

Canadian Advanced Technology Association, Canadian Chamber of Commerce and Science Council of Canada
July 1990

Overview

In 1989, the Canadian Advanced Technology Association, the Canadian Chamber of Commerce and the Science Council of Canada co-sponsored the National Technology Policy Roundtable. The theme was **The Technology Engine in Community Economic Development**. This report was published in July 1990 by the Canadian Chamber of Commerce and reflects the consensus viewpoint of the 150 participants who attended the Roundtable in Toronto in October 1989. The report focuses on both the importance of community-level initiatives to nurture and apply science and technology (S&T) for economic development, and the role that Canadian communities must play in ensuring Canada's long-term competitive strength.

The participants identify four components that must be present for a technology engine to function. The first component is the knowledge that exists within S&T institutions and the quality of the links between the S&T infrastructure and industry. The second component is the infrastructure and networks that encourage the application and use of technology throughout all segments of a community's industrial base. The third component is the support framework available for advanced-technology industry, including the S&T infrastructure, human resource base and specialized services. The fourth component is the community vision and culture that encourages and recognizes scientific, technological and business endeavour.

Recommendations

A number of detailed possible community actions are recommended to put these components in place, ranging from establishing research parks and increased training by business, to including S&T in community economic planning.

Extending S&T Networks into the Community

The report recommends:

1. Industry be brought into the classroom, with local business participating in *adopt-a-school* programs at the primary and secondary levels.
2. Local firms and business associations be encouraged to sponsor events such as science fairs, scholarship competition, S&T clubs, and scientific and technical classes.
3. Museums, libraries and other public institutions be encouraged to mount scientific and technological exhibits.
4. *Annual industry open house days or high-technology industry tours* be organized to expose the community to advanced technology enterprise and activities.

S&T in the Economic Development Planning Process

The report recommends:

1. An S&T group be established as part of the development planning process, with representation from scientific, technological and business interests.
2. Permanent community forums be established to provide leadership on S&T issues; the Edmonton Council on Advanced Technology is a useful model.
3. A city councillor be assigned the responsibility for S&T issues.
4. S&T be included in the community economic development planning process and that progress be reviewed annually with respect to objectives.
5. An integrated communications plan be developed and updated regularly to encourage and maintain public awareness, understanding and support for the community's S&T goals.

Building the Knowledge Base

The report recommends:

1. Specific incentives be provided for R&D undertaken within municipalities.
2. In negotiating *greenfield* investments, companies transfer R&D activity as well as production.
3. Inventories of local research capabilities be compiled and priorities established concerning what specific research to focus on.
4. Local organizations be established, funded jointly by industry, university and public partners, to promote R&D and training; the Ottawa-Carleton Research Institute is an example.
5. Community-based research networks be set up to link local research to broader national and international activities.
6. Chairs be established in local universities in areas of strategic interest to local industry.
7. The introduction of a national high-speed network for R&D be supported, ensuring that community R&D interests have access to the network.
8. Community amenities and cultural activities be emphasized in economic development planning.
3. Local universities, community colleges or secondary schools be encouraged to offer knowledge-upgrading programs for the scientific and technical personnel in local firms.
4. Industry tours of local research labs be organized.
5. The exchange of knowledge between researchers and industry be promoted through, for example, monthly sponsored luncheons with guest speakers.
6. Each knowledge-producing institution have a technology transfer office or its equivalent.

Using the Knowledge Base

The report recommends:

1. University and Government research on identifiable industry needs be targeted.
2. Local National Research Council Canada (NRC) Industrial Research Assistance Program (IRAP) networks be strengthened to increase awareness of the knowledge-based resources available within the community.
1. Technology transfer opportunities be publicized.
2. Cooperative R&D initiatives be encouraged.
3. Research parks to create better contacts between local industry and research organizations be established.
4. Local IRAP network and technology referrals be strengthened through the NRC's Canadian Institute for Scientific and Technical Information.
5. Technology in-flow be accelerated by expanding the role of economic development commissioners.
6. The establishment of private technology brokerage services be encouraged within the community.
7. Venture capital clubs or local technology venturing networks be created to encourage potential investors to collaborate in the establishment of community-based venture capital funds.

-
8. A service such as the Canadian Opportunities Investment Network be launched to help entrepreneurs identify and contact potential investors.
 9. The establishment of a national technology venturing data base be encouraged.

Nurturing Growth: Management Support for Early Stage Companies and Entrepreneurs

The report recommends:

1. Young entrepreneurs be fostered through entrepreneurship and management training.
2. Entrepreneurs' clubs be established.
3. Networks be created that allow experienced business people to share management expertise with early stage companies, as in the City of Hamilton's *Business Helping Business* initiative.
4. Local groups be encouraged to offer targeted management training programs.
5. Community-based incubation centres be established.

Advanced-Technology Support Infrastructure

The report recommends:

1. The requirements of local advanced-technology industry be surveyed, identifying specialized infrastructure and support services.
2. Specific action plans be devised to redress community shortfalls.

Market Development

The report recommends:

1. The local procurement of scientific, technical and professional services by large firms and government organizations be promoted.
2. A national market intelligence network be established and delivered to local industry through local institutions.

3. Strong links be forged among potential users of technology, the community's R&D infrastructure and advanced-technology sectors.
4. A single community point of entry into all programs that target technology development or access be created.

Education and Training

The report recommends:

1. The profile of science, technology and entrepreneurship be raised in curricula and course materials at the primary and secondary school levels.
2. School boards ensure that guidance counsellors are aware of private sector career options for graduates.
3. Employers explore more effective ways of attracting attention to scientific and technical careers.
4. Business and educational leaders at all levels explore ways of strengthening links.
5. Programs that ease the students transition to the workplace be expanded, particularly at the post-secondary level.
6. Companies provide training and retraining opportunities for their own long-term benefit.
7. Every community have an education and training committee that reviews periodically the needs of local industry for specialized training and knowledge upgrading courses.

Education, Training and Skills Upgrading Needs of the Knowledge-Based Economy

The report recommends:

1. Companies incorporate training and retraining opportunities into their corporate culture.

2. Governments and business associations collaborate to create programs that provide individuals with flexible means to pursue skills upgrading.
3. Governments increase their efforts to integrate existing programs that support training, simplify administrative requirements and increase promotional efforts.
4. Business associations encourage their members to expand training and retraining efforts as a matter of good business practice.
5. Business associations address the education and training needs of workers and propose concrete initiatives, such as the preparation of course materials, support of proposed programs or chairs, provision of scholarships, or expansion of work-study opportunities.

Enhancing the Climate for Innovation

The report recommends:

1. The Government implement policies to increase the contracting out of departmental R&D requirements.
2. The Government re-establish the Unsolicited Proposal Program.
3. The Government consider creating a procurement *watchdog office*, possibly within ISTC or Treasury Board, to coordinate public sector efforts to develop measures to maximize value-for-money, and to monitor results of contracting out policies.
4. Senior Government officials introduce Canadian versions of the Small Business Set Aside Program and Small Business Industrial Research Program.
5. Senior Government officials establish more aggressive programs to transfer in-house technologies to the private sector.

Encouraging the Application and Use of Technology

The report recommends:

1. Existing funds be reallocated to support the Industrial Research Assistance Program and maintain its efficient administrative procedures.

Regional Development Policies

The report recommends:

1. Government design regional development strategies to build on local strengths (policies should enlarge community access to knowledge and economic opportunity through networking and community outreach activities).

The Communications Infrastructure of the Information Age

The report recommends:

1. Governments and business associations take a leadership role in creating the national user networks that communities need to gear up the technology engine.
2. Canada mount a major long-term national project to develop and install a leading-edge communications infrastructure.

Sustaining Political Commitment: The Management Change

The report recommends:

1. The recommendations of this report be tabled at the annual meeting of First Ministers for review and approval as guiding principles for Canada's S&T strategy.
2. All Canadian communities and trade associations consider organizing workshops or conferences to discuss the issues raised in this report and to devise action plans.

-
3. Senior Government officials prepare an action plan designed to support community initiatives and reflect the proposals put forward here.
 4. Project groups be struck to oversee the development and implementation of the national plan, and to provide encouragement and support to participating communities.

For more information or copies of the report, contact the:

- **Canadian Advanced Technology Association, Suite 803, 275 Slater Street, OTTAWA, Ont., K1P 5H9, Tel.: (613) 236-6550.**
- **Canadian Chamber of Commerce, Suite 1160, 55 Metcalfe Street, OTTAWA, Ont., K1P 6N4, Tel.: (613) 238-4000.**
- **Science Council of Canada, 100 Metcalfe Street, OTTAWA, Ont., K1P 5M1, Tel.: (613) 992-1142.**

Canadian Chamber of Commerce Focus 2000 Task Force Report on Education and Training

Canadian Chamber of Commerce
August 1988

Overview

This report addresses how employers and employees, in concert with the education community and public sector, can enhance Canada's competitive position. The Task Force stresses that only employers and employees can address effectively the multiple decisions and actions needed to make education and training responsive to the needs of the workplace. Employers and employees, in partnership with education and government, therefore, have a crucial role to play in policy development.

Recommendations

The report recommends firms:

1. Get the process started by:
 - developing a human resource plan;
 - involving employees in the training process;
 - identifying a coordinator with leadership talent to spur the training program;
 - setting aside a percentage of gross revenues for training purposes; and
 - identifying government programs that apply to the firm's training requirements.
2. Take measures to improve the returns on investment in training by:
 - stressing rewards (material and non-material) for skill attainment;
 - emphasizing good working conditions and relationships;
 - relying more on explicit contract agreements; and
 - giving older workers opportunities to stay with the firm.
3. Involve the education and training community by:
 - participating in cooperative education and training activities;
 - communicating requirements to the education community; and
 - offering the use of research and other facilities to the local school system, colleges and universities and, in turn, encouraging employees to draw upon the facilities of local educational programs.
4. Contribute to strengthening the opportunities for education and training by:
 - providing flexible work arrangements for those willing to return to part-time or full-time studies;
 - using affirmative action measures to encourage women into non-traditional occupations; and
 - extending human resource planning to part-time workers.
5. Act in a community-based manner by:
 - identifying the skills requirements of the community;
 - holding local workshops and seminars to highlight the importance of training, as well as to generate discussions on training needs to assist in the development of human resource plans and training programs;
 - establishing Industry-Education Councils;
 - censuring firms that *poach* or plagiarize the training effort of others;
 - working closely with educators and students to improve the quality and relevancy of courses at all levels; and
 - marketing business opportunities to students and community leaders.

6. Share information and resources relevant to training by:

- pooling information about government programs;
- sharing successes and failures;
- collaborating in the establishment of apprenticeship programs and other forms of cooperative skill development; and
- helping make decentralization of government programs a success.

7. Provide information by:

- supplying a one-stop venue for information on training programs;
- encouraging local Chambers to collaborate with national business organizations to compile examples of training successes; and
- developing information packages for distribution at schools/colleges.

8. Facilitate training by:

- encouraging local Chambers to host training sessions on how to implement human resource development plans; and
- supporting or initiating partnerships between industry and educators.

9. Promote government involvement by:

- ensuring that ministers responsible for education and training monitor closely international trends in skill development;

- proposing that First Ministers, together with the ministers responsible for education and training, hold a series of national conferences to review progress in skills development in Canada, and to consider supportive measures governments should take;
- giving greater attention and more resources to forecasting future skills requirements, and expected labour market imbalances;
- improving information dissemination about provincial and federal training programs;
- suggesting that provincial governments explore ways of strengthening the quality and effectiveness of education in primary and secondary schools;
- proposing that provincial governments ensure proper funding for colleges and universities; and
- recommending that the Government consider options to further stimulate training and reduce the problem of *poaching*.

**For more information or copies of this report, contact:
Canadian Chamber of Commerce, Suite 1160,
55 Metcalfe Street, OTTAWA, Ont., K1P 6N4,
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Canadian Chamber of Commerce Focus 2000 Task Force Report on Entrepreneurship

Canadian Chamber of Commerce
August 1988

Overview

This report discusses community-based initiatives that could be conducted by local chambers of commerce to stimulate entrepreneurship. The report is based on the belief that entrepreneurship is driven, first and foremost, by the local environment within which each individual or company must operate. It stresses the economic importance of entrepreneurship, noting that most of Canada's dynamic cities and regions are characterized by strong entrepreneurial activity. Where such activity does not exist, it can be encouraged by efforts at the local level. The report highlights who entrepreneurs are likely to be; the factors that influence them to embark on a business venture; and how, in some communities, entrepreneurship may be channelled into non-profit associations and social and cultural endeavours.

Entrepreneurial action exists in a continuum, ranging from the development and marketing of new products that have no existing competition, to the launching of products that challenge existing competitors. Conditions favourable to entrepreneurial action depend, among other factors, on the availability of human and financial resources, and on the expertise and capabilities of the entrepreneur in his or her field.

Overall, Canada's new enterprises have sufficient access to capital, in particular venture capital, but there are exceptions. The study also

points out that a business plan is an important tool for organizing a company and gaining investor support. Societal, political and business attitudes toward both entrepreneurial and *intrapreneurial* initiatives are extremely important.

Recommendations

The report recommends:

1. The federal and provincial governments set aside 15 to 20 percent of their procurement activities for small business in Canada, allowing many new businesses to acquire the necessary experience to expand.
2. Each local chamber or board of trade, which is a member of the Canadian Chamber of Commerce, develop a clear and concrete program to promote entrepreneurship within its membership and its community.
3. Each local chamber devise activities to promote entrepreneurship as a principle worth pursuing.
4. Each chamber find ways to improve the feasibility of entrepreneurial activities.

**For more information or copies of this report, contact:
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Canadian Chamber of Commerce Focus 2000 Task Force Report on Harnessing Change

Canadian Chamber of Commerce

August 1988

Overview

This report of the Focus 2000 Task Force on Harnessing Change focuses on contributions that could be made by the Canadian Chamber to the process of economic transformation. The challenge is to increase competitiveness by reducing the disruptive effects of change while promoting its beneficial aspects.

The Task Force examines some of the most significant social and economic changes occurring in Canada. The report identifies lifetime learning, telemarketing and *teleworking*, demographic shifts, the emergence of women into the work force, and the role of small business as key areas of change that demand the immediate attention of business. The Task Force also presents an overview of the major factors driving change within the business community. These factors include technology, entrepreneurship, corporate strategy and corporate structures. Factors impeding and distorting rational change include Government policy, educational shortcomings, labour-management relations and public attitudes.

Wide ranging challenges and opportunities confront all sectors of Canadian society. For Government, the challenge is to build flexibility into the system wherever possible. Business has a role in ensuring that economic structures are competitive. One means of doing this is by continuously seeking out and adopting new technologies. The community, not bureaucratic organizations, must lead change through the development of new mechanisms and economic alternatives.

Recommendations

The report recommends the Chamber:

1. Make a contribution in the area of employee education by small companies.
2. Consider ways it might assist with or contribute to such initiatives by acting as a source of information, a facilitator, or an active participant.
3. Play a role in the phenomenon of telemarketing and *teleworking*.
4. Assemble relevant demographic and labour market data and make it available to its members.
5. Exercise leadership in the area of changes being brought about in the workplace by the entry of women.
6. Expand both the membership and the influence of the Chamber movement through services tailored specifically to the needs of small enterprises.
7. Investigate ways of fostering greater cooperation between management and labour in the introduction of new technologies; assemble case studies and make them available to members; and enter an ongoing dialogue with corresponding labour organizations on implementing technology in the workplace.
8. Make a significant contribution to the growth of an entrepreneurial culture in Canada.
9. In cooperation with business schools, develop an information base on corporate strategy that would be made available to its members as a compendium of case studies, models and examples.

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10. Contribute to the evolution of Canadian corporate structures by becoming a conduit for information on these processes.
 11. Investigate concrete actions and initiatives that could be undertaken in the realm of education, apprenticeship, continuing education and retraining.
 12. Continue soliciting opinions and advice of labour representatives on important Chamber initiatives and focus more specifically on joint initiatives that could be taken at the grass-roots level to advance the process of economic change.
 13. Together with governments, educational institutions, the labour movement and the media, play an active role in shifting public perceptions of change in Canada.
 14. Bring projected major changes that will affect the livelihood of employees into the consultation process at the earliest stage possible.
 15. Investigate mechanisms such as small-business incubators, venture capital funds for local investment, initiatives to develop managerial and entrepreneurial skills, local training and educational projects, and electronic data bases to track investment opportunities.

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Canadian Chamber of Commerce Focus 2000 Task Force Report on Making Investment Capital Available

Canadian Chamber of Commerce
August 1988

Overview

The Task Force was given a mandate to examine investment issues associated with making Canadian business more competitive, and to propose an action plan for the future. This study identifies the meaning and requirements of investment in an economy experiencing transition, with new sources of growth and new financing needs. The Task Force believes that the Government should undertake a fundamental examination of the biases in the tax system that direct investment toward housing and away from securing equity in small companies. The largest Canadian companies have little difficulty in obtaining financing for their expansion requirements. However, innovative companies in non-traditional sectors, both public and private, as well as small companies, find it hard to secure equity financing.

Recommendations

Supply Issues — Creating a Better Supply of Funds for the Entrepreneur

The report recommends action to:

- Educate the managers of pension funds on the profitability of increasing their investments in entrepreneurial funds.
- Change the regulations for pension funds to revamp the *foreign basket* rule, which puts items such as limited partnerships into foreign baskets.
- Change the securities laws so that small investments by personal investors are not as tightly constrained.
- Clearly exempt venture capital firms up to a certain level from capital gains tax on investments in small and medium-sized companies, rather than taxing them on an income basis.

Ways of Helping the Entrepreneur Find Money and Improve Operations

The report recommends action to:

- Simplify taxation.
- Create a corporate structure, through the Department of Finance, similar to the *Sub Chapter S Corporate* in the U.S. where early losses of companies can flow through to shareholders and be deducted from their other income.
- Create small business development corporations (SBDCs) in provinces other than Ontario and Alberta.
- Give tax benefits to the individual investor, such as in the U.K., to invest in private entrepreneurial companies.
- Write off the expenses incurred by individual investors in searching for new investments.
- Restructure the balance implicit in the current lack of proper integration between a proprietor's personal and corporate taxes so that there is a greater incentive to keep equity in the business rather than declaring management bonuses and returning it as shareholder loans.
- Ensure more timely recovery of tax overpayments from the Government.
- Reinstate income debentures as a form of financing for small and medium-sized companies.
- Improve R&D incentives, especially in development areas.

The Role of Chambers of Commerce Across the Country

The report recommends action to:

- Initiate an ongoing information campaign about the capital requirements of entrepreneurs in a transitional economy.

- Develop an electronic computerized infrastructure across the country in order to access information about the availability and sources of capital, and use this capability to communicate effectively with local chambers about how members can get access to information and help in obtaining appropriate financing.
- Create local funds managed by successful local business people that will place small amounts of money in small ventures.
- Sponsor an interlink process such as COIN in each community.
- Develop skills programs and seminars that will help members better understand the elements of business planning and what it takes to secure financing for their operation.
- Sponsor, through the Canadian Chamber, a study on rates of return on investment in small corporations.

Proposed Research

The report recommends action to:

- Initiate more research on medium-sized companies to confirm the trends indicated in this study.
- Undertake research to develop educational tools that will respond to the problems outlined in this report.
- Undertake research to determine the effect on lenders and other investors of the large amount of intangible assets of the *soft-asset* company.
- Develop, through the Canadian Chamber, research on non-conventional measures of investment in order to better understand the importance of investment in soft assets.

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Canadian Chamber of Commerce Focus 2000 Task Force Report on Technology and Canadian Business

Canadian Chamber of Commerce

August 1988

Overview

This report presents findings of the Task Force on Technology and Canadian Business on innovation and technology. The report emphasizes technological change as the dominant force in the transition to a more knowledge-based economy in all sectors.

The Canadian business community faces new forms of competition that have increased the need for innovation and technological change in firms. The study discusses the influence of technological innovation on productivity, efficiency and design at both the macro and firm level. Since the introduction of new technology is a business and strategic decision, greater support and commitment at the CEO and senior manager level are essential to overcome the poor performance of Canadian business in developing new technology. Room for improvement exists in the management of technology, in making investment decisions to justify the introduction of new technology, and in the appraisal of marketing opportunities. Barriers to the innovation process are listed in the report along with suggestions on how companies can overcome these impediments. Changing markets, customers' needs, the development of new strategic objectives, new forms of competitiveness, and intermediaries are important incentives for the technological innovation discussed in the report.

Recommendations

The report recommends:

1. It be made a priority to develop a greater understanding of the importance of technological change in today's business environment, and through this capability undertake a national initiative to *de-mystify* the role of technology in business operations by designing new programs for its members.
2. The Chamber reclaim control of the S&T agenda.
3. Public policy makers provide a more favourable environment for innovation and technological development.

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The Canadian Chamber of Commerce Focus 2000 Task Force Report on the Environment

Canadian Chamber of Commerce

August 1989

Overview

This Task Force was asked to help the Chamber promote greater private sector involvement in environmental issues, and was given a mandate to recommend to the national organization how small and medium-sized businesses can operate in an environmentally sensitive way. Public opinion polls show that the environment is one of the most important issues for Canadians and that the business community has to articulate a clear position in favour of a healthy environment. It is time that the business community as a whole starts telling the public that it cares about the environment and demonstrates that concern by setting and meeting targets for improved environmental performance. The report stresses the need to protect the environment not by shutting down business in general but by changing the things that are environmentally destructive.

Recommendations

1. The report recommends the Chamber:

- Adopt environmentally sustainable economic development as a major long-term goal of its members.
- Write a Code of Environmental Ethics for its members.
- Develop, in cooperation with political leaders, leaders of major sectors of the Canadian economy, roundtables and other expert groups, a series of goals that it feels is appropriate to move Canada toward sustainable development.
- Participate in sustainable development discussions and projects such as the planned 1991 Canadian Conference on Sustainable Development to be held in Quebec and the 1992 United Nations global conference on sustainable development.

- Take active positions on environmental issues such as pollution control and the use of natural resources, and communicate these positions to business, governments and the public.
- Sponsor and participate in workshops on how business can comply with the existing environmental laws and can move toward practices that will be environmentally sustainable in the long term.
- Encourage regional and local chambers to establish their own roundtables or working groups on the environment and the economy that could assist local businesses in dealing with environmental issues.
- Establish a Canadian Environment Bureau to help business, particularly small and medium-sized businesses, understand environmental issues and regulations and find solutions to environmental problems.
- Encourage the institution of environmental auditing procedures as a parallel system to financial auditing, and assist member organizations and Canadian business in developing a model environmental audit program geared to small and medium-sized companies.
- Research and encourage the use of innovative pollution control practices such as emission trading rights among industry.
- Urge members to eliminate the use of ozone-depleting chemicals as quickly as possible.
- Create a full standing committee on the environment and ask the committee to review and make recommendations on the implementation of ideas in this report.

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- Distribute this report as widely as possible in the business world, and among opinion leaders and interested members of the public in order to encourage the search for and implementation of ideas that will enable business to operate in an environmentally sound manner.
2. The Task Force recommends the Chamber, in concert with its member associations and companies:
- Set an example by undertaking their own environmental audit and improvement programs.
 - Seek to be involved in the development of plans and strategies for sustainable development from the local to national level.
 - Create new partnerships at all levels, from local to international, to discover what needs to be done to achieve a healthy environment.
 - Encourage the development of environmental solutions that are driven by the market as much as possible in order to avoid relying on regulations to solve all environmental problems.
 - Cooperate with industries and encourage cooperation by Government to stimulate the development of a major business sector based on pollution control, the wise use of natural resources and the implementation of sustainable forms of development.
- Use the environmental expertise of large companies to help small companies improve their environmental performance.
3. The Task Force recommends companies of all sizes:
- Identify the environmental impact of their operations, then develop and implement strategies to reduce that impact and report their successes to the Chamber movement and the public so that others can learn from their experience.
 - Create an environmental accountability system to provide their owners, directors, shareholders and employees with an annual statement indicating what they have done during the past year to reduce their impact on the environment.
 - Work with governments to achieve policies, laws and regulations to favour environmentally sustainable forms of business.
 - Create more associations, both formal and informal, to share expertise in environmental protection.

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Positions on Selected National Issues 1988, 1989 and 1990

Canadian Chamber of Commerce

1990

Overview

The *Positions on National Issues for 1988, 1989 and 1990*, published by the Canadian Chamber of Commerce, contains the final approved versions of all the resolutions adopted by the voting members of the Canadian Chamber of Commerce on September 18, 1990. Resolutions, along with recommendations, were made for the departments of: Agriculture; Consumer and Corporate Affairs; Employment and Immigration; Energy, Mines and Resources; Environment; External Affairs and International Trade; Finance; Fisheries and Oceans; Forestry; Indian Affairs and Northern Development; Industry, Science and Technology; Justice; Health and Welfare; Transport; and the Secretary of State; as well as for the Privy Council Office, Small Businesses and Tourism, and the Treasury Board Secretariat. Since each resolution has an effective lifespan of three years, the report includes resolutions adopted at the two previous annual meetings. In accordance with the by-laws, a majority of two thirds of the votes cast was necessary to approve each resolution.

Recommendations

Agriculture Canada

The report recommends:

1990

- The Government develop policies that would result in Canada producing a high-quality basic food supply that would be grown in this country at a reasonable price to producers, processors and consumers.
- A long-term strategic approach to Canadian agriculture be provided along with policies and action to carry it through.

- The Government consider the following in arriving at long-term policies: the need for more investment in Canadian agriculture in order for producers and processors to adapt and develop in the future; the goal of becoming, ultimately, a non-direct-subsidized sector, responsive to the discipline of the marketplace; the production of additional value-added agricultural commodities; and the establishment of a Canadian agricultural think-tank as a means of revitalizing Canadian agriculture.

1988

- The Farm Debt Review Board (FDRB) be continued and be assessed regularly for improvements to the debt review process.
- In any debt review process, the FDRB have the power to mediate rather than arbitrate.
- Creditor representatives at the FDRB hearings have the authority to make a settlement with the farmer.
- Training programs to increase farmers' administrative skills be encouraged by a coordinated approach involving educational institutions, provincial governments, farm organizations and all agricultural lenders.
- The Canadian Chamber of Commerce support the Government's decision to provide almost \$40 million for the continued operation of the FDRB to 1991.
- The Government move quickly to announce and implement a business plan to maintain and enhance the Farm Credit Corporation's role as a provider of financial services to Canadian farmers.

Consumer and Corporate Affairs Canada

The report recommends:

1990

- The Government and Canada Post Corporation ensure that revenues generated under Canada Post's exclusive privilege not be used to cross-subsidize the cost of the Corporation's competitive and unregulated products and services.
- The Department of Consumer and Corporate Affairs continue to establish public education programs for users of both systems, and continue working with the representatives of various provincial governments to improve the *Newly Upgraded Automated Name Search* data base.

Employment and Immigration Canada

The report recommends the Government:

1990

- Adopt an expansionary immigration policy that allows for net immigration levels to increase at a progressive rate.
- Increase its immigration level for the selected workers class to one that is greater than the level of emigrating workers from Canada.
- Adopt an aggressive education campaign as an important component of its immigration policy to create a greater awareness of the contributions made by immigrants.
- Allow for greater flexibility of immigration policy to better cater to regional, rather than national, needs for skilled worker immigrants.
- Utilize its immigration policy more effectively to increase the supply of young workers with limited work experience.

- Allow the annual quota set on refugees to increase by a fixed proportion of the total immigration level for the same year.

It is also recommended the Chamber itself support the Government's:

- Attempts to increase the number of immigrants in the investor and entrepreneur classes.
- Ongoing efforts to control the level of illegal immigrants entering Canada.
- Traditional openness to those who are genuinely seeking escape from persecution abroad.

1989

- The Government allow refugees, who have received working papers and have been granted permission to work in Canada, access to its skills-training programs through the Canadian Jobs Strategy while the refugees' applications for permanent residence are being processed.
- The Government ensure that the dollars invested in training are delivered through existing organizations such as the Community in Ontario, rather than develop whole new bureaucracies to provide these services.
- The Government continue to work toward amalgamation of public sector organizations concerned with training.
- The Canadian Chamber of Commerce and interested provincial and community chambers and boards of trade be involved directly in the consultation process for the development of any such programs.
- The funds derived from the Unemployment Insurance Program for skills training be made available directly to businesses that wish to set up training programs with

appropriate criteria, thus meeting market and employee needs.

1988

- The Government work jointly with its provincial counterparts and industry on a plan to promote careers in skilled trades and technology by developing a campaign of advertising and information transfer to all levels of society.
- The federal and provincial governments, in conjunction with industry, take the necessary steps to develop, refine and strengthen the existing apprenticeship program, effecting changes such as stabilizing employer/apprentice relationships.
- Canadian businesses and industries and, in particular, members of the Canadian Chamber of Commerce, commit themselves to performing the necessary leadership role in promoting and creating careers in skilled trades and technology and in supporting and developing apprenticeship programs.
- In renegotiating the funding formula, governments not place additional financial burdens on employers, who already bear the bulk of the training costs.
- Where applicable, the Canadian Chamber of Commerce and the Government encourage organized labour and appropriate governments to reduce or remove restricted entry language and uneconomic pay scales governing apprenticeships.

Energy, Mines and Resources Canada

The report recommends:

1990

- The Government reinforce its support of the market system as the basis for development of Canadian energy resources.

1988

- The Government re-examine its policy and go back into the tax system to provide an environment that permits the economic development of major projects with long lead times, and/or define a program of non-tax assistance that will encourage corporate taxpayers to proceed with such projects and programs.
- In implementing the Canadian Exploration Incentive Program, officials of the Government work closely with all concerned business organizations to ensure that suitable and adequate rules and regulations are adopted.

Environment Canada

The report recommends:

1990

- The Government and the business community continue to implement the recommendations of the National Task Force on Environment and Economy.
- The Government continue its ongoing consultations with the Chamber, with particular reference to the current *Green Plan* consultation process.
- The Government and the business community continue to strengthen Canada's role in the international movement to integrate environmental enhancement and economic development.
- The Canadian Chamber of Commerce across Canada urge every member firm to develop and implement enthusiastically a program for sustainable development.
- The Canadian Chamber of Commerce and local chambers identify areas where they can take direct action to improve the environment.

- The Government take a leadership role to strengthen the coordination of federal, provincial, territorial and municipal action.
- Governments at all levels pursue improved consultation with its key stakeholders.
- The Government adopt principles to guide environmental management.
- The private sector and the public at large work cooperatively to establish a system of protected areas to represent all natural regions of Canada by early in the new century, and that the total area protected comprise at least 12 percent of the lands and waters of Canada.

1988

- The Chamber work to ensure that the federal and provincial governments maintain adequate water-planning strategies and, where necessary and possible, provide assistance through an increased assurance of supply of quality water for municipal, agricultural and industrial use.
- For the benefit of the Canadian people and wildlife, the federal and provincial governments, in consultation with industry and public water users, maintain and expand water-management planning and operations that provide water for environmental and recreational enhancement.
- The Chamber encourage governments to design and implement public and private Water-Management Planning and Operations in a manner that minimizes adverse environmental and social impacts.
- The Chamber encourage all levels of government and the private sector to support water resources research aimed at enhancing the social, economic and environmental benefits to be derived from our water resources.
- The Chamber incorporate this and other long-range environmental issues as a significant part of its *Focus 2000*.
- The Government amend the *National Parks Act* to reflect a balance of the legitimate public interest in the development of facilities necessary for recreational uses and a reasonable level of visitor services with concern for wilderness preservation.
- The Government ensure that people who represent the interests of communities and recreational users, including alpine and cross-country skiers, are included on all committees responsible for park legislation, management planning and policy.
- In consultation with local interests, the Government develop a policy and plan that will allow for orderly, controlled and environmentally acceptable development that is consistent with the need by visitors for facilities and services.
- The Government commence a public program to ensure that future generations are taught the importance of preservation and an acceptable level of conduct while using Canada's great outdoors.

External Affairs and International Trade Canada

The report recommends:

1990

- Canada participate as a full partner in any free trade negotiations between the U.S and Mexico.
- Canada ensure that any agreement that emanates from these negotiations does not undermine the gains Canada obtained in the FTA, and ensure that any agreement is

consistent with General Agreement on Tariffs and Trade (GATT) Article XXIV.

- Canadian negotiators pay careful attention to the special features of the Mexican economy, and ensure that these realities do not produce an agreement detrimental to Canadian interests.
- Canada seek to avoid the development of a U.S.-Mexican trade agreement that makes Mexico more attractive than Canada to U.S. exporters and investors.
- The Government promote Canadian interests by attempting to trilateralize the FTA, as opposed to beginning new negotiations with Mexico and the U.S.
- Efforts be made, especially through the Canadian Trade Office in Taipei, to gain greater Canadian access to the Taiwanese market and to remove impediments and obstacles to Canadian trade in Taiwan.
- To facilitate business and tourist travel between Canada and Taiwan, consideration be given, as a priority, to the development of formal air links for Canadian carriers to Taiwan.
- Federal departments establish standards of service to the public to facilitate trade and commerce.
- The departments take action to improve the systems and procedures that facilitate border crossing for private and commercial traffic, while continuing to enforce existing laws, but within the overall spirit of the FTA.
- The respective departments, in cooperation with their U.S. counterparts, designate representative international border crossings as a pilot project for evaluation and testing of the new systems and procedures.

- The Government maintain the present A-B line at the Dixon Entrance and protect Canada's sovereignty and concurrent fishing rights over these waters.

1989

- The Government launch an inquiry into the possibilities of negotiating a Canada-Japan-U.S. free trade agreement.
- The Government determine how best to advance Canada's interests should such a negotiation be undertaken.
- In the absence of proper resource management practices in national fishing off Canada's coasts, the Government announce to the international community that it will take immediate peaceful steps to extend Canada's functional resource management jurisdiction.
- The Canadian Chamber of Commerce commit itself to make this issue the highest priority through the office of its Chairman in discussions with colleagues in the EC.

1988

- Canada adhere to the International Convention on the Settlement of Investment Disputes.
- The Chamber support the multilateral liberalization of investment rules.
- The Chamber support the extension to third countries of the investment provisions contained within the FTA.
- By exploring the possibility of free trade arrangements between the EC and Canada, the Government strive to ensure that trading relations with the EC will be no more restrictive after 1992 than they are today.

- The Government assist in this process by undertaking, in cooperation with the business community, an analysis of the implications for Canadian business of the integrated European marketplace after 1992.
- The Government work within the GATT and other important international institutions to promote the greatest possible liberalization of trade in goods, services and investment worldwide.
- The Government pursue actively with other GATT members early progress in the Multilateral Trade Negotiations with respect to safeguards, dispute settlement mechanisms, and the functioning of the GATT itself.
- The Canadian Chamber of Commerce support the Government in its efforts to eliminate global and agricultural subsidies by the year 2000.
- The Government create the appropriate domestic economic climate for Canadian business to meet the challenges and opportunities of increasing international competition.
- The Canadian Chamber help to promote the GATT as an important institution in liberalizing global trade.
- The Canadian Chamber encourage the Canadian business community to monitor closely the Multilateral Trade Negotiations and the major issues being negotiated.
- The Government, as part of its involvement in GATT negotiations, foster actively a multilateral reduction of international trade barriers, particularly in the service sector.
- The Canadian Chamber of Commerce remain committed to the principle of trade liberalization and remain an active proponent of the FTA.

- Both business and local chambers of commerce help to educate their employees and constituents about the advantages of the trade agreement.
- Canadian business move quickly to secure the benefits derived from greater access to the U.S. market for their goods and services that the FTA offers.
- The Canadian Chamber of Commerce work with the Government to ensure that labour market and industrial adjustment programs are provided effectively, as required.

Department of Finance

The report recommends:

1990

- The Government call a meeting of First Ministers, on an urgent basis, to set forth a specific program to reduce the overall deficit.
- The above-mentioned reductions take the form of program expenditure reductions exclusively.
- The Government fight inflation through real reductions in the deficit and accumulated debt rather than a high interest rate monetary policy.
- The federal and provincial governments review their program responsibilities with the purpose of eliminating any program duplication.
- The Minister of Finance, within 10 days of tabling the budget, table in Parliament a five-year plan to eliminate the deficit.
- This plan be debated by the House of Commons within 10 sitting days of tabling.
- An appropriate period be set aside for such a debate, but that the period be not less than three sitting days.

- *Deficit* for the purposes of this plan be defined by the Auditor General of Canada.
- All economic assumptions and forecasts be reviewed by the Economic Council of Canada, and that its report form part of the plan tabled by the Minister of Finance.
- Subsequent to the first plan, an evaluation of the previous year's plan be included.
- Implementation of the five-year plan be suspended by Parliament during a protracted economic recession or other national emergency, and that the plan take the form of legislation.
- The legislation be cited as **The Deficit Reduction Act**.
- The Government amend the proposed GST to reduce complexity by eliminating or reducing drastically those rules denying or restricting the entitlement to input tax credits with respect to various types of costs.
- As an additional option to the quick method, tax liability be based on accrual based on quarterly or annual financial statement data rather than a prescribed rate on sales.
- The Government raise from the current levels the gross annual sales threshold for eligibility to utilize a new simplified reconciliation calculation or the quick method for GST to \$2 million.
- The Government allow legal, accounting and financial consulting businesses to use the simplified method of accounting.
- Eligible registrants grossing less than \$2 million annually be allowed to remit instalments quarterly and file GST returns annually; the filing deadline for such registrants being coincident with the filing deadline for corporation income tax returns, which is six months after the year end.
- The Government allow vendors the option to file for their FST rebate based on actual amounts of FST paid, when they can support this by written evidence.
- The Government amend the rules on conversion of taxable dividends to tax-free capital gains to replace the concept of the *knowledgeable and prudent investor* with a prescribed dividend rate and provide that only the portion of the capital gain that is reasonably attributable to the non-payment of dividends be denied the capital gains exemption.
- The Government proceed without further delay to introduce amendments to the *Income Tax Act* to provide for a corporate loss transfer system, as put forward originally in the discussion paper released with the May 23, 1985, Budget.
- The Minister of Finance allow late-filed forms and elections for those sections of the *Income Tax Act* that do not currently allow for them, and that an appropriate penalty be levied.

1989

- The Government, in reaching a pragmatic expense reduction decision, take into account the relative effects of such reductions on the local economies, and the ability of the community involved to cope and compensate through alternate economic opportunities.
- The Government take steps to ensure that the economic burden of fiscal restraint and debt control is shared fairly by all Canadians, and that less advantaged communities affected by Government expense reduction are not burdened with a disproportionate share of economic recovery.

- The Government take serious responsibility for implementing the principles of economic regional development in its decision-making process affecting economic policy that it has endorsed fully with the provinces of Canada.
- The Government amend the rules for the Capital Gains Exemption for shares of Qualifying Small Business Corporations to make them less complex and more fair, and to make the criteria for qualification more certain.
- The Department of Finance reconsider its position on this legislation, repeal the General Anti-Avoidance Rule and enact specific anti-avoidance legislation where needed.
- The Government, in reaching a pragmatic expense-reduction decision, take into account the relative effects of such reductions on the local economies, and the ability of the community involved to cope and compensate through alternate economic opportunities.
- There be no implementation of the GST unless accompanied by significant, specific and visible Government spending cuts.
- The Government re-evaluate the effect of the proposed GST on the provision and cost of transportation services in the various regions of Canada, and investigate ways to mitigate these negative effects on the regions.
- The Government move quickly to implement increases to contribution limits for those taxpayers who rely on RRSPs as their primary source of retirement savings.
- The Government simplify the *Income Tax Act* as it applies to automobile provisions, and remove arbitrary ceilings on capital cost

allowances, deductible reimbursement and other provisions.

- If the ceiling on Capital Cost Allowance is not removed, the \$24 000 limit be automatically indexed annually to the rate of inflation of automobiles.
- Current tax laws, as applied to Canadian-based transportation companies, be amended to place Canadian-based carriers on a competitive basis with competing American-based carriers.

1988

- The Government stop the trend that it has established toward deterioration in the self-assessment system by taking immediate corrective action.
- The Chamber endorse, in principle, the recommendation made by the Minister in 1986 with respect to a law allowing for provisional implementation of tax matters.
- The Government continue to consult with the private sector on options for improving the budgetary process.
- The Government implement the proposals tabled in its budget at a much faster rate than is currently the practice, and that it include a timetable for implementation of the budget proposals when a budget is tabled.
- The Bank of Canada continue to adhere to the anti-inflation policies that it has pursued with such success in recent years.
- The Bank of Canada be cognizant of the economic impacts of higher interest rates and the appreciation of the Canadian dollar, and adjust policy, if need be, to avoid exacerbating any slowing in the growth of the economy that may emerge in any regions of Canada.

- The Minister of Finance refine the proposed changes to the Associated Corporations Rules so that small business will not be denied access to the small business rate of tax, due to the ambiguous and indefinite scope of the concept of significant influence.
- The Government remove the restriction on R&D limited partnerships for qualification to receive and flow through tax credits properly earned by the execution of Scientific Research and Experimental Development.
- Subsection 248(7) be returned to its original form so that the remittance of source deductions is deemed to be received by the Receiver General on the due date, if mailed by first class mail on or before the said due date.
- Within the framework of its Focus 2000 project, the Canadian Chamber of Commerce examine the various benefits of a targeted approach to social programs with a view to informing the Government and the Canadian people about the advantages that would flow from such a policy.
- The Government, as part of the next budget exercise, develop a plan to enhance the selectivity of its major social transfer programs.
- The Government take seriously its commitment to simplification of the *Income Tax Act*, by appointing a senior officer, in either of the departments of Finance or Justice, whose sole responsibility will be to ensure that all future amendments to the Act are in a simple, understandable form, and to draft amendments to the present Act to simplify the complexities that have been allowed to creep in.

- The Government amend the application of the capital gains tax so that it applies only to the real gain in purchasing power realized on the disposition of a capital asset.

Fisheries and Oceans

The report recommends:

1989

- The Department implement a seal herd reduction program so that the herds may be managed humanely.
- The federal and provincial governments adopt consistent and uniform enforcement procedures as outlined in Bill C-74.
- The federal and provincial governments adopt cooperative policies for the restocking and enhancement of the inland fish population currently in high demand by both recreational and commercial fisheries.
- The Department be provided with adequate funding for research into creating markets for those species that have no recreational or marketable values at this time.
- The federal and provincial governments demand high health and packaging standards for fisheries products and assist industry to attain these standards by promoting research and new technology.
- As part of regular trade promotion activities, governments emphasize new markets for Canadian fisheries.

Forestry Canada

The report recommends:

1988

- The Government undertake renewal of the Resource Development Agreements with the provinces.

- The agreements be funded at a level consistent with forestry requirements.
- The forest industry participate in the planning and development of projects contemplated under the agreements.
- Private woodlot owners (up to 2 000 hectares) be given every opportunity to participate in the development and implementation of these agreements.
- The agreements be reached without any lapse of funding, at the provincial level, from expiry date until the date of implementation of new agreements.

Indian and Northern Affairs Canada

The report recommends:

1989

- Outstanding Native land claims continue to be settled as expeditiously as possible, and in a manner that honours the existing exploration and development rights of third parties, and that protects the access of resource users to the lands involved.
- The processes of land-use planning in the North be improved in order to ensure the input of all stakeholders and full consideration of the economic benefits from resource development and other commercial activities.
- The amounts of land set aside in future for parks, reserves and preserves be limited to the amount required to accomplish their proper purpose.
- The federal and territorial governments, with participation of affected Native and other groups, encourage the extension of needed transportation infrastructure, the promotion of opportunities for Native-owned businesses, and the continued education and training of Northerners for managerial, professional and skilled employment.

- The Government continue to transfer its powers over the Yukon and the Northwest Territories to those governments.

Industry, Science and Technology Canada

The report recommends:

1990

- The federal and provincial governments promote Canadian competitiveness as an ongoing concern in the development of their policies and decisions.
- Both the federal and provincial governments give top priority to the elimination of trade barriers and without further delay establish deadlines for their review, negotiation and removal.
- All provinces and the Government proclaim that no new barriers to interprovincial trade be introduced, irrespective of changing political responsibilities and power between levels of government.
- The Chamber adopt the 1989 National Technology Policy Roundtable Report as released.
- The Government take steps to follow the recommendations in the Report, with a leadership role from ISTC.
- The Government ensure industry involvement with federal-provincial government CO₂-reducing initiatives, including any new legislation leading to realistic, timely and technically achievable goals and measures.
- While the Chamber endorses the goal to reduce vehicle emissions, the Government adopt a more realistic implementation timeframe by phasing in requirements between 1994 and 1996, with standards

developed in consultation with business and environmental interests.

- ▣ The Chamber encourage and facilitate regional economic development in this country by implementing the Focus 2000 program initiatives in all interested communities in cooperation with provincial and local Chambers of Commerce.
- ▣ The key role for the new department be as an informed, reasoned advocate for business interests to other Government departments and bodies.
- ▣ The new Department ensure that government policies and programs support private sector initiatives, allowing business to compete effectively in the North American and international markets.
- ▣ The Department build links to business in order to involve business in a meaningful way in policy development.

Department of Justice

The report recommends:

1989

- ▣ The Parliament of Canada and the legislative assemblies of all provinces amend Section 7 of the *Canadian Charter of Rights and Freedoms* so that it reads: "Everyone has the right to life, liberty, security of the person and enjoyment of property, and the right not be be deprived thereof, except in accordance with the principles of fundamental justice."

1988

- ▣ The Canadian Human Rights Commission (CHRC) take a long-term, *well-considered* approach to assessing corporate performance, looking at corporate intent.

- ▣ The CHRC consult with employers on their intent and procedures by providing opportunities for meaningful input.
- ▣ The CHRC use Employment Equity Program definitions to analyze employers' data rather than developing its own, *finer* terms.
- ▣ The CHRC, Canada Employment and Immigration Commission (CEIC) and employers work jointly with Statistics Canada on future data collection to ensure its relevance and compatibility with requirements of the *Employment Equity Act*.

Health and Welfare Canada

The report recommends:

1990

- ▣ Government intervention in pension plans deal only with making pension plans fair and secure.
- ▣ Legislation be uniform in all essential areas across Canada by agreement of provincial and federal governments to reduce unnecessary differences that now exist with their resulting administrative costs and deterrent value to new plans.
- ▣ The Government not impose any sort of mandatory system of inflation adjustments for pensions.
- ▣ Provincial governments lift the moratorium on surplus reversion where the employer is not forbidden expressly by the plan documents to utilize surplus, and recognize clearly as acceptable practice the use of surplus as payment for employer contributions.

1988

- Government legislation be amended at least to reinstate the conditions that existed regarding federal grants prior to the April 17, 1984 legislation, so that provinces would have the flexibility to tailor their health care system to their own needs; including charging user-fees for hospital services and physicians' visits without triggering the Government penalty.
- Federal legislation be altered further to permit the provinces to adopt those measures that they deem necessary for the introduction of private health care services, including private insurance, in competition with public health care plans.
- Health care plans be structured to ensure accessibility to quality health care services for all citizens.

Revenue Canada

The report recommends:

1990

- Should a clerical or calculation error resulting in no benefit to the taxpayer and no cost to Revenue Canada occur in the filing of such elections, the taxpayer be permitted to file amended elections at no cost within a three-year period.
- The departments of Revenue and Finance continue a consultative process with the business community with the objective of resolving remaining problems in a timely manner.
- Information required of the taxpayer be minimized to include only information that is essential to meet the requirements of the Scientific Research and Experimental Development Tax Credit Program.

- Steps be taken to improve the interaction between the departments of Revenue and Finance and taxpayers in order to reduce confusion resulting from different positions and requirements.
- The Scientific Research and Experimental Development Tax Credit Program be made the subject of a review by both the departments of Finance and Revenue Canada with business community involvement.

Government of Canada Privy Council Office

The report recommends:

1990

- The Government reconsider Bill C-46, particularly with respect to the concept of a Conflict of Interests Commission, and introduce a two-part disclosure process outlined as follows: "The first part would be a general statement of assets and liabilities and should be made available to the public. The second part would be a far more detailed statement filed with the Clerk of the House for use by the Speaker and the House Committee on Privileges and Elections, should action be necessary."

Department of the Secretary of State of Canada

The report recommends:

1989

- The Council of Ministers of Education promote, in the curricula and in extra-curricular activities, the positive role of business and of fostering an entrepreneurial spirit and skills training in youth.
- The Chamber take a leadership role in the establishment of a Canadian Committee for the Advancement of International Business Expertise consisting of representatives from

a broad geographic base of business, governments and post-secondary institutions.

- The Chamber take an active role in discussions with both provincial and federal governments regarding the crucial need for the advancement of international business expertise in Canadian universities.
- The Government strengthen its efforts to establish a plan, in cooperation with the provinces and other stakeholders, to effectively eliminate illiteracy by the year 2000.
- The Chamber continue its efforts to cooperate in partnership with the educational community to enhance literacy and learning abilities among those who will join the work force in the coming years, and share resources in the training and retraining of employees.
- The Council of Ministers of Education be asked to examine educational programs to ensure they are structured to allow access to continuing education, literacy and job skills training, and retraining for people of all ages.
- In designing social programs, increasing emphasis continue to be placed on encouraging self-reliance, further education, and skill enhancement, as a means of preventing poverty.

1988

- The Chamber, as part of its Focus 2000 initiative, endorse the concept of the Industry-Education Council model as developed in Hamilton-Wentworth, for replication in other Canadian communities to enhance the cooperation between employers and education entities and to facilitate the expansion and development

of new Industry-Education partnership activities.

Small Businesses and Tourism

The report recommends:

1989

- Institutional funds be encouraged to form provincially managed venture capital pools.
- Lending policies and practices be monitored to ensure that small businesses are not disadvantaged, and that in the next downturn there be a bias toward keeping businesses as going concerns.
- Policies be developed to facilitate lending to service and technology businesses.
- Tax changes foster equity investment in active businesses over debt investment in real estate.
- Government programs be reoriented to offer support, management and financial control for emerging businesses, through vehicles such as business incubators.
- Delivery of business support programs be through private sector organizations.
- Governments endorse and support investment matchmaking services such as the Canadian Opportunities Investment Network.
- The Small Businesses Loans Program be expanded to guarantee, in addition to fixed assets, the financing of such operating assets as accounts receivable and inventory.

Transport Canada

The report recommends:

1990

- Canadian regulations with respect to cabotage be enforced.

- The Government increase air traffic controller training and increase staffing levels, and investigate the role that the private sector could play in training controllers.
- The Government install air traffic control equipment as soon as possible.
- The Government establish performance standards for airport operators and controllers, and that the private sector participate in establishing the performance standards.
- The Government ensure that the required resources are provided to enable air traffic control to serve the market demand.
- The Government pursue immediate productivity measures to further enhance performance.
- The Government study carefully initiatives taken in other countries to manage and provide air traffic control services.
- The Government conduct extensive consultation with the maritime and manufacturing communities in order to solicit alternative recommendations on expense reductions.
- The Government identify services that are not needed to ensure value for money in order to achieve the Government's policy of lower overall costs.
- Any additional costs to Canadian ports and transportation systems proceed only after a full evaluation of the impact of such fees on the long-term viability of our maritime industry and the economic benefits it provides.

1989

- The federal and provincial governments give priority to developing a national transportation policy to rebuild, maintain and expand the existing transportation infrastructure to reflect the increasing importance of an efficient and workable national highway in Canada.
- The national highways policy be based on the objective findings of the special study group established by the Council of Ministers Responsible for Transportation and Highway Safety.
- The Government give priority support to the second phase of the work of the study group of the Council of Ministers that will look at costs and benefits of upgrading the national highway system.
- Taking into account cost/benefit analysis, the Government, in conjunction with provincial governments, proceed to upgrade the national highway system, including the Trans-Canada Highway.
- The financing of the upgrading of the national highway system be derived substantially from the funds being raised currently by fuel taxes, vehicle licences, etc., at both levels of government.
- VIA Rail management be given the chance to propose a recovery plan to make its services profitable.
- If cuts have to be made, the same parameters for decision making be applied throughout the country.
- VIA Rail's offer to the private sector involving fair conditions for operation on the CN and CP lines be considered as an alternate solution.

- The Government subsidies for the transportation of grains under the *Western Grain Transportation Act* be made payable to the producers in order to encourage free market competition in the transportation sector.
- Any necessary studies required prior to implementation of the above recommendation be undertaken on an urgent basis.
- The Government reopen negotiations under the bilateral Air Transport Agreement with the U.S. government to promote, to the fullest extent possible, commercial air services by establishing additional direct air services routes that will best serve the Canadian public interest while enhancing regional equity in air services.

Treasury Board of Canada Secretariat

The report recommends:

1990

- The Government commit itself to more consistent, timely and useful reporting of its costs and deficits.
- The Government dedicate itself to researching and testing more comprehensive and relevant frameworks for reporting on the effectiveness of governments, Crown corporations, regulated industries and publicly funded organizations, keeping in mind the suggestions of an independent panel sponsored by the Canadian Comprehensive Auditing Foundation.

- The Government work toward using modern technology and the networks and outlets of established financial institutions and telecommunications systems to administer, control and report on the great variety of social expenditures within its jurisdiction.
- The Government, in keeping with its commitment to lessen interference with the marketplace, and in an effort to strengthen the long-term competitiveness and health of the Canadian economy, pursue more aggressively its policy to privatize Crown corporations.
- The Government frame policies that look to the private sector to carry them out and refrain from encouraging initiatives that are not commercially sustainable.
- The Government continue to rigorously seek to achieve sound management and financial performance by those Crown corporations that continue under federal ownership.

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Positions on Selected National and International Issues 1991

Canadian Chamber of Commerce

1991

Overview

The *Positions on National Issues for 1991*, published by the Canadian Chamber of Commerce, contains the final approved versions of all the resolutions adopted by the voting members of the Canadian Chamber of Commerce on September 24, 1991. Resolutions, along with recommendations, were made for the Prime Minister's Office, and the departments of: Agriculture; Employment and Immigration; Environment; Finance; Industry, Science and Technology; International Trade; Health and Welfare; Revenue and Transportation. Each resolution has an effective lifespan of three years. In accordance with the by-laws, a majority of two thirds of the votes cast was necessary to approve each resolution.

Recommendations

Prime Minister's Office

The report recommends:

- All levels of governments, the business community, labour groups, as well as individual Canadians, work together to fashion a new partnership to:
 - recognize the unique characteristics and strengths of all Canadians;
 - build a more competitive economy recognizing comparative advantages;
 - provide opportunities for Aboriginal people to realize their potential;
 - identify more clearly the responsibilities of each level of government with a view to eliminating duplicate jurisdictions and curbing spending powers; and
 - establish a decision-making process within a framework of sound and effective management of the economic and financial affairs of the nation.

- The Canadian Chamber of Commerce, and its members, continue to be actively involved in public debate of Canada's constitutional arrangement.

Agriculture Canada

The report recommends:

- The Government continue to develop the Agriculture Safety Net Programs, ensuring that they are market responsive and individually targeted, while being fiscally responsible.
- The Government, within its current budget constraints:
 - encourage the development, commercialization, transfer and utilization of commercially relevant agricultural technology by Canada's agri-food sector;
 - encourage closer cooperation within and between private and public sector agricultural organizations to diversify and strengthen the agricultural economy and to optimize the benefits from these organizations' efforts in domestic and international markets; and
 - encourage increased excellence in agricultural research by Canada's agri-food industry directed to international market opportunities.
- The Government, within its current budget constraints, encourage and support independent/private initiatives to enhance aquaculture development. Further, the need for close cooperation among the Department of Fisheries and Oceans, other research and regulatory departments of the federal government, and other levels of government is recognized as vital to the developmental process.

- The good reputation of Canadian aquaculture products and international competitiveness be maintained and strengthened through high quality and health standards, in such areas as nutritional adequacy, consumer acceptability, food safety and absence of drug residues.
- Cost-effective research and development relative to aquaculture be encouraged, including research into the potential for a possible impact on natural fisheries.
- The Chamber of Commerce support the recommendations outlined in the Report to Ministers of Agriculture by the Federal-Provincial Agriculture Committee on Environmental Sustainability.
- The Government move quickly to amend the *Western Grain Transportation Act* so that the Act:
 - encourages the development of a more efficient and cost effective transportation and transport handling system that does not create a bias as to mode or routing of grain shipments within Canada; and
 - encourages diversification and value adding on the prairies.
- The Government, instead of increasing obligations under the present *Employment Equity Act*, revise the Federal Contractors Program and lower the dollar limit from those companies under contract from \$200 000 to \$100 000.
- The compliance requirements for both federal contractors and federally regulated employers be harmonized. Judgment should be based on the qualitative efforts undertaken by employers to achieve employment equity, as well as their quantitative results.
- The implementation of the Act, and any investigations into employer plans, be conducted by CEIC and not the Canadian Human Rights Commission.
- The federal and provincial governments work closely together to ensure a cohesive, cost-effective and market-driven approach to labour force development in Canada.
- To avoid duplication, the local labour market partners should take into account existing bodies when building structures to support their initiatives.
- After a fair, accurate and comprehensive definition of training is agreed upon by governments, business and labour, the Canadian Chamber of Commerce encourage its members to recognize the value of ongoing training and skills enhancement to meet national training targets or goals if and when they are established.
- The Government allow the premium-payers of the Unemployment Insurance (UI) systems (i.e. employers and employees) to play a stronger role in deciding how the UI program is administered, what structural elements it should include and what premium rates are set.

Employment and Immigration Canada

The report recommends:

- The Canadian Employment and Immigration Commission (CEIC) review its current use of statistics to ensure that they are in fact representative of employer initiatives. These statistics should be based on hiring and should acknowledge the differences between company data and federal data.

- CEIC work jointly with business, labour and the relevant provincial counterparts in developing a plan to promote and encourage careers in skilled trades and technology. This could be accomplished by developing a communications campaign to encourage the choice of a career in the skilled trades, emphasizing that a career in the trades can be monetarily rewarding and also satisfying.
- The federal and provincial governments, in conjunction with business, take the necessary steps to develop, refine and strengthen the existing apprenticeship program with a view to eliminating its current deficiencies, including effecting changes to the program to promote more stable employer/apprentice relationships.
- Canadian businesses and, in particular, members of the Chamber of Commerce, commit themselves to perform the necessary leadership role in promoting and creating careers in skilled trades and technology and in supporting and developing apprenticeship programs.
- The Government encourage business to participate more actively in the training of workers in order to ensure Canada's economic competitiveness and work with organized labour and the provincial governments to regularly review access and remuneration for apprenticeship programs.
- The Prime Minister's Office encourage the development of a set of national education goals in Canada through a broad collaborative effort incorporating the views of the key education system stakeholders (students, parents, business, governments, educators, associations, labour, etc.).
- The Canadian Chamber of Commerce participate in the discussions regarding these goals.

Environment Canada

The report recommends:

- The Government ensure that a coherent and cooperative approach is taken by all levels of government so that a consistent set of environmental policies is pursued. This would ensure that public, business and government resources are not unduly wasted on duplication of programs.
- The Government take a leadership role in establishing good environmental practices in its own operations.
- The Government, recognizing the importance of global trade to the Canadian economy and our own standard of living, take a leadership role in developing coordinated international action.
- The Government allow business a reasonable amount of time to make voluntary changes to its packaging policies before any decision is made to enact legislation.
- The Government establish a mechanism that looks at all significant environmental and societal impacts related to packaging before any packaging legislation is imposed; and in particular, the Government include life cycle analysis of environmental and societal impacts in the packaging protocol.
- The Government ensure that there is proper coordination among the national and provincial governments to ensure that the National Packaging Protocol is applied consistently.
- The following general principles be adopted by governments at all levels in the planning, promotion and implementation of programs directed toward the minimization of solid waste generation:

- the design of such programs should be based on a logical waste management hierarchy that places the highest priority on the elimination and reduction of waste, followed by reuse, recycling and recovery;
- such programs should specifically target types of waste materials whose reduction or alternative management maximizes environmental value, minimizes the need for traditional waste management facilities and can be justified economically;
- the financing of these programs should be based on the principles of "user pay" with incentives for their use being provided by equitably applied higher service charges for conventional disposal facilities. In structuring the financial basis for these programs, the concept of establishing a standard "diversion fee" directed toward significant waste streams and based on the value derived from reduced utilization of conventional disposal facilities should be explored; and
- commercial opportunities arising from the development and provision of alternative waste management services should be available to the business community generally, for delivery on a competitive basis.
- Where there is overlapping or unclear jurisdiction, the federal and provincial governments cooperate in the development of a unified environmental assessment process and clarify the respective roles and responsibilities of both levels of government.
- Environment Canada and other Government departments working in this area adopt the following principles to guide their approach to public participation:
 - Environment Canada to solicit input from the key industry and business groups as to who is a stakeholder in any particular initiative;
 - Environment Canada to continue to release discussion papers prepared in advance of multi-stakeholder workshops designed to focus the participant's attention on some of the key issues;
 - Environment Canada to continue to conduct consultative workshops in advance of any formal process that may be required in the development of legislation; and
 - Environment Canada to work to improve its consultative process to improve the quality of the inputs received.
- The Government ensure that the likely impacts from the application of new environmental regulations, guidelines and standards on Canadian industry, especially site-specific operations be carefully evaluated.
- The Government phase in, where appropriate, new environmental regulations, guidelines and standards over an extended period of time — allowing industry to adapt without abrupt changes in the economics, which could be catastrophic for some important operations.
- The federal and provincial governments pursue water-planning strategies to ensure a sustainable supply of quality water for municipal, agricultural, industrial, recreational, fisheries and wildlife uses in an environmentally sound and economically efficient manner.

- Governments design and implement public and private water management planning and operations in a manner that minimizes adverse environmental and social impacts.
- For the benefit of Canadian people and their environment, the Government of Canada and provincial governments, in consultation with industry and public water users, explore water conservation technologies and market pricing mechanisms that could economically provide assured water supplies without negative environmental and social impacts and reduce demands that affect local economies and ecosystems.
- All levels of government and the private sector support water resources research and policies aimed at sustaining the social, economic and environmental benefits derived from our water resources.

Finance Canada

The report recommends:

- The Government call a meeting of First Ministers — on an urgent basis — to set forth a specific program to reduce the overall deficit and to reduce the debt-to-gross domestic product ratio.
- The above-mentioned reductions be achieved through program expenditure reductions at all levels of government and that the 0-3-3 policy, as announced in the 1991 federal budget, be supported by the Canadian Chamber and be expanded to include all government payroll, including managers and administrators, officers of Crown corporations, judges, senators, and members of Parliament.
- Measures like spending ceilings at the federal level be a small first step toward meaningful expenditure control and be implemented at the provincial level.

- The Government recognize that Canada is in a very dangerous situation that must be corrected quickly, and immediately acknowledge the deterioration in the competitiveness of the tax system. It must move expeditiously to restore an attractive investment climate in order to protect jobs and the economic future of Canada. Specifically, the report recommends the following:

- the Government move immediately to restore the three-year depreciation schedule previously in place; and
 - the Government work with the various provincial governments to ensure a Canadian tax structure competitive with that in the U.S.
- The Government, through Revenue Canada, be urged to amend the rules relating to GST rebates for visitors from outside Canada for expenditures for short-term accommodation. This would allow visitors to be able to assign such rebates to the Canadian providers of short-term accommodation.
- The Government delete deemed financial institution rules so that restrictions on input tax credits apply only to listed financial institutions and that any perceived abuses or inequities be dealt with by expanding the definition of "listed financial institutions."
- The Section 156 (*Excise Tax Act*) election be made available to closely related entities other than corporations.
- The federal Minister of Finance amend the *Excise Tax Act* to permit the Minister of National Revenue or his designate to waive penalties and/or interest that otherwise would be imposed under the Act, where, in the opinion of the Minister of National Revenue or his designate, the registrant

has made a reasonable effort to collect the proper amount of tax eligible under the Act during the two-year period ending on December 31, 1992.

- The Government, in its negotiations with the participating provinces, ensure that in so far as matters relating to the goods and services tax are concerned:
 - rulings and interpretations are consistent and centralized;
 - the filing requirements and other similar compliance and audit procedures are similar across jurisdictions;
 - the harmonization results in no increased compliance burden for the registrant; and
 - it shall remain revenue neutral.
- Revenue Canada — Customs and Excise follow the legislation in administering the GST and that substantive amendments and changes be legislated rather than adopted by administrative practice.
- The Ministers of Finance and National Revenue instruct their officials to review the penalty provisions of the *Income Tax Act*, draft legislation that will lessen the penalty burden arising from innocent non-compliance and instruct officials charged with administration of the Act to apply penalties in a fair and even-handed manner.
- The federal Minister of Finance begin the process of simplifying the *Income Tax Act* and Regulations on two fronts: first, the Minister should redraft the provisions of the Act in a comprehensible manner; second, the Minister should amend concepts in the Act, such as the taxation of capital gains, the applications of capital losses, the lifetime capital gains exemption and related anti-avoidance provision; and replace such provisions with a simpler system, such as

that proposed in another recommendation of this Chamber, based on the indexation of property so that inflationary gains are not subject to taxation.

- The federal and provincial governments reduce the number of taxes currently imposed and rationalize and integrate their tax bases where essentially similar taxes are levied by federal and provincial governments.
- The Canadian Chamber of Commerce continue to endorse, in principle, the recommendation made by the Minister in 1985 with respect to a law allowing for provisional implementation of tax matters.
- The Government continue to consult with the private sector on options for improving the budgetary process.
- The Government implement the proposals tabled in its budgets at a much faster rate than is currently the practice, and that it include a timetable for implementation of the budget proposals when a budget is tabled.
- The Government amend the application of the capital gains tax so that it applies only to the real gain in purchasing power realized on the disposition of a capital asset.
- Subsection 248(7) of the *Income Tax Act* be returned to its original form so that the remittance of source deductions is deemed to be received by the Receiver General on the due date.
- The Government increase the Small Business Deduction to \$400 000 immediately. Although this measure would, in the short-term, have a minor negative impact on federal taxation revenues, it would help create a supportive business climate for growth in the small business sector.

- The Government preserve the tax-exempt status of Canadian pension funds, and proceed to legislate the increased foreign equity content limit, as soon as possible.
- The Government change the regulations to permit the use of the benefit accrual under the plan for people with disabilities. This will be much simpler for employers to administer and much fairer to disabled plan members. As a compromise, given the large inequities in the current system with regard to disabled members, the use of the salary at the date of disability in the regular (Pension Adjustment) PA formula could be used.
- The Government ensure that the PA for defined contribution and deferred profit sharing plans reflects the actual percentage vested rather than applying 100 percent for all percentages above zero.
- The Government consider the use of age-related PA factors, rather than one factor.

Industry, Science and Technology Canada

The report recommends:

- The federal and provincial governments promote Canadian competitiveness as an ongoing objective in the development of their policies and decisions.
- The federal and provincial governments establish a cost-effective assessment process on competitiveness, in consultation with the business community, to measure the impact of government policies and legislation on Canadian business. Resources for such a process should be reallocated from existing departments/ministries, which would be consistent with the Government's deficit-reduction strategy.

- The federal and provincial governments each publicly disclose its assessments of the competitive impact of its policies and legislation on Canadian business. This would ensure that government decision-making processes consider all relevant costs and benefits to the Canadian business community.
- The Government vigorously pursue the elimination of trade barriers among the various provinces and territories, and the elimination of all subsidies that distort the comparative advantages among provinces and territories.

External Affairs and International Trade Canada

The report recommends:

- The Government seek as an immediate objective the elimination of anti-dumping laws between Canada and the U.S., and their replacement by a substitute regime based on competition law.
- The Government seek to achieve the elimination of anti-dumping laws as they apply to Canada and the U.S., through whatever means available, including the negotiations mandated by Article 1907 of the FTA.
- The Government encourage the promotion of sustainable development and environmentally responsible behaviour while ensuring that environmental sensitivities not be misused in a trade-restrictive manner.
- The Government promote the re-establishment of the GATT Task Force on environmental issues.

- The Government of Canada consider environmental issues in the context of a North American Free Trade Agreement as key elements in those discussions, and ensure that the appropriate Canadian government departments consult widely and engage in necessary research to identify the most important environmental issues.
- The Government continue to recognize the European market as a particularly important market for Canada and key to Canadian success in the emerging global economy, and increase its efforts to assist Canadian business in accessing this market.
- The Government ensure that key areas in which the EC is developing new rules and standards be surveyed carefully to ensure that Canadian interests are promoted, including such areas as Canadian access to the wood products and financial services markets.
- The Government use all available mechanisms for ensuring that the current changes in the EC's institutional structure address Canadian commercial disputes with Europe over fisheries, beef, wine and furs.
- The Government continue to work with the EC to strengthen the bilateral relationship, and in particular build on the 1976 Framework Agreement and the 1990 Declaration on EC-Canada Relations as part of an effort for turning the Canadian-EC relationship into a genuinely effective political and economic link.
- The Government seek to ensure that trade in services be a key component of the negotiated outcome to the Uruguay Round.
- The Government seek to ensure that trade in services be a key component of the negotiated outcome to a North American Free Trade Agreement.
- The Government reallocate resources from other areas to generate programs on the Canadian service sector and to identifying how this sector can be an increasing component of Canadian economic competitiveness and trade ensuring in the process that all levels of government work together to ensure that their policies and programs are applicable and available to service industries.
- The Government consult widely with the business community in identifying new initiatives and priorities regarding the service industry without adding to net government expenditures, and utilize existing expertise within the private sector.
- The Government be supported in its efforts to create a World Trade Organization and that this initiative be treated as a priority objective of Canadian GATT negotiators.
- Canada seek the establishment of a World Trade Organization that builds on the GATT by institutionalizing it, ensuring that it receive the same status as other United Nations bodies while seeking to guarantee in the process that this new organization avoid an overly bureaucratic and rule-laden orientation.
- The Government ensure that in the creation of a new World Trade Organization, particular attention be given to the establishment of improved and integrated dispute settlement mechanisms, which would include more adjudicative and formalized proceedings than exist at present.
- As part of an overall strategic approach to Canadian interests in the Asia-Pacific region, the Government work in close consultation and collaboration with the private sector in promoting trade and investment, and encourage cooperation and

coordination of activities among the various Canadian players in the region.

- The Government increase its effort to assist Canadian business in accessing the markets of Asia-Pacific, including promoting awareness within the countries of Asia-Pacific of Canadian capabilities in areas in which Canada has not traditionally been recognized within the region as expert, including such industries as services, consulting, engineering, transportation, telecommunications and high technology.
- The Government continue to recognize the importance of the Canada-Taiwan trade relationship.
- The Government support Asia-Pacific Economic Cooperation (APEC) as a mechanism for the discussion of regional trade and investment issues.

Health and Welfare Canada

The report recommends:

- The Government dismantle and redistribute the system of Family Allowance payments. This recommendation is made on the assumption that redistribution of the Family Allowance system will reduce government bureaucracy and administration.
- The Government restructure the MP Pension Plan to reflect the Revenue Canada pension limits available to the average Canadian worker.
- The federal and provincial governments:
 - continue to investigate alternative mechanisms for the delivery and administration of health care services;

- re-examine the many different health care priorities competing for funding;
- take serious efforts to ensure that "cost containment" is considered by both the providers and users of the health care system; and
- continue to work with the business community to increase the awareness among employers about the benefits derived from programs promoting healthier lifestyles.

Revenue Canada

The report recommends:

- As part of its competitiveness orientation, the Government consult widely with business and local communities to identify a federal dealing with cross-border issues. This strategy should include an examination of current taxation practices on gasoline and other commodities, with the objective of reducing or eliminating taxes that produce a competitive disadvantage for Canadian businesses. There should also be an examination of all other relevant federal policies in the area of taxation, regulation, customs and excise, and fiscal and monetary policy in order to ensure that the impact of these policies on the cross-border shopping issue is a prime consideration.
- The Government continue to facilitate the entry of foreign nationals entering Canada as tourists and the re-entry by Canadians with nothing to declare.

- The Government provide adequate facilities and sufficient Customs officials to ensure the collection of duties, tariffs and taxes at the border, and expedite the negotiation of agreements with provincial governments to collect the Provincial Sales Tax at the border where applicable.

Transport Canada

The report recommends:

- The current practice of Transport Canada of selectively decommissioning Aviation Weather Reporting Stations as part of its cost reduction program not be accepted without prior consultation with the industries, businesses and communities affected. Transport Canada has committed to a program of industry consultation prior to the decommissioning of aviation-related services, and this consultation must of necessity involve the affected communities. Examples currently exist across Canada where Transport Canada has acted unilaterally in cost-cutting initiatives without the opportunity for industry or community input. Specifically, it must be demonstrated by Transport Canada that the weather information in support of aviation is available to the users in order to avoid a compromise of safety.
- Decommissioned Aviation Weather Reporting Stations be reconsidered until the local businesses, industries and communities have an opportunity for input.
- A new, updated and more liberal aviation agreement between Canada and the U.S. be developed.

- The Canadian and U.S. governments adhere to the deadline of December 31, 1991, in reaching a new bilateral air transport agreement.
- Any new agreement promote to the fullest extent possible commercial air services between, and possibly within, the two countries, which will serve Canadian business and leisure travellers.
- If cabotage remains a stumbling block toward the completion of a new air transport agreement, it be set aside to ensure the successful resolution of a new agreement.
- The federal and provincial governments give priority to developing a national transportation policy to rebuild, maintain and expand the existing transportation infrastructure to reflect the increasing importance of an efficient and workable national highway system in Canada.
- The national highways policy be based on the objective findings of the special study group established by the Council of Ministers Responsible for Transportation and Highways Safety.
- Taking into account cost-benefit analysis, the Government, in conjunction with provincial governments, proceed to upgrade the national highway system, including the Trans-Canada Highway.
- The financing of the upgrading of the national highway system be substantially derived from the funds currently being raised by fuel taxes, vehicle licences, etc., at both levels of government.

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- The Government form an integrated national transportation policy in consultation with provincial and territorial governments, transportation carriers and users.
 - The review of the *National Transportation Act* be based upon ensuring a cost-competitive system and encompass an examination and assessment of both federal and provincial legislative, fiscal and other policy factors affecting transportation.
 - Those charged by the Government with this review be chosen under terms of a mandate that includes areas of concern outside the direct purview of the *National Transportation Act*, but affecting the ability of the Act to meet its objectives.

**For more information or copies of this report, contact:
Canadian Chamber of Commerce, Suite 1160,
55 Metcalfe Street, OTTAWA, Ont., K1P 6N4,
Tel.: (613) 238-4000.**

The Prospects for Innovation in Canadian Industrial Relations in the 1990s

Anil Verma, University of Toronto, Canadian Federation of Labour and World Trade Centres
1991

Overview

This report was prepared for the Canadian Federation of Labour and World Trade Centres Joint Committee. Its major premise is that the future prosperity of the Canadian economy depends on changes in industrial relations and human resource management practices toward a system of joint governance (management and labour) of the workplace. In particular, the report suggests that increased productivity and quality can be attained if innovative work practices are introduced, such as worker involvement, job security, sharing plans and flexible work arrangements.

Recommendations

The report recommends:

Management

1. Invest in building up its relationships with the unions before proposing and/or introducing innovations.
2. Find ways to fund activities that will help both sides (the union and the company) acquire expertise in, and knowledge of, innovation.
3. Seek opportunities to engage in joint work with the union in areas such as training, employee surveys and employee communication.
4. Negotiate with the union to introduce innovation in new work sites on a trial basis.
5. Share power with unions in workplace management.

Unions

1. Develop their own expertise on innovation and demonstrate an urgent commitment to introducing them.
2. Develop linkages with external expert groups that can provide independent assessments of the risks and opportunities associated with innovation.
3. Develop a forward-looking bargaining strategy on innovation based on union security, information sharing, a voice in design and implementation of innovation, and job security.
4. Seek opportunities to engage in joint work with management in areas such as training, employee surveys and employee communication.

Government

1. Fund joint programs through which the parties can acquire a better understanding of innovation and the problems facing them.
2. Provide funds to unions to acquire expertise in various innovations; these funds would sponsor union staff training and enable unions to hire outside experts.

**For more information or copies of this report, contact:
Canadian Federation of Labour, Suite 300, 107 Sparks
Street, OTTAWA, Ont., K1P 5B5, Tel.: (613) 234-4141.**

Innovation and Canada's Prosperity: The Transforming Power of Science, Engineering and Technology

Canadian Institute for Advanced Research

October 1988

Overview

The premise of this report is that Canada's economic prosperity beyond the next five years will depend on its ability to enhance participation in a growing volume of world trade by improving, through science-based innovation, the range, quality and price of tradable goods and services. To bring about the changes required to enhance Canada's science-based innovation potential, a technology strategy must be developed with the following conditions being given high priority: quality, flexibility, adequate manpower, adequate financing, resource allocation, concentration of resources, risk sharing and service sector infrastructure. Establishing strategies is fundamental for Canada's future. Canadian industry (including labour), supported by Government, must lead in establishing targets, identifying opportunities and developing policies and strategies to exploit innovation opportunities.

Recommendations

The report recommends:

1. The capacity of Canadian industries to perform strategic and long-term applied research be increased substantially.
2. Long-term applied research, oriented to possible strategic market opportunities, be industry driven.
3. To compete in the global economy, Canada develop a consensus-forming (government-private sector) process. The consensus-forming process requires the leadership of the Prime Minister and the Premiers, and must engage

the most senior leaders of industry, labour, governments and the universities. Several principles fundamental to a Canadian S&T consensus-forming process are included in the report.

4. In the development of a national consensus-forming process, priority be given to the definition of *indexes of improved research strength* that can be used to guide both industrial and government investment through corporate strategies and government incentives, grants, procurement, and policy for direction of research laboratories.
5. Because of the scope and complexity of technologies that must be brought together in modern new products and systems, single firms should enter into *linkages*. These linkages must connect effectively industries, government and universities to unify and intensify basic, applied and developmental levels of research with the goal of improving Canada's share of the science-based innovation, which is essential to the production of tradable goods and services for the future.
6. In the matter of finance, Canada develop strategies to fund long-term, high-risk, industrial-based applied research. The longer the term and the higher the risk of the research, the greater the proportion of public financing that is required.

For more information or copies of this report, contact: Canadian Institute for Advanced Research, Suite 701, 179 John Street, TORONTO, Ont., M5T 1X4, Tel.: (416) 971-4251.

Economic Growth: Science & Technology and Institutional Change in a Global Economy

Richard G. Lipsey, Canadian Institute for Advanced Research

May 1991

Overview

This is an outline of a research program planned by the Canadian Institute for Advanced Research rather than a statement of research results. Presented on May 7, 1991, it is a survey of the issues relevant to the topic. Everything is subject to revision.

In the light of growing concern about the directions, nature and sustainability of economic growth, the author reviews cursorily some of the theories of economic growth and their weaknesses. The purpose of the proposed research program is to develop a better understanding of the growth process — of the determinants of the wealth of nations — and thence better theories of growth upon which to base improved growth policies. The author provides a sample of the kinds of issues that need to be dealt with in understanding the process of growth and technological change; to wit, the need to understand:

- the whole globalization process;
- the merit, or lack of merit, in maintaining a manufacturing sector;
- the issues relating to the desire to alter the balance of production between industries;
- the role of strategic industries;
- the importance of clusters of economic activity;
- the importance of ownership;
- the importance of institutions;
- human motivation better than we now do; and
- the importance of the market for corporate control.

Initial Recommendations

Regarding Government policy, the author suggests the Government:

1. Embrace the market economy.
2. Does not fight the last war — for example, do not blindly copy Japanese approaches that were designed for the most part to catch up, not to be the leader.
3. Encourage competition.
4. Adopt an outward-looking, trade-oriented approach.
5. Work out a concerted policy for Investment Canada.
6. Review thoroughly bases for different taxes.
7. Does not rush into supporting research consortia.

Regarding further research the author suggests the Government:

1. Review and assess the debate on whether manufacturing matters.
2. Investigate whether there is anything special about the tradable goods sector.
3. Improve current theories of the firm.
4. Conduct further work on the nature of capital and on increasing returns in growth models.
5. Review how the U.S. lost its lead.
6. Compare similarly endowed countries (e.g. Argentina with Canada in 1930).
7. Analyze the sources of rising real income.
8. Determine the real source of large-scale differences in incomes.
9. Determine whether ownership matters.
10. Determine the role foreign direct investment plays in encouraging competition.

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11. Investigate the pros and cons of opening the home market to foreign competition.
 12. Determine what influences a firm to either stay and fight or to run when faced with a competitive challenge.
 13. Determine the importance of clusters.
 14. Investigate how people, firms and institutions respond to challenges.
 15. Determine what motivates people.
 16. Determine the mistakes of current mercantilist policies.
 17. Investigate the many problems concerning financing.
 18. Determine whether the North American time horizon is shorter than that of others.
 19. Investigate how much Government institutions matter.
 20. Investigate whether anything useful can be said about the cultural determinants of competitiveness.
 21. Determine the social dynamics of factor creation and what Government policies really matter.
 22. Determine whether there is any place for an investment review agency.
 23. Study further the use of address models in issues of international trade and competitiveness.
 24. Determine what can be learned about the impact of specific shocks in an international setting.
 25. Determine the range of public policies that need to be studied and whether there is any evidence that they have positive effects.
 26. Review the apparent successes of the science and industrial policies of the newly industrialized countries and Southeast Asia.
 27. Determine the value of designing new regimes for the protection of intellectual property.

For more information or copies of this report, contact: Canadian Institute for Advanced Research, Suite 701, 179 John Street, TORONTO, Ont., M5T 1X4, Tel.: (416) 971-4251.

The Aggressive Economy: Daring to Compete

Canadian Manufacturers' Association

June 1989

Overview

Shortly after the signing of the FTA in November 1988, the CMA began its campaign to promote a competitiveness vision for Canada. In the words of the CMA:

...the hard part is still ahead. The world's new competitor nations are determined to improve their standard of living at the expense of ours...but if we want to participate successfully in the global economy and retain our privileged position, the most critical change is concerned with our way of thinking. We must think like winners, we must believe that we can win; and we must adopt a winning strategy.

The CMA study is, however, more than an advocacy piece, it attempts to lay out a strategy for competitiveness "based on the four pillars of an aggressive economy: a self-help attitude on the part of management, a highly skilled work force, effective application of new technology and a public policy environment that promotes competitive performance." The strategy for a competitive economy is based on a considerable body of research and analysis undertaken by the CMA and found in other published material made available to it.

The Aggressive Economy: Daring to Compete is one element of a long-term effort to generate a competitive consciousness. It has been followed by the publication of a **Competitiveness Index** and a management education and training program known as **Compete to Win**. An updated edition of *The Aggressive Economy* was published in 1991.

Recommendations

The report recommends:

1. With regard to generating **wealth and economic growth**, Canadian policy makers understand that manufacturing is the engine of growth in the Canadian economy and to compete successfully in other world economies, Canadian manufacturing needs aggressive reinforcement from the rest of the economy — from the workers to service firms to governments.
2. With respect to **industrial R&D**, Canadian companies increase their investment in technology as a competitive weapon. To reinforce this private sector initiative, Government support for R&D must improve through tax and non-tax measures that:
 - remove irritants and simplify administration of the R&D tax system (reform and simplify R&D tax incentives, eliminate taxing of tax credits, make R&D tax credits 100 percent refundable, and remove the 75 percent cap on R&D investment tax credit);
 - redirect Government efforts in the non-tax area to industry-driven priorities (extend the Defence Industries Productivity Program to other industries, freeze Government in-house R&D spending, use procurement by government to support Canadian technology development and strengthen the Industrial Research Assistance Program); and
 - increase funding for university-industry research.

3. In terms of the need to encourage investment, governments should build a tax system that encourages investment in support of international competitiveness. To this end, governments should ensure:

- taxes on manufacturers are at least as low as those on less productive activities;
- more generous incentives for investment in plants and equipment;
- the federal sales tax is replaced immediately with Stage 2 tax reform; and
- long-term capital gains on shares in Canadian businesses that compete in international markets and with offshore competitors in the domestic market are not taxed.

4. In recognition that the "skills and adaptability of the work force have become crucial factors in gaining and maintaining competitive advantage," universities should be deregulated, giving them greater freedom to set fees, choose areas of specialization, and decide how to attract students, faculty, research funds and private donors.

5. Governments align fiscal and regulatory policies with the objectives of an aggressive economy so they do not thwart the efforts of companies and workers to improve competitiveness. With this in mind:

- the Government must set a goal of achieving a budget surplus within five years, primarily by reducing aggressively the large base of expenditures; and
- federal and provincial governments should agree to reduce the cumulative regulatory burden facing Canadian industry. The Federal Office of Regulatory Affairs should be charged with tracking this problem. It should report publicly, issuing an annual report that would be discussed at the next meeting of First Ministers following publication.

Copies of this report are available at \$20 each from the Canadian Manufacturers' Association, Publications Department, 14th Floor, 1 Yonge Street, TORONTO, Ont., M5E 1J9, Tel.: (416) 363-7261.

"Canada 1993" A Plan for the Creation of a Single Economic Market in Canada

Canadian Manufacturers' Association

April 1991

Overview

The Canadian Manufacturers' Association (CMA) is of the opinion that Canada's productivity "is being undermined by hundreds of interprovincial barriers to trade in goods and services affecting 10 to 15 percent of gross domestic product." The CMA concedes that provincial and federal governments are fully aware of the problem but are moving far too slowly to address it. To accelerate the process, the CMA released this discussion paper, calling on provincial premiers and the Government to adopt a three-year plan to eliminate all interprovincial barriers to trade.

The CMA states that economic integration is inseparable from political integration and suggests that "the importance of creating a single national market should be a top political objective as our political union is subject to intense criticism and calls for changes."

The CMA makes the following arguments for the removal of barriers to interprovincial trade:

1. **A single market would strengthen Canada.** Creating a single economic market for Canada would counter the current regional drift and help shape discussions on constitutional reform.
2. **A single market would promote competitiveness.** Interprovincial trade barriers have divided Canada's small domestic market — especially in the case of goods and services subject to government procurement. Resulting inefficiencies are passed on to the Canadian public. Reduction of interprovincial barriers to trade could promote competitiveness by:

- increasing the scale of production;
- increasing the competitive pressure to perform and be responsive to customers and markets;
- decreasing the dependence on government support by supplier firms and perhaps encouraging them to become more export-oriented;
- discouraging the retaliatory proliferation of rules and regulations affecting trade; and
- encouraging specialization among firms in Canada.

3. **A single market could save billions of dollars.** The CMA estimates the savings from a single economic market would exceed \$6.5 billion annually. The savings would be derived from savings on the \$100-billion government procurement market. Consumers would benefit from the removal of barriers affecting agricultural and alcoholic products. Labour mobility would be enhanced, and a more flexible economy and strengthened political union would result. While obviously a difficult calculation to make, the CMA suggests that there are no offsetting costs to this estimate.
4. **Canada must learn from the European experience.** The 12 members of the EC are working to eliminate all inter-country barriers by 1992, and this initiative is forecast to increase Europe's total GDP by more than 5 percent. Canada can also benefit from the economic specialization and trade creation effects of trade liberalization.

Recommendations

The CMA describes the initiative *Canada 1993* as a vision and encourages all governments to adopt this vision. The CMA recommends a seven-point program to achieve this vision:

1. Eliminate interprovincial barriers to trade in goods affected by provincial and Government procurement. Target: 1991.
2. Eliminate interprovincial barriers to trade affecting beer and wine. Target: 1991.
3. Eliminate interprovincial barriers in the government procurement of services and construction. Target: 1992.
4. Bring federal and provincial Crown corporations into the agreement on goods, services and construction. Target: 1992-93.
5. Bring sub-provincial organizations that benefit from provincial transfers into agreement on goods, services and construction. Target: 1992-93.
6. Eliminate barriers in provincial labour markets that impede the free movement of individuals between provinces. Target: 1992-93.
7. Eliminate interprovincial barriers to trade in agricultural products. Target: 1992-93.

For more information or copies of this report, contact:

- Canadian Manufacturers' Association,
Suite 302, 130 Albert Street, OTTAWA, Ont.,
K1P 5G4, Tel.: (613) 233-8423.
- Canadian Manufacturers' Association,
Publications Department, 14th Floor,
1 Yonge Street, TORONTO, Ont., M5E 1J9,
Tel.: (416) 363-7261.

Canadian Competitiveness Index

Canadian Manufacturers' Association

September 1991

Overview

In September 1991, the CMA released the second annual publication of its Competitiveness Index. The need for, and indeed the intention to create, such an index is indicated in an earlier publication, the CMA's advocacy study on *The Aggressive Economy: Daring to Compete*, published in June 1989. The CMA hopes that publication of the index will contribute to a heightened awareness of the need for competitiveness and a greater understanding of how Canada is actually performing.

The index is based on Canada's relative productivity and price performance over the decade 1980-91. It compares Canada's economic performance with the weighted average performance of the G-7 leading industrial countries. The weighting is based on the relative composition of Canada's international trade. The overall index is composed of three measures that individually and taken together determine (according to the CMA) Canada's competitiveness. They are as follows:

1. The relative rate of change of unit labour costs in manufacturing — which reflects productivity and wage trends.
2. The relative change in the rate of change of wholesale prices in the goods producing sector of the economy — in addition to unit labour costs, wholesale prices also reflect overhead costs, services input costs and taxation costs.
3. Canada's international current account performance. This index measure indicates the ratio of exports to imports since 1980 in both goods and services.

The index is constructed by taking the sum of the three measures, with each weighted equally, and the average performance of the G-7 countries represented as 100. Therefore, a Canadian score below 100 would indicate that Canada is not performing as well as the other G-7 countries.

The overall index shows that Canada has performed worse than the G-7 industrialized countries and that the competitive position has been steadily deteriorating. All three measures described above support this conclusion.

The CMA concludes that "the observed competitive deterioration will continue in the 1990s unless Canada aligns its resources behind the objective of achieving a more competitive and aggressive economy. A continuation of current trends will erode Canada's standard of living, reduce employment in the manufacturing sector and worsen the deficit problem by slowing economic growth. These are the prospects that await us if we do not urgently tackle the challenge of improving our competitiveness."

Recommendations

The report recommends:

1. A concerted effort be made by both government and business to improving Canada's competitive performance.
2. Business take the lead in committing itself to achieving global competitiveness with:
 - manufacturers further rationalizing their operations to reduce costs and become more export oriented;
 - manufacturers enhancing the skills of all their employees and managers to take advantage of new technologies and organizational practices; and

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- continued high investment levels in both manufacturing equipment and R&D being essential to the objective of lowering costs and producing world-class exports.
3. Governments support economic growth through appropriate framework policies. Top priorities must be: reducing the deficit, interest rates and the cost of capital; improving the results of the costly educational and training systems; and promoting the rapid adoption and diffusion of new technology.

For more information or copies of this report, contact:

- **Canadian Manufacturers' Association,
Suite 302, 130 Albert Street, OTTAWA, Ont.,
K1P 5G4, Tel.: (613) 233-8423.**
- **Canadian Manufacturers' Association,
Publications Department, 14th Floor,
1 Yonge Street, TORONTO, Ont., M5E 1J9,
Tel.: (416) 363-7261.**

Globalization: Canadian Companies Compete

Catherine G. Johnston, Conference Board of Canada
February 1990

Overview

This report, jointly produced by the Conference Board of Canada and Industry, Science and Technology Canada, describes how some Canadian companies compete successfully in a milieu of globalized markets, suppliers, competitors and consumers. The Conference Board of Canada conducted personal interviews with approximately 65 senior executives from 15 companies across Canada.

The study examines the world in which companies must compete and investigates the type of organization best suited to operate within this environment. It also suggests how to keep organizations in a state of preparedness, and discusses the current challenges facing companies today, focusing on the knowledge and experience of a significant number of business people in Canada.

There are no recommendations, but four main themes are found in the study. First, the environment in which business operates is undergoing a metamorphosis. Second, the challenge of increased competition dictates that, for the 1990s and beyond, companies must undergo major changes in their structure and organization. Third, in order to maintain this new organization in a constant state of readiness, it is important to foster a dynamic, competitive and responsive business strategy. Fourth, ever-evolving consumer demands dictate that a company's competitive position must also evolve.

For more information or copies of this report (available in English and French), contact: Conference Board of Canada, 255 Smyth Road, OTTAWA, Ont., K1H 8M7, Tel.: (613) 526-3280.

Strategic Connections: Technology, Innovation and Labour Relations

Ruth Wright, Conference Board of Canada

March 1991

Overview

This report, co-funded by the Conference Board of Canada and Labour Canada, explores organized labour's perspective on emerging technology and innovation issues and its potential role in addressing these issues. The study examines attitudes to change and key problem areas, and identifies areas for possible collaboration. In general, the study finds labour unions either neutral or more negative than management concerning the perceived impacts of technological change and innovation, and more likely to identify negative consequences such as a decrease in job satisfaction, downgrading of jobs, increased stress and more grievances. Survey results cover topics such as the impact of technological change on skill levels, work organization, employee responsibility, stress and job satisfaction.

The findings are derived from interviews, reference to other studies, on-site visits and detailed questionnaires completed by union leaders and industrial relations practitioners in large Canadian private and public sector organizations. The study presents questionnaire results and suggestions from individuals in an anecdotal fashion, but does not make recommendations *per se*. The major findings are as follows:

1. Technological change is a larger issue in highly capital-intensive operations.
2. Technological and organizational change are larger issues at the national level than for union locals.
3. Labour leaders are not against technological change; their concerns arise from the associated fall-out issues — employment security, quality of work, training, lack of consultation at the critical design and decision-making stages, and compensation for increased productivity.
4. Labour should be a partner from the outset in managing the change process in any organization.

For more information or copies of this report (available in English and French), contact: Conference Board of Canada, 255 Smyth Road, OTTAWA, Ont., K1H 8M7, Tel.: (613) 526-3280.

Reshaping Canada to Compete

Coopers & Lybrand (Canada)

January 1991

Overview

Reshaping Canada to Compete is based on interviews with more than 100 Canadian business, government and labour leaders. Senior partners from Coopers & Lybrand and a panel of outside advisers participated in these discussions, and in preparation of the report. The report seeks to describe the state of the nation by examining the following four key issues that affect the lives and livelihood of Canadians:

- the internationalization of business;
- the erosion of market competitiveness;
- pervasive global, domestic and structural change; and
- the leadership crisis.

The report argues that as Canadian business is increasingly drawn to compete on a global scale, Canadian firms, and the tax and regulatory environment, must be positioned to meet the challenges posed by the changing ways business is being done. Changes in trade patterns, based largely on the regionalization of global markets, an aging population, urban agglomeration, reliance upon primary sectors as the cornerstone for economic growth and hefty public sector debt load all affect how Canadians will respond to the challenges of increased global competition. Finally, the report suggests that Canadian political leaders have failed to address both systemic and issue-oriented challenges to the Canadian federation, and that business leaders, on the whole, have failed to rise to membership in the international business community.

Recommendations

The report suggests that Canada has many of the necessary attributes to be successful in the 1990s — if government, business and Canadians are prepared to meet the challenges of the changing political, economic and business environments by:

- establishing a new interprovincial-federal policy-making mechanism along the lines of the G-7, involving each province, the Government and northern peoples, called the G-12;
- building a cooperative private-public trade initiative that is responsive to globalization;
- formulating a competitiveness strategy for the 1990s; and
- completing the constitutional discussions quickly and overhauling Canada's governmental structures and costs.

**For more information or copies of this report, contact:
Maureen Farrow, Partner and Chief Economist,
Coopers & Lybrand, 145 King Street West, TORONTO,
Ont., M5H 1V8, Tel.: (416) 941-8226.**

Can Canada Compete?

John Crispo, University of Toronto

1990

Overview

This report is a personal prescription for the policies and programs that are required to make Canada more competitive. Its primary purpose is to induce more thinking among Canadians about what must be done to make Canada more competitive. Becoming more competitive involves the general task of exploiting Canada's comparative advantage by doing better what Canada already does well. More specifically, this means that Canada must produce goods and services more effectively in terms of their price, quality and delivery.

Most of the report is devoted to public policies because the author believes that appropriate public policies are vital to creating the atmosphere, climate, environment or framework within which the private sector can plan ahead with certainty and confidence. Governments are required to establish a climate where private enterprises can thrive.

Recommendations

The report recommends:

1. The first priority of governments be to reduce deficits and debts before they become too burdensome for the private sector to carry.
2. Governments review their investment and R&D incentives to ensure they are having the desired effects; and also continue to privatize and deregulate where appropriate.
3. Governments work with labour and management to develop more effective retraining, upgrading and relocation programs, and more constructive collective bargaining relationships as changes are also required in personnel structures and industrial relations.
4. Canada's approach to social security be rationalized and restructured by channelling existing benefits toward those most in need of them.
5. When pursuing other equity concerns, Government always remain mindful of the potential equity/ growth trade-off. Ways must be found to achieve more equity within society, without sacrificing growth any more than is absolutely necessary.
6. Control of inflation remain a priority.
7. Governments raise environmental standards as fast as possible, taking into account available technology and the capacity of industries to survive those standards, especially in relation to those of other countries.
8. More effective national consultative mechanisms be undertaken. These mechanisms could narrow the range of outstanding differences in a number of areas.
9. A total commitment and effort be undertaken by all levels of government, by the public and private sectors, by goods and services producers and by labour and management.

This book is available through Coles and Renouf book stores; or contact the publisher, Hemlock Press, Suite 702, 680 Queens Quay West, TORONTO, Ont., M5V 2Y9, Tel.: (416) 586-0065.

Adjusting to Win

A. Jean de Grandpré, Chairman, Advisory Council on Adjustment
1988

Overview

This is the Report of the Advisory Council on Adjustment, also known as *The de Grandpré Report*. The Council was created by the Government in 1988 to examine the possibilities for Canadians to gain maximum advantage from the FTA; to identify specific adjustment issues arising from the Agreement; and to recommend changes in adjustment programs. The Council was chaired by A. Jean de Grandpré, Chairman of the Board of BCE Inc. Other members of the Council were: Jalyann Bennett, Vice-President Corporate Development, The Manufacturers Life Insurance Company; Gordon Cummings, President and Chief Executive Officer, National Sea Products Ltd.; James McCambly, President, Canadian Federation of Labour; and Norman Wagner, Chairman of the Board, Alberta Natural Gas Company Ltd. The report was published in March 1989.

The report consists of four elements: a review of the strengths and weaknesses of the Canadian economy (as of 1988); people issues; corporate issues; and specific industry issues.

The review of the Canadian economy notes both Canada's record of successful adjustment and the need to change attitudes to meet successfully new and emerging challenges. Under people issues, the report examines the implications of demographic and technological changes on labour market requirements, with the focus on education and retraining. Under corporate issues, it looks at the importance of technological innovation, appropriate taxation, access to financing, removal of barriers to interprovincial trade, and export development efforts as essential elements of successful adjustment to the new trading environment. Under specific industry issues, it examines the particular adjustment problems of the wine industry and industries producing and using poultry, dairy, fruit, vegetable and wheat products.

Recommendations

Education, the Prerequisite

The report recommends:

1. On an urgent basis, the First Ministers find the appropriate vehicle to review the education/training systems in Canada in order to increase their responsiveness to the requirements of rapidly changing international and domestic economies. Such a vehicle should involve participation by both business and labour, and might take the form of a federal-provincial royal commission on education/training.

A Skills Strategy

The report recommends:

1. To promote greater labour-management cooperation, the Government double the Industrial Adjustment Service (IAS) funding and increase the personnel required to administer the program; and consider funding new, imaginative approaches under the Innovations program.
2. Other initiatives, such as improvement of the social handling of technological change issues at the workplace, be encouraged.
3. The private sector (both management and labour) seek new and innovative ways to plan jointly for change.
4. The Government increase its support of human resource planning through the IAS.
5. The Government make human resource planning and the establishment of human resource goals a prerequisite for firms applying for any assistance under federal programs.
6. To foster the *training culture* needed to increase Canadian competitiveness, the Government design and implement an initiative to lever greater private sector training.

7. The Government design and implement a flexible tax liability for firms that would be offset by a firm's expenditures for training, up to the full amount of the tax.
8. The Government act as facilitator in fostering private sector training by providing consulting services, analysis capability or seed money to employers, unions and industry associations.
9. A bipartite group of business and labour be established by Government to review how best to effect a shift in emphasis in expenditures on labour market interventions from income maintenance to employment promotion measures.
10. The Government shift expenditure from income maintenance to employment promotion measures, taking into consideration the recommendations of the bipartite group.
11. The Government double the amount allocated to Unemployment Insurance, under Section 39, Training.
12. The provinces cooperate with the Government in reallocating expenditures from the passive *safety net* to the *trampoline* back into the work force.
13. The Government increase significantly — by \$200 to \$300 million annually — funding for programs such as Skill Shortages and Skill Investment or similar programs that are particularly germane to adjustment.
14. The Government seek actively private sector input in the design, implementation, delivery and monitoring of labour market measures.
15. The Government, building on existing models, establish a structure such as the International Trade Advisory Committee or the Sectoral Advisory Groups on International Trade to provide broad advice on labour market issues and the formulation of labour market policies.

Specific Employment Issues in an Age of Globalization

The report recommends:

1. The federal, provincial and territorial governments put in place minimum standards for advance notice of layoffs, with the objective of maintaining as near continuous employment as possible, with the following minimum notice periods for full-time employees and regular part-time employees:
 - 2 weeks regular notice for all companies laying off 1 to 4 persons;
 - 4 weeks regular notice for all companies laying off 5 to 9 persons;
 - 8 weeks regular notice for all companies laying off 10 to 49 employees; and
 - 16 weeks for layoffs of 50 or more people.

In group layoffs, the employer provide to the relevant federal, provincial and territorial departments and agencies a full demographic and skill profile of those laid off, the proposed compensation and redeployment package, and the reasons for layoff.
2. The Government, through existing agencies and departments, ensure that employers respect fully seniority provisions, pensions and other benefits built up during employment, in the design and implementation of merger, acquisition and product rationalization strategies.
3. To harmonize severance pay legislation for permanent layoffs or plant closures throughout Canada, legislation be enacted in every jurisdiction to provide to employees with five years or more of service, as a minimum:
 - one week regular wages, excluding overtime, for each year of service, plus a credit for each complete month of service to a maximum of 26 weeks;

- compensation for a further half-week per year of service for workers 55 years and over, to a combined service-plus-age maximum of 39 weeks.
- 4. Severance payments not be considered in the determination and allocation of earnings for Unemployment Insurance benefit purposes.
- 5. The Government undertake a study of the costs and benefits of treating severance payments to a maximum of \$10 000 as a capital gain for the purposes of income tax, and implement decisions based on the results of this study before December 1989.
- 6. Consumer and Corporate Affairs Canada expedite amendments to the *Bankruptcy Act* to create a national wage earner protection fund to make payments of up to \$4 000 to cover unpaid amounts owing to workers for such items as wages, vacation pay, pension and benefit premiums, and severance pay.
- 7. In the event that the wage earner protection fund is not available, the Government expedite legislation to ensure that claims of wage earners have priority over all other claims in the disposition of assets of insolvent employers.
- 8. Employment and Immigration Canada, in consultation with other federal, provincial and territorial departments and agencies, establish community-based *one window* arrangements to provide a range of services to employees and employers during layoffs that have a significant economic impact on a community.
- 9. The Government be prepared to expand the Community Futures Program, if necessary, to assist any communities that require adjustment assistance because of circumstances arising from globalization of markets.
- 10. The Government examine the circumstances facing older workers in order to determine

whether additional special measures are required to help them reintegrate into the labour force.

- 11. All provinces and territories participate in the Program for Older Worker Adjustment (POWA).
- 12. The federal and provincial governments examine ways of extending benefits similar to those available under POWA to older workers not part of major layoffs.

Technological Innovations

The report recommends:

- 1. The Government, in consultation with industry, set realistic R&D goals for each industrial sector, work with industry to develop action programs and publicize the resulting goals and achievements.
- 2. Provincial governments address the inadequacy of their funding of universities, with particular emphasis on providing for more adequate science and engineering facilities.
- 3. Equipment funding for universities be given special attention.
- 4. For contract research to be done by universities, the sponsor (business or Government) assume responsibility for all overhead costs involved.
- 5. Companies make a commitment (on an urgent basis) to seek out and utilize technology available outside the firm.
- 6. In light of the constant evolution of technology and markets, the Government review on a continuing basis the effectiveness and funding of programs that promote technology transfer.
- 7. Employers, community colleges and universities increase their cooperation to meet the challenges of the human resources aspect of technological innovation.

8. Government influence industry to develop and promote management training systems designed to elicit broad employee participation in technological innovation.

Taxation and Financing

The report recommends:

1. The Government, taking into account all relevant and significant income and commodity tax measures, monitor closely the competitiveness of the tax system to ensure that it provides adequate incentives to encourage new capital investment.
2. The Government monitor closely the impact of the tax treatment of R&D activity with a view to providing increased incentives when appropriate.
3. The Government avoid frequent changes in tax rules pertaining to R&D expenditures and ensure that programs and policies affecting R&D provide a consistent environment.
4. The Government consider expanding involvement in R&D through industry sector consultations, using Government procurement and contracts where appropriate within existing budgets, and making these arrangements more visible.
5. In the interest of helping Canadian companies become more competitive in the new trading environment, the current biases in the sales tax favouring imports over domestic production be removed.
6. In those sectors where accelerated modernization might be required to meet the challenges and opportunities of the new trading environment, the needs of the sectors concerned be identified under the Sector Competitive Initiatives Program of ISTC, and the program be expanded to provide for loan guarantees or income debentures in those

circumstances where it can be demonstrated that there is a serious shortfall of capital in the industry.

7. A company human resource development plan be a required component of any application for financial assistance under all Government programs.
8. The Government compare the accessibility and cost of capital in Canada to the situation in Japan and the U.S., in view of the need for increased competitiveness.

Interprovincial Barriers

The report recommends:

1. Governments ratify the initial Agreement on the Reduction of Interprovincial Barriers to Trade Related to Government Procurement as soon as possible, and follow up this initiative with a concerted effort to bring about real change.
2. Governments ensure that effective mechanisms be set in place to promote and monitor progress in implementing this agreement.
3. First Ministers charge the Committee of Ministers on Internal Trade with the responsibility to negotiate the elimination of barriers to internal trade resulting from the use of differing provincial standards and regulations.
4. The Government promote the further extension of national training standards for skills that are useful to more than one employer.
5. Skill certification be fully transferable among provinces, particularly for apprentices, journeymen and other skilled trades people.
6. In the development of new national standards, the Government encourage a greater labour/management role in national training, in national certification of apprentices, journeymen and other skilled trades people, and in

retraining programs designed to keep abreast of the latest technological developments.

7. The federal and provincial governments use all means at their disposal to ensure the free and unhindered movement of labour between provinces.

Outward Orientation

The report recommends:

1. External Affairs and International Trade Canada (EAITC) review the expertise and number of its trade commissioners and its specific industry technical experts in the U.S. and other major trading partner countries and refine their strategic positioning.
2. EAITC undertake a review of the effectiveness and efficiency of the Program for Export Market Development (PEMD), particularly as it relates to the U.S., to ensure that it meets the needs of exporters in the new trading environment.
3. Federal and provincial governments better coordinate their support programs for export activities.
4. The Government review its support for export financing to ensure that Canadian exporters continue to have access to competitive financing.
5. The private sector be involved in developing trade strategies through the International Trade Advisory Committee/Sectoral Advisory Groups on International Trade process and other informal and formal mechanisms.
6. EAITC, in cooperation with the private sector and provincial trade organizations, refine and target export education and export awareness programs.

7. EAITC, in cooperation with ISTC, Investment Canada and the provinces, further enhance investment promotions abroad, with special emphasis on technology-based investments.

Agri-Food Industry

The report recommends:

1. A two-price system be implemented to provide an adequate supply of North-American-equivalent-priced poultry meat to the further processors of products not covered by the Import Control List; the price of poultry meat per pound paid by Canadian further processors should be the same as that paid per pound by their U.S. competitors.
2. The Canadian chicken and turkey marketing agencies hold an initial meeting within six months with the poultry producer marketing boards, the primary processing industry, the poultry further processing industry and the provincial supervisory councils to work out the details of a two-price system; ISTC and the Department of Agriculture should facilitate this consultative process.
3. If a two-price system cannot be agreed upon, import quotas be further increased by EAITC and made available directly to further processors of products not covered by the Import Control List.
4. A two-price system be implemented to provide an adequate supply of North-American-equivalent-priced raw dairy materials to the further processors of products not covered by the Import Control List; further processors should pay the same price for dairy products as that paid by their U.S. competitors.

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5. The Canadian Dairy Commission hold an initial meeting within six months with representatives of the provincial dairy producer marketing boards, the dairy primary processing industry, the dairy further processing industry and the provincial supervisory bodies to work out the details of a two-price system; ISTC and the Department of Agriculture should facilitate this consultative process.
 6. If such a two-price system cannot be agreed upon, import quotas be increased for cheeses, for example, and made available to further processors of products that contain dairy ingredients and are not covered by the Import Control List.
 7. A working group consisting of governments, processors and producer representatives be established within a year to work out, crop by crop, methods to ensure that the fruit and vegetable processing industry has access to raw materials at the same price as that paid by their U.S. competitors; ISTC and the Department of Agriculture should facilitate this consultative process.
 8. Any move to harmonize technical standards, such as sizes of cans, be made in consultation with processors.
 9. Wheat boards in Canada sell wheat to Canadian millers at prices based on the prices quoted on the U.S. commodity exchanges in effect on the day of the sale.
 10. Canadian buyers be able to buy wheat from the wheat boards on a forward contract basis geared to the future quotation on the U.S. commodity exchanges in effect on the day of sale.
- Wine Industry***
- The report recommends:
1. Interprovincial barriers to trade be removed at the earliest possible date to facilitate industry rationalization and improved competitiveness, consistent with measures to meet FTA and GATT requirements.
 2. ISTC enter into consultation with the wine industry to develop initiatives that would enhance the competitiveness of the industry, with particular reference to improved marketing and promotion.
- For copies of this report, contact your nearest ISTC Business Service Centre. The addresses, telephone and facsimile numbers are provided at the beginning of this publication.**

The Perspective 2000 Conference

Economic Council of Canada

November 30 and December 1, 1988

Overview

One of the main goals of the conference, known as Perspective 2000, was to help foster greater awareness among national leaders and decision makers of global pressures and their impact on the everyday lives of Canadians, so strategies and policies needed to cope with these pressures will have a better chance of speedy adoption. This volume, or synopsis, is divided into four blocks:

1. The Global Setting
2. Canada's Place in the World Economy in the Year 2000
3. Employment/Human Resource Development
4. Environmental and Institutional Framework for Economic Policy

Blocks 2, 3 and 4 are the most relevant. According to the Council, the world of the year 2000 will be driven by rapid technological change. Some industries in the Canadian economy will be particularly hard hit by the arrival of new competitors. While macroeconomic policy and trade policy are mentioned, the importance of education and training in meeting the challenge of international competition attracts virtually unanimous consensus.

Aggressive participation in the global economy is a must, and change-resistant, inward-looking attitudes are a path to poverty. Canada must pursue a strategy of openness to the world and adopt an aggressive stance in international markets. To maintain its position in these markets, the Canadian economy will have to be restructured in the high-tech industries where the most important production input will be human capital. All sectors of the economy will feel the effects of fundamental change, and these changes will be necessary to maintain the competitiveness of Canadian goods and services in international and domestic markets. A major theme, and one of its major conclusions, is the need for governments at various levels to adopt a framework of analysis, monitoring and policy making that is explicitly intersystemic and intertemporal.

**For more information or copies of this report, contact:
Economic Council of Canada, 18th Floor, Tower A, Place
de Ville, 320 Queen Street, P.O. Box 527, OTTAWA, Ont.,
K1P 5V6, Tel.: (613) 952-2138.**

Adjustment to International Competition

Richard E. Caves, Harvard University and Economic Council of Canada
1990

Overview

This study was carried out in 1990 for the Economic Council of Canada by Richard E. Caves of Harvard University. It is an econometric investigation of the short-run responses of Canadian manufacturing industries to changes in world prices and competitive conditions during the 1970s.

The study was used as background research for the Council's *Venturing Forth — An Assessment of the Canada-U.S. Free Trade Agreement*. Although it makes no recommendations per se, some findings suggest:

1. The selling prices of Canadian manufacturers be linked closely to the prices of their foreign competitors.
2. Canadian producers respond aggressively when import competition stiffens.
3. Product differentiation and tariff protection slow the short-run response to international disturbances in quantities and prices.
4. Few mistakes can be made in predicting Canadian industry's responses to international disturbances by assuming that products are differentiated but sellers are otherwise fairly competitive.
5. Exceptions to this are few, and involve concentrated capital-intensive industries that, in response to short-run disturbances, appear to raise prices and adjust quantities as if they try to maintain excess capacity — behaviour that is not consistent with competition in the long run.
6. Because foreign subsidiaries participate in even-border intra-firm trade, their presence reduces the sensitivity of Canadian imports as a whole to market prices.
7. Foreign subsidiaries are insensitive to the cost of capital in Canada when making decisions about capital spending, but are sensitive about labour costs, although less so than are domestic firms.
8. Traditionally regarded as import-competing, Canadian manufacturers behave in the short run as if exports are a regular and substantial part of their business activities.
9. The advantages that foster Canadian exports stem from research and skills, not just from the traditional capital-intensive processing of natural resources.

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From the Bottom Up: The Community Economic Development Approach

Economic Council of Canada

1990

Overview

This statement, published by the Economic Council of Canada (ECC), assesses the contribution of local community organizations to economic development, in particular, the continuing problem of economic stagnation in many regions of the country. The members of the ECC suggest that, although the local approach to economic development is not the answer to every problem of underdevelopment in every community, there are many situations in Canada where it can make a real difference. The ECC advocates not an increase in expenditures to Local Development Organizations (LDOs), but a more effective use of the funds that are currently available. The statement concludes by stating that the locally based, community-development approach can be highly useful in revitalizing the economies of small, isolated communities.

Recommendations

The statement recommends:

1. Communities and the public sector emphasize the establishment of human resource and information infrastructures to support private initiatives.
2. LDO activities respond to market opportunities.
3. Communities pursue a diversified array of projects to increase the stability and sustainability of the overall development effort.
4. Communities promote a strong local private sector, particularly through the nurturing of new small businesses.
5. Communities guard against overstretching managements/leaders and develop a support system.
6. LDOs undertake regular evaluations and participate in national data gathering activities.
7. LDO assistance be funded from existing business assistance programs.
8. Financial and human-resource commitments by the community be a prerequisite for provincial and federal government support.
9. Government financial support for LDOs be phased down over a medium-term time frame to encourage communities to increase their resource commitment.
10. Criteria for choosing communities for public sector support be based on blending the level of economic need with the potential for development.
11. Neighbourhood areas of large urban centres be considered for support, but with priority given to small and more remote communities, especially small communities that coordinate their local development efforts.

For more information or copies of this statement, contact: Economic Council of Canada, 18th Floor, Tower A, Place de Ville, 320 Queen Street, P.O. Box 527, OTTAWA, Ont., K1P 5V6, Tel.: (613) 952-2138.

Good Jobs, Bad Jobs: Employment in the Service Economy

Economic Council of Canada

1990

Overview

This report summarizes the Council's research findings on employment changes in the industrial structure of the Canadian economy and examines the appropriateness of the Government's labour market policies. The study relies on census data analyses, special surveys and case studies. It highlights the emergence of *non-standardized* work, the changing labour market structure of the service sector, the nature and magnitude of the service economy, and the growing synergy of the goods-producing sectors and the service sector in creating economic activity and employment.

The Council concludes that the dominance of the service economy requires a public policy response that adheres to the following three principles:

- strengthening the commitment to human resource development, including fundamental changes to Canada's commitment and approach to education and training;
- improving economic security for workers, as labour markets become fragmented and non-standardized work gains importance; and
- recognizing the growing importance of services to economic growth, and the interdependence of the goods and services sectors.

Recommendations

The report recommends:

1. The reform of Government labour market strategy move in the direction of supporting skills development and employability as the primary objective. (The Council endorses the transition from the existing Unemployment Insurance fund to an *employment insurance* fund.)
2. Unemployment Insurance funds available for retraining be increased and that the eligibility restrictions for training under the program be relaxed.
3. Publicly funded adjustment programs for older workers emphasize retraining and employment counselling.
4. Federal, provincial and territorial governments implement the national minimum layoff, advance-notice standards suggested in the de Grandpré report.
5. All jurisdictions establish a labour standard involving the creation of a committee comprising business and labour representatives to develop and implement re-employment packages for laid-off workers involved in major layoffs.
6. The Government allocate increased funds to the Industrial Adjustment Service to be used as seed money for the development of sector-specific human resource plans in industries that have chosen to initiate such plans.

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7. Legislation be adopted, in all jurisdictions, that provides for the inclusion of part-time workers with an ongoing employer attachment, in employee benefit programs on a prorated basis.
 8. Awareness of new employment diversity be incorporated into the design of public benefit programs.
 9. Governments evaluate, on an ongoing basis, the adequacy of Canada's private and public pension systems, and be prepared to rethink the overall approach to retirement income security in the 1990s.
 10. Governments review their overall policy toward innovation and the service sector, with the purpose of developing an innovation policy that reflects the contribution of R&D and technological change to economic growth in services.
 11. Industry associations and governments work together to develop cooperative linkages between the goods and services sectors. The Canadian Manufacturers and Retailers Council (CANMARC) is cited as a good example of cooperation that assists manufacturers and retailers in the coordinated use of bar-coding and electronic data interchange.
 12. The federal and provincial governments view Canadian telecommunications and computer infrastructure as a vital component of a competitive, diversified, information-based economy.

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K1P 5V6, Tel.: (613) 952-2138.**

Transitions for the 90s (27th Annual Review)

Economic Council of Canada

1990

Overview

The 27th Annual Review by the Economic Council of Canada sets up a number of policy options that will help Canadians to lower the rate of unemployment while controlling inflation. The Council identifies two fundamental transitions that will be crucial to the performance of the Canadian economy over the long term. The first is the integration of various national and regional economic systems into a global economy. The second transition required is to build new relationships or institutions that can foster joint problem-solving by federal and provincial governments, and by the public and private sectors.

Recommendations

The report recommends:

1. Government income support programs be altered so they help people to adapt to a changing job structure rather than pay them to wait passively for a new job to come along.
2. Workers replace dependency on Government transfers with self-reliance by investing in higher skills, using the new technologies, and exploring the scope for starting their own businesses. (They must also be prepared to experiment with new ways of organizing work and new forms of compensation.)
3. Businesses invest in best-practice technologies, in the training of their employees, and in the development of new management practices and compensation systems.
4. Individual communities take up the challenge of self-development by identifying market opportunities and mobilizing local resources to launch new businesses, whether owned privately or by community organizations.
5. Provinces help foster self-reliance and diversification by investing in training and technology and by removing obstacles to entrepreneurship.
6. A partnership be established to delegate the responsibility for labour-market programs to labour, business and other economic agents. Direct participation in training and adjustment decisions should help to establish better working relationships among social partners and produce programs that are focused on active support for workers.
7. A set of coordinated monetary and fiscal policies be created to generate a healthier economic environment.
8. The following weapons to fight inflation be used:
 - a credible inflation target;
 - a coordinated inflation target;
 - coordinated fiscal policy;
 - more flexible wages; and
 - a framework for social partnership.

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The Role of Science and Technology in Economic Development

Geraldine Kenney-Wallace, McMaster University
Fall 1990

Overview

This paper was presented at the Annual Conference of the Atlantic Provinces Economic Council on *Strategies and Options for the Atlantic Economy in the 1990s*. The author, President of McMaster University, uses the Fibre Optic Submarine Map as an accurate chart of the global economy to argue that S&T (i.e. as a result of R&D) is the key to economic growth and development; and success or failure can be measured in terms of the levels of investment in partnerships that can share long-term risks. This includes work with strategic alliances involving industry, the R&D community, labour groups, governments and education at all levels. Canada is short of R&D; Canada is short of engineers and scientists. Just to keep an industry such as telecommunications innovative, firms need to invest anywhere between 7 and 16 percent of sales in R&D. What is invested is a down payment on what can be leveraged out of the economy. She proposes seven commandments as an executive summary for innovation toward future prosperity.

Recommendations

The author's seven commandments for innovation toward future prosperity are as follows:

1. Invest in people through education, research and training, with a focus on S&T.
2. Invest in R&D — that is, real scientific research and product development, and manufacturing innovation that gets ideas out faster from the laboratory (into prototypes and then into the markets).
3. Invest in partnerships and share the risks.
4. Innovate, do not litigate.
5. Know thy market — global markets.
6. Know thyself — stop trying to do everything; distinguish investments for economic development from investments based on philosophies geared to social policy.
7. Despite the temptations of the devil, or even governments, always take the long-term view.

For more information or copies of this report, contact:
Atlantic Provinces Economic Council, Suite 500,
5121 Sackville Street, HALIFAX, N.S., B3J 1K1,
Tel.: (902) 422-6516.

Industry Committee Report

National Advisory Board on Science and Technology (NABST) Industry Committee
1988

Overview

The Prime Minister asked the Committee to consider what industry could do to increase its rate of investment in new technologies; how industry-university-government cooperation could be enhanced; and what measures could minimize the disruptions and enhance the benefits of accelerating technological change.

The Committee saw as its mission the development of new ways to achieve sustained economic growth by making Canada a more knowledge- and technology-intensive nation. According to the Committee, the comparatively weak S&T position of Canada can be traced to low government and industry spending on R&D, low government support of industry-based R&D, and an undue emphasis on government or university-based research as a surrogate for research that should be taking place in the private sector. In relation to the mission of sustained growth, the most important weakness is the low rate of industrial R&D. Only six Canadian industries qualify as R&D-intensive by statistical standards; they account for 46 percent of industrial R&D but only 4.5 percent of total industrial sales. The weak Canadian effort is not explained adequately either by the resource orientation of the economy, or by the level of foreign ownership in it.

Recommendations

The Committee argues that there can be no surrogate for industry research. As a consequence, expectations of what universities can do in commercially related research need to be dampened. Government in-house research should be tied increasingly to an industrial client base. Government support for industrial research should be comparable with that available in other countries and should be directed to the small base of industrial firms that understand the importance of S&T to their future growth. The Committee proposes a number of specific measures of assistance, including special tax write-offs for investments in innovation; a product risk-sharing fund; low-cost prototype financing; the establishment by the Government of industry-managed marketing information networks; a federal council on procurement; and an R&D personnel subsidy program.

In response to the Prime Minister's question about the impact of technological change, the Committee notes that it is the industries producing *tradable* goods and services that are vital to future economic growth. In the resource-based, mature manufacturing and high technology sectors, S&T is the key element of success in the production of tradable goods and services. These industries cannot be expected to be a large generator of jobs. They will, however, generate the income that will support jobs in the personal and social services sectors.

While fragmented data show technological change has little adverse, aggregate effect on income distribution, the unevenness of technological effects poses a potential problem for individuals and regions. Enhanced labour mobility through labour market adjustment policies and programs will reduce any undesirable impact of change. Specifically, the Committee recommends that the Prime Minister ask the Cabinet

Committee for Social Development to establish a close working relationship with provincial government counterparts to monitor change, assist labour adjustment, and improve training and education.

**For more information or copies of this report, contact:
NABST Secretariat, 8th Floor, West Tower, 235 Queen
Street, OTTAWA, Ont., K1A 0H5, Tel.: (613) 990-6260.**

Private Sector Challenge Committee Report

National Advisory Board on Science and Technology (NABST) Private Sector Challenge Committee
1989

Overview

In its report to the Prime Minister, the Private Sector Challenge Committee of NABST identifies the need for Canadians to work together to create an innovative and competitive Canada. In a changing world increasingly dependent on knowledge-intensive technologies, Canada is a nation at risk. The World Economic Forum compares 22 countries against various competitive yard sticks. Canada ranks sixth; furthermore, corporate executives consider Canada's prospects to be worse and ranks Canada eighth.

Canada's traditional manufacturing and resource bases no longer guarantee a strong position in a knowledge-based global economy. From 1983 to 1987, Canada saw its trade deficit in R&D-intensive products rise from \$5.1 billion to \$7.2 billion. Similarly, the deficit in technology-based services rose 92.4 percent between 1977 and 1985. Canada invests much less than our main trading partners in R&D. Canadian instruments for both tapping foreign technology and exploiting existing research are deficient. While increasing the percentage of GDP spent on R&D is essential, care must be taken that the money is well spent.

The ability of a country to compete in world markets is determined in large part by the creativity, skills and motivation of its work force. While the Prime Minister and provincial premiers need to come together on a National Human Resource Development Strategy, there is much that the private sector can do to address this critical element of competitiveness.

The major danger facing Canada at this critical juncture is the failure to read the warning signs. Shortsightedness and complacency based on the continuing strength of the GDP threaten Canada's long-term existence as a serious competitor. Canada cannot let this happen. Canada must pursue new markets and global opportunities aggressively. It

must reshape its economy, its capacity to innovate and its ability to compete. The competition is stiff. Nothing short of the best will suffice. The private sector must lead Canada in this effort.

Recommendations

While the private sector must assume the lead, governments, educational institutions and individual citizens must ensure an environment in which innovation can flourish.

Governments must provide sound intelligence on the elements of innovation and monitor domestic and international progress. They should actively promote innovation through a positive tax, financing, procurement and regulatory environment. All governments and the educational community must work with the private sector to ensure a comprehensive national approach to innovation, skills development and workplace transitions. Every man and woman in the work force must be challenged to commit their energies to creating an innovation culture and making Canada competitive.

The Committee, in this report, defines the challenge and proposes that the private sector in Canada respond quickly and organize itself to be a catalyst for action. It recommends that a group of *industry eagles* should lead a five-pronged mission:

- Help forge consensus among private sector leaders on the pragmatic steps required for Canadian competitiveness.
- Build public awareness of the magnitude, ramifications and importance of the competitiveness challenge.
- Facilitate the development of industry self-help mechanisms such as pre-competitive research consortia, procurement and the pooling of risk capital.

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- Promote and stimulate the development of a comprehensive, rational approach to transitional requirements for skills development and labour adjustment in response to the emerging competitiveness agenda, and to initiate sector-specific training programs.

- Monitor collective progress toward creating an innovation culture.

**For more information or copies of this report, contact:
NABST Secretariat, 8th Floor, West Tower, 235 Queen
Street, OTTAWA, Ont., K1A 0H5, Tel.: (613) 990-6260.**

Financing of Industrial Innovation Committee Report

National Advisory Board on Science and Technology (NABST) Financing of Industrial Innovation Committee
1991

Overview

Industrial innovation requires an investment in the *soft* assets of knowledge, engineering and marketing, as well as in the *hard* assets of plants and equipment. Financing industrial innovation raises two main issues: the cost of capital and access to capital.

As a country, Canada's cost of capital is high relative to that of Japan and Germany, but is comparable with that of the U.S. and the U.K. The principal reason for the relatively high cost of capital within Canada is the cost of equity. At the country level, international debt/costs are converging due to globalization of debt markets. A relatively high cost of equity has a disproportionate impact in Canada, as Canada has the lowest debt/equity leverage of the countries studied. The cost of capital is not uniform for all types of investments. The Canadian cost of capital for investment in machinery and equipment with a life of 20 years compares favourably with that of other countries in the period under study, due primarily to tax arrangements (which are no longer available). However, for the R&D component of industrial innovation, the cost of capital in Canada is in the upper range relative to that of other countries. This finding is confirmed by comparisons between 42 Canadian companies and competing or comparable foreign firms: Canadian firms are in a high-cost group of companies, while Japanese and German firms had relatively lower costs, a phenomenon evident across several sectors of the economy.

Access to capital, whether for start-up or expansion, is the primary financing issue for new or emerging technology-intensive firms. Those managing technology-intensive enterprises and their potential investors share a significant characteristic: inadequate, meagre knowledge of the other. The gap in understanding and expertise, on both sides, creates a self-perpetuating cycle of failure, a vicious circle of underinvestment. Access to capital is, first and foremost, a human resources issue; specifically concerning the quality and availability of management. Inadequate rewards for risk-takers result in shortages of the management skills required.

The relatively high cost of capital in Canada is not just a problem for the high-technology sector. Resource-based and mature manufacturing industries are equally threatened. Macroeconomic conditions, such as Government deficits and low savings rates (compared with those of Japan and the Federal Republic of Germany), are largely responsible. Further, current regulation for financial institutions in Canada limits opportunities for growth in the base of innovative industrial performers. Action is required to reduce the cost of capital for R&D and for other elements of industrial innovation.

Technology-intensive firms in Canada, in the start-up or early phases, face severe difficulties in gaining access to capital. The principal difficulties arise from an inadequate supply of management skills for running and building technology-intensive firms, as well as from lack of knowledge, understanding and experience among investors about the development of technology-intensive commercial activity.

Recommendations

The report recommends:

1. Capital gains tax rules be modified so that gains from eligible equities held longer than three years are not included within personal income for the purposes of taxation.
2. A tax penalty be applied against the assets of pension funds that do not invest at least 1 percent of their assets in eligible small enterprises. Should a fund fail to invest the 1 percent in eligible firms, a penalty of 10 percent would be assessed on the amount not so invested. Eligible enterprises would include companies that perform substantial amounts of R&D or venture capital groups that specialize in the financing of technology-intensive firms.
3. A national fund of up to \$1 billion be established, capitalized over time by Government and/or by the penalty tax on pension funds (see Recommendation 2), and administered at arm's length from Government, for the purpose of contributing up to 50 percent of the industrial innovation costs for specific projects proposed by established firms. The fund contribution would be repayable at premium rates from revenues on eventual sales of the product developed and marketed.
4. A matching investment fund be established, on a pilot basis, to provide repayable Government contributions directly to new and/or small innovation-based ventures of up to 75 percent of equity funds raised by individual investors. Government would finance the creation of the fund. Funds would be bonded as to use (i.e. for innovation). Provided the bond was in place and certain minimum criteria were met, funds would be made available without Government review.
5. The establishment of a financial institution to provide equity and debt investment for technology-intensive firms. Governments would contribute some part of the initial capitalization of this bank. The financial institution would endeavour to earn market rates of returns on its investments.

**For more information or copies of this report, contact:
NABST Secretariat, 8th Floor, West Tower, 235 Queen
Street, OTTAWA, Ont., K1A 0H5, Tel.: (613) 990-6260.**

Human Resource Development Committee Report

National Advisory Board on Science and Technology (NABST) Human Resource Development Committee
1991

Overview

To regain economic competitiveness and remain a Summit Nation, Canada needs to focus intently on adding value and knowledge to its exportable goods and services, building on existing strengths. The key to remaining competitive is mastery of the process of continuous innovation. The need to restructure in this direction has reached crisis proportions.

To change course toward a more innovative economy, the Committee argues that adult training is a major undeveloped opportunity in Canada. It formulates, in response to this underdeveloped opportunity, the concept of *continuous learning*. Continuous learning involves formal education and adult training in a continuous process that lasts a lifetime. This process provides people with flexibility and self-confidence in the face of continuous challenge and change.

Recommendations

The Committee recommends an initial focus on retraining managers and teachers, and then the rest of the work force. It calls for the reorienting and clustering of the best and brightest students. It wants national standards for the school systems, and differentiation and specialization of the country's universities. It recognizes the special role of science, engineering and technology in the global economy, and states that private sector careers in these fields must be made more plentiful, rewarding and challenging to attract the talent required for a prosperous future.

In the context of the challenges presented by the global economy, the overall goal is public awareness and wide participation, to be achieved by increased literacy and numeracy, and by increased scientific and technological understanding.

To get started, the Prime Minister is asked to lead by setting a national target for adult involvement in teaching and learning, and by establishing groups to identify and initiate the right specific steps.

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NABST Secretariat, 8th Floor, West Tower, 235 Queen
Street, OTTAWA, Ont., K1A 0H5, Tel.: (613) 990-6260.**

Science and Technology, Innovation and National Prosperity: The Need for Canada to Change Course Committee Report

National Advisory Board on Science and Technology (NABST) National S&T Priorities Committee
1991

Overview

This Report defines S&T as the set of skills and activities that are linked, through innovation, to increased productivity and hence underpin economic development in advanced industrialized societies. The report documents the rapidly widening gap between the technological fitness of Canadian industry and that of its industrial country competitors. The extent and seriousness of this gap are underlined to encourage governments, and Canadians generally, to act with commitment and urgency to change course. The report includes reviews of six industrial sectors — pulp and paper, chemicals, auto parts, aerospace, lasers, and computer services and software — to illustrate the diversity of competitive circumstances facing Canadian industry.

The report concludes by saying the challenge must be met primarily by Canadians as individuals, and particularly by firms in sectors exposed to global competition. The essential role for government is to provide leadership and a sense of direction and to establish the most favourable conditions to encourage innovation and productivity.

Recommendations

The report recommends three directions that Canadians can take with considerable confidence.

1. Policies that harness S&T to promote innovation and increase productivity must move forward on several fronts simultaneously. The most important of these are:

- Framework policies that encourage the application of S&T, including regulatory policies that are conducive to innovation; policies that promote national savings (and thus reduce the cost of capital); policies that promote competition; and policies that facilitate adjustment.

- Human resources policies addressing the full spectrum of training and education, with emphasis on inspiring more young people to pursue technical careers; providing much greater management and employee training; and developing in individuals the flexibility to adapt to continuous technological change.
 - Policies that promote the development, acquisition and diffusion of technology and state-of-the-art industrial practices.
2. Canada's circumstances suggest that the most urgent S&T challenges for the private sector, with the cooperation of government, are to: employ science-based innovation and technology more effectively to increase the value-added component in Canada's resource industries, and in the mature manufacturing sector; make Canada a more attractive location for the performance of R&D by Canadian and foreign-owned companies; and create a climate that encourages the birth, growth and maturation of technologically sophisticated firms in high-potential sectors.
 3. To ensure that policies in the foregoing areas are most effective, governments must engage in continuous consultation with the private sector to develop a shared understanding of the best ways in which science-based technology can be applied in particular sectors and subsectors to foster innovation and increased productivity.

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NABST Secretariat, 8th Floor, West Tower, 235 Queen
Street, OTTAWA, Ont., K1A 0H5, Tel.: (613) 990-6260.**

Statement on Competitiveness Committee Report

National Advisory Board on Science and Technology (NABST) Statement on Competitiveness Committee
1991

Overview

The objectives of this report are to define and to document the competitiveness problem Canada is facing; to convey the critical need for Canada to respond by changing course now; and to propose a strategy for the Government in initiating this change of course.

The report provides a diagnosis of Canada's present situation and makes the following observations:

- Resource products are still the key to Canada's trading success, but the trend in prices is down while that in production costs is up.
- Inflation and the high dollar have left the manufacturing sector in very bad shape, but the fundamental problem is dismal productivity growth.
- R&D spending, already extremely low by industrial-country standards, has actually been declining relative to GDP.
- The economy is increasingly short of technical skills.

The report recommends to the Government that the competitiveness issue be raised to the top of federal and federal-provincial agendas, that the Prime Minister and ministers carry the competitiveness message from coast to coast, and that all major initiatives of the Government be evaluated in the light of their implications for competitiveness.

Recommendations

The report recommends:

1. **Framework policies** that support innovation and create favourable conditions to attract and support R&D activity and innovative firms be developed.
2. **Human resource policies** that inspire more young people to enter technical careers and stimulate more extensive employee training be developed.
3. **Policies that promote the development, acquisition and diffusion of technology** at the level of individual firms be developed.

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NABST Secretariat, 8th Floor, West Tower, 235 Queen
Street, OTTAWA, Ont., K1A 0H5, Tel.: (613) 990-6260.**

Competing in the New Global Economy

Ontario Premier's Council on Technology

1988

Overview

The first Premier's Council of Ontario was established in April 1986. The Council's mandate was to "steer Ontario into the forefront of economic leadership and technological innovation." Chaired by Premier David Peterson, this multipartite advisory body represented a broad cross-section of the Ontario economy. Its members were drawn from business, labour, government and academic communities. In July 1986, the Premier asked the Council to examine the competitiveness of Ontario's economy and develop policies and proposals for the province's future. The focus of the Council's work was the industrial competitiveness of the province. Under Premier Peterson, the Council produced two reports: *Competing in the New Global Economy* and *People and Skills in the New Global Economy*.

Competing in the New Global Economy focuses on industrial restructuring — the process by which old industries transform themselves and new industries emerge. It contains an analysis of the Ontario economy, including a dozen specific industrial sectors, start-up companies and Ontario Hydro; and presents a comprehensive set of proposals calling for fundamental changes in public policies and programs. Volumes II and III are supporting documents. Volume II contains the industry studies together with two special studies of the Start-up Company and Venture Capital Industry and Hydro's role in provincial development. Volume III contains an analysis of industrial policy and brief analyses of selected provincial, national and foreign industry policies and programs.

The report properly identifies lack of competitiveness as a fundamental structural problem in many high-growth, high-tech industries. Other industrial weaknesses identified are: a low level of R&D spending in most industries; the dependence of too many sectors on undifferentiated commodity

products; highly uncompetitive plants in core industries; and inadequate support for entrepreneurial start-ups and larger firms on the threshold of becoming multinationals.

It is argued in the report that these weaknesses are compounded by problems with the public infrastructure. Education and training systems are not up to the levels of competitors and so are not adequate. University and government laboratory S&T infrastructure has not focused enough on industrial priorities and world-class performance. Further, the report states that public policies have been ill-conceived and governments ill-equipped to provide appropriate and effective support to industry with respect to international competitiveness.

Recommendations

1. Ontario Recapitalization Incentive Plan

An Ontario recapitalization incentive plan should be established to attract investors to indigenous medium-sized exporting companies going to public equity markets to raise new capital.

2. New Directions for Restructuring

Ontario should put in place a sound industrial restructuring process focused on the trading sectors, requiring the active involvement of business, labour and government, and aimed at achieving timely and workable restructuring actions.

3. A Review of Worker Adjustment

The Premier's Council should examine the labour adjustment issues of restructuring in Ontario's core industries and work with government to develop a comprehensive approach to meeting the adjustment needs of workers in these industries.

4. *Ontario Worker Ownership Initiative*

The Government of Ontario should initiate a full examination of the potential benefits of encouraging broader worker ownership in Ontario companies.

5. *Incremental R&D Tax Incentives*

The Ontario government should institute a special tax incentive for incremental R&D expenditures above a company's three-year rolling average of R&D performed in Ontario.

6. *Strategic Procurement Plan*

A strategic approach to procurement should be adopted throughout the Ontario government, including Ontario Hydro. Such an approach should include three initiatives:

- A Strategic Procurement Committee, to comprise representatives of independent business, academic and labour leaders, as well as senior government representatives, to lead the initiative.
- A Health Care Procurement Commissioner elected to focus on pulling together Ontario's substantial buying power in the health care field to assist in the development of Canadian medical equipment and pharmaceutical firms, and in attracting foreign multinationals to carry out R&D and locate manufacturing facilities in the province.
- An enabling R&D Contract Fund that, under the direction of the Strategic Procurement Committee, would receive proposals from all arms of the Ontario government and provide a means for developing competitive Ontario suppliers by awarding small developmental contracts prior to tendering major contracts.

7. *Ontario Risk Sharing Fund*

The provincial government should create an Ontario Risk Sharing Fund to provide conditionally reimbursable matching loans to successful, established exporting companies for investments in new product development, prototype placement in export markets, and the establishment of new marketing offices outside North America.

8. *Refocus the Ontario Development Corporations*

The Government of Ontario should accelerate the refocusing of the Ontario Development Corporations according to the competitive priorities identified in this report.

9. *Early Stage Venture Capital Incentives*

The Government should provide tax incentives for investments in a special class of early-stage venture-capital funds.

10. *Initial Public Offering Incentive*

The Ontario government should offer investors in the initial public offerings of Ontario companies in traded sectors a tax incentive significantly above the base level tax credit or deduction offered under the Ontario Recapitalization Incentive Plan described in Recommendation 1.

11. *Redirect Government Research to Industry*

The Ontario government should involve the private sector more effectively in university and government research and ensure that industrial priorities play a much more important role in guiding such research.

12. *Technical Personnel Assistance Program*

The Ontario government should establish a Technical Personnel Assistance Program to encourage small and medium-sized firms to accelerate their hiring of R&D, engineering and other technical personnel.

13. *Comprehensive People Strategy*

The Premier's Council should work with appropriate areas of government to develop a comprehensive people strategy that will address vital education, training and labour market policy issues as an integral part of its next agenda.

14. *Ontario Excellence Awards*

Ontario Excellence Awards should be created to give recognition to individuals for their special contributions to making a better economic future for the people of the province.

**For more information or copies of this report, contact:
Premier's Council on Economic Renewal,¹
101 Bloor Street West, TORONTO, Ont., M5S 1P7,
Tel.: (416) 326-6754.**

¹ The current Premier's Council was established by Premier Bob Rae in February 1991. The mandate of the current Council is to accelerate the process of economic renewal in Ontario, by acting as a change agent in addition to advising government. The Council has created four task forces to date. Interim reports from most of these Task Forces will be available in the first half of 1992.

People and Skills in the New Global Economy

Ontario Premier's Council on Technology

1990

Overview

The first report of the Premier's Council of Ontario focused on industrial restructuring — the process by which old industries transform themselves and new industries emerge. But new technology, new products and new industries are only part of the necessary equation. The other part is people and the skills they need to earn their living in the 21st century. This report, *People and Skills in the New Global Economy*, examines ways in which industry, educators, labour and government can work together to ensure that tomorrow's work force is equipped with the skills they need to compete, to adapt and to enjoy meaningful working lives.

Recommendations

1. *Building a Platform for Lifelong Learning*

The teaching of language should aim for more than the achievement of linguistic competence; it should attempt to improve communication and critical thought.

Mathematics and science should become a mandatory component of the core school curriculum until at least the end of Grade 10. (If science and mathematics could ever be made more palatable and attractive for students, the Council would ideally like to see these subjects made mandatory until the end of Grade 12).

Efforts to promote an understanding of mathematics, science and technology should be extended across the curriculum and throughout secondary level education.

2. *Making Technological Education and Careers Attractive and Viable Options for Students*

Careers in industry and the skilled trades are more financially rewarding, more interesting and more secure than most students think. A concerted effort must be made to sell these benefits to students, and this is an effort in which industry and labour must play a leading

role. Creating more advanced level credits in technological studies could also enhance their status and substantiate claims of their worth.

3. *Enhancing Career Education*

Career education programming should be assigned more importance within the school systems and should enlist the efforts of those outside the system — business, labour and communities — to ensure that advice on employment opportunities is both accurate and current. This aspect of guidance should take many forms, including the planning of career education days, and liaisons with local business and industry to provide current information to students and involvement in cooperative education program planning.

4. *Creating a Common Curriculum*

A common destreamed curriculum in Grades 7 to 10 should be put in place by the year 2000. Progress toward this common curriculum should be the object of constant review and critical evaluation.

5. *Developing the Specialized Years*

The beginning of the specialization years should present most students with a range of choices: leaving school to enter the paid work force or a training program; continuing partly in school and partly in the work force or a workplace training program; or continuing in school in order to complete a diploma. The widest range of options should be offered to all students whether or not they choose to complete their diploma.

6. *Emphasizing Evaluation*

If Ontario's educational system is to change, ways must be developed to measure how well the schools perform in terms of whatever criteria they choose to adopt. Ontario should emphasize educational standards and evaluation by introducing:

- a sampling system to monitor educational standards;
- province-wide benchmark evaluation to cover basic skills;
- comprehensive profile assessments for students; and
- a report card to the public to identify achievements and progress annually.

7. *Revamping Teacher Training*

Ontario needs more teachers. Various demographic trends, including retirements, immigration, rising birth rates and the movement toward smaller classrooms all point to a serious teacher shortage by the mid-1990s, when retirements alone will equal the number of new graduates.

Ontario also needs better-trained teachers. At least one-quarter of teachers at any one time are taking courses to upgrade their qualifications. But most of this training consists of quick courses that are seldom intensive enough to equip teachers to cope with new curricula, new teaching methods and new technologies. In particularly short supply are teachers with solid groundings in math, science and technology. The Council therefore recommends revamping teacher training.

8. *Providing Leadership in School Administration*

Principal training programs must be modernized and expanded to acknowledge their dual role as instructional leader and manager in a complex school system.

9. *Building a New Relationship for School, Community and Workplace*

All school boards should establish community linkage committees with a mandate to review school programs for their relevance to the economic and social life of their communities. In addition, each school should consider setting up its own linkage committee to develop guidance and monitoring programs,

educational exchanges, apprenticeship and co-op programs.

10. *Emphasizing Transferable Skills*

College programs should be structured to permit greater ease of transfer between programs and to provide a common set of generic skills that can accommodate a variety of career paths.

11. *Combating Drop-out Rates*

In order to combat the high dropout rates found early in college programs, the colleges should therefore establish or enhance pre-admission or orientation courses to enable students to explore, collaboratively and in a setting of social support, such topics as life skills, time management and study skills. If colleges are to undertake these remedial functions, they will require additional funding and teaching staff to carry them out effectively.

12. *Development of Centres of Specialization*

A selected group of college technology programs should be transformed into sectoral or technology-specific leaders in education and training and be designated "Centres of Specifications."

13. *Developing Foundation Skills in Post-Secondary Education*

Universities and colleges should develop and maintain foundation courses and course content that will provide all undergraduates with a common set of sophisticated communication, numeracy and technical/scientific skills.

14. *Securing University Funding*

The funding for faculty renewal and equipment upgrading should be augmented by:

- adjustments to government funding to reflect more accurately the investment requirements for programs in science and engineering; and

- analyzing the potential risks and benefits of alternative means of alternative revenue sources, including fee increases or deregulation. It is imperative, however, that broad access to the system be maintained.

15. *Rewarding Teaching Excellence*

Universities should investigate ways of increasing the rewards and resources available to those who direct their efforts to teaching excellence.

16. *Incentives for Postgraduate Studies in Science and Engineering*

The pursuit of postgraduate studies in science and engineering should be encouraged through:

- special grants and stipends for postgraduate students; and
- the creation of opportunities for direct entry from a bachelor degree to a four-year doctoral program.

17. *Ensuring Continuity and Transferability across the Education System*

The Council believes it should be made easier for students to switch courses, or to switch between college and university, without losing credit for previous work.

18. *Toward an International Education*

The Council believes the educational system must reflect the realities of the global marketplace and give its students an international education.

19. *The Ontario Training and Adjustment Board*

Ontario should establish an Ontario Training and Adjustment Board. This Board would be a bipartite management and labour authority to provide strategic direction for the funding and delivery of workplace training and adjustment activities in the province.

20. *Sectoral Training Committees*

Sectoral Training Committees would be established to create and administer a regime for training in their industry sectors.

21. *Regional Training Committees*

Regional training committees should be established to respond to the diverse needs of local communities and businesses in the area of training.

22. *An Ontario Apprenticeship Board*

An Ontario apprenticeship board should be created to revamp Ontario's industrial apprenticeship system.

23. *The Learning Network*

The Council recommends the development of a learning network to support and enhance best practice in education and training in the province.

24. *Local Training Access Centres*

Local training access centres should be established to provide information and support services to the employment disadvantaged who require access to training opportunities.

25. *Improving Advance Notice Provisions*

Ontario should lower advance notice thresholds to include layoffs of 10 to 49 workers. Considerations should also be given to increasing the notice periods for all mass layoffs.

26. *Establishing Workplace Adjustment Committees*

Employers and employees in workplaces facing mass layoffs or closure should be required to establish bipartite workplace adjustment committees to facilitate counselling, retraining and new employment for displaced workers. These committees should also be required to plan and arrange for retraining where the job requirements of a significant number of employees are affected by technological change.

27. *An Ontario Workplace and Community Adjustment Service*

An Ontario workplace and community adjustment service should be created under the auspices of the Ontario Training and Adjustment Board to assure that appropriate public and private resources are promptly deployed to assist workers and communities suffering from mass layoffs and plant closures.

28. *Diversification for Single-Industry Communities*

A dedicated fund for economic diversification and restructuring should be established to assist single-industry communities with their particular adjustment needs.

29. *A Restructuring Options Unit*

Ontario should establish a restructuring options unit as part of the Ontario workplace and community adjustment service to assist workers and communities in exploring viable restructuring alternatives for plants that are closing.

30. *Protecting Dislocated Workers' Legal Entitlements*

Ontario should provide wage protection advances to all workers who are owed salary, severance, vacation pay or pension benefits by employers who default on these obligations. Changes should also be made to the federal *Bankruptcy Act* to protect earned workers' wages by giving them priority creditor status.

31. *Removing Penalties from Severance Payments*

The Government should rescind the provisions in the *Unemployment Insurance Act* that treat severance pay as income for calculation of entitlement to Unemployment Insurance benefits.

32. *Training for Employees Under Notice*

The Government should also amend Section 26 of the *Unemployment Insurance Act* to permit unemployed workers and workers under notice for termination to receive UI benefits while taking training.

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² The current Premier's Council was established by Premier Bob Rae in February 1991. The mandate of the current Council is to accelerate the process of economic renewal in Ontario, by acting as a change agent in addition to advising government. The Council has created four task forces to date. Interim reports from most of these Task Forces will be available in the first half of 1992.

Technology/Economy Programme

Organization for Economic Cooperation and Development (OECD)
1988

Overview

The *Technology/Economy Programme* (TEP) was implemented in 1988 by the OECD's Secretary General, Jean-Claude Paye, to define an integrated and comprehensive approach to technology-related issues designed to deepen the understanding of the relationship between technology and the economy, and to make better use of technology for society and economic growth.

The Programme's process involved presentations of various studies by international experts at a series of nine international conferences between June 1989, and July 1990. The synthesis conference was held in Montreal, February 3 to 6, 1991.

The conferences were centred around the following themes: economic growth; technology assessment; human resource development; technological change as a social process; technology and investment; toward techno-globalism; technology and the environment; technology and competitiveness; and technology and the global economy.

Following the Montreal Conference, the OECD's TEP High Level Group of Experts, created to draw policy recommendations from the TEP process, presented their report and recommendations. The "draft" report was published in January 1992 by the OECD as *Technology in a Changing World, Policy Implications — Report of a Group of Independent Experts*.

Recommendations

The report recommends:

1. Governments aim to achieve a proper balance between their support for basic research systems (universities and public laboratories are the main components) and their support for business sector R&D.
2. Governments attribute more importance to the diffusion process by paying more attention to the total environment where enterprises operate, and properly coordinating the many policy components that have the potential of affecting diffusion. Further to this, the OECD develop key indicators based on this broader concept of innovation and diffusion, which may be required for formulating policies, and monitoring and evaluating their effects.
3. Governments foster and support assessment of technology and promote broad information and public discussion of technology issues.
4. Governments pay greater attention to the need for coordinating education, training and labour market policies in order to effectively mobilize, develop and employ human resources in the innovation and diffusion process.
5. The OECD strengthen its work on international statistics and indicators on human resource development, with particular emphasis on national practices on lifelong education and on international migration of scientists, engineers and highly skilled workers.
6. The appropriate OECD bodies explore possibilities for extended international cooperation, for example, mutual recognition of credentials, intensification of educational exchange programs, etc.
7. The OECD attempt to clarify the definition of intangible investment and how it could be measured appropriately; and that a review be undertaken of the degree and effects of the asymmetry of treatment accorded to physical and intangible investment in current national practices.

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8. Governments ensure the existence of the necessary financial, legal, regulatory and competitive conditions so that strategic infrastructure is upgraded continually in relation to user needs.
 9. Governments improve further the performance of their administrations, introducing more flexibility, speed and decentralization into their own bureaucratic operations, taking full advantage of the opportunities offered by new information and communications technology.
 10. Guidelines for government support — at national or sub-national levels — to corporate research be discussed within the OECD; and the issue of equal access for domestic and foreign firms to publicly funded research on an equivalent basis be addressed, including the desirability of granting access to government-sponsored consortia and programs.
 11. The OECD broaden its analytical work to understand the role of institutional, cultural and other factors in explaining differences between countries in technological, industrial and overall economic performance.
 12. The OECD encourage and accelerate continuing research on intercountry differences in the nature and practices of competition policy.
 13. Governments, in the spirit of existing OECD codes of liberalization of capital movements and the National Treatment Instrument, explore the scope for further reducing divergences in regulations concerning financial markets and foregoing direct investment, in order to ease frictions.
 14. The OECD pursue its work related to intellectual property and to the setting of norms and standards, and that these be discussed in the relevant OECD bodies.
 15. Discussions be initiated on increased international cooperation and coordination in major scientific research areas among OECD governments based on appropriate burden sharing.
- Following the Montreal Conference, OECD Ministers adopted a policy statement on Technology and the Economy, which was issued as part of a communiqué in June 1991.

For copies of the "Summary of the Discussions" or more information contact: Technology Innovation and Diffusion Directorate, Science and Technology Sector, ISTC, 235 Queen Street, OTTAWA, Ont., K1A 0H5, Tel.: (613) 954-3499.

Governments & Corporations in a Shrinking World: Trade & Innovation Policies in the United States, Europe & Japan

Sylvia Ostry, University of Toronto
1990

Overview

This book, published by the Council On Foreign Relations Press, grew out of the Council on Foreign Relations' study group — *The Search for Stability: Business and Government in an Inter-dependent World* — which met six times between April and November 1989. The group consisted of corporate executives from 18 global corporations from the U.S., the EC and Japan, as well as policy makers and academics. In this book, Sylvia Ostry surveys the emerging international economic order on trade and innovation policies, and focuses on the vast differences in the corporate-government interface in the political economy of policy making within the Triad: the U.S., the EC and Japan. She foresees increasing friction and conflict within the Triad, identifies emerging problems and makes some recommendations for overcoming the resulting frictions. The recommendations relate to policy proposals in the OECD, the GATT and to the role of the global corporation.

Recommendations

The OECD: Innovation Policy

Because innovation policy embraces such a range of government programs, the OECD, which has expertise in all the different areas, is the logical focus for initiating a project for analysis and policy proposals. Such a project should be initiated and its objectives would be to:

1. Review the theoretical and empirical literature on strategic industries with a view to proposing a consensus-based working definition for policy use.

2. Analyze the three elements of the policy set — trade, R&D and market structure policies — in (initially) the Triad, with a view to highlighting the impacts of significant differences in policy on industrial and trade performance.
3. Make recommendations for short-run action (to diffuse international friction) and to implement a long-run process of policy convergence.

The GATT: Anti-Dumping and Safeguards

GATT reform should be to constrain unilateral interpretations by extending, clarifying and making more specific those aspects of the code that have allowed this proliferation. Such reform should include:

1. On the procedural side, specific provisions on circumvention, a uniform rule of origin, a provision to ensure that users are represented at hearings and a rule governing disclosure of information.
2. On the substantive side, clear and specific provisions to specify dumping determination (i.e. determination of foreign market value), export prices, adjustments to bring both to a comparative basis and the calculation of the dumping margin.
3. A legitimate GATT safety valve provision for special fast-track and repeat-offender procedures to deal with specific sectors.
4. A surveillance and dispute settlement mechanism under the GATT code.
5. A new safeguard arrangement to deal with fair trade.

Further, periodic GATT rounds should be abandoned. Instead, continuous negotiations and an enhanced institutional capacity to monitor the international economy and to deal with emerging specific issues should be the norm.

Global Corporations

The international public good of a multilateral trading system is based on stability. The erosion of the GATT has, in truth, reduced even this fundamental aspect of the system. The global corporations ultimately have a large stake in the reduction of uncertainty. A far better option to serve their long-term interests would be the

establishment of the global business roundtable to work with governments and the GATT for a new round in 1991.

**For more information or copies of this book, contact:
Council On Foreign Relations Press, 58 East 68th Street,
NEW YORK, N.Y., 10021, U.S.A., Tel.: (212) 734-0400.**

Canada at the Crossroads: The Reality of a New Competitive Environment

Michael E. Porter, Harvard University

October 1991

Overview

In 1990, Michael E. Porter, a Professor of Business Administration at Harvard Business School, published an important book, titled *The Competitive Advantage of Nations*, in which he develops a relatively simple, but highly acclaimed, conceptual framework for addressing competitiveness (i.e. the *Diamond* of key factors that determine national advantage). The book also includes the results of his detailed international study of competitiveness, which examined the performance of 10 nations (but which did not include Canada).

In 1991, the Government co-sponsored a major study with the Business Council on National Issues on Canada's competitiveness. This study replicates the analysis Michael E. Porter uses in *The Competitive Advantage of Nations*, subject to a number of adjustments to his model, which were needed in order to reflect certain unique characteristics of the Canadian economy (i.e. high degree of foreign ownership, dominant impact of the U.S. market and the FTA).

The Canada study includes a review of 25 specific industry sectors (see Annex) and a review of key aspects of public policy, including education and training, S&T, environmental and other regulations, procurement and competition policy, among others.

Recommendations

Canadian firms should:

1. Assess the Canadian Diamond using Porter's framework to examine their strengths, weaknesses, opportunities and threats.
2. Move toward innovation-driven advantages by developing differentiable, more highly processed products.

3. Focus on areas of true competitive advantage by:
 - rationalizing product lines;
 - re-evaluating levels of vertical integration; and
 - reducing levels of diversification.
4. Upgrade the Canadian Diamond by:
 - increasing investment in specialized human resource development;
 - forging closer ties with educational institutions;
 - improving technology development and adoption;
 - transforming trade associations into factor-creating mechanisms;
 - nurturing Canadian supplier industries;
 - striving to develop and serve demanding Canadian buyers;
 - establishing links with Canadian-based firms in related industries;
 - developing labour-management relations centred on productivity; and
 - relying more on performance-related compensation.
5. Adopt more global strategies by:
 - seeking out demanding foreign buyers; and
 - tapping into strengths of suppliers on a world-wide basis.
6. Define a North American or global mandate. Foreign subsidiaries should aim for a product mandate for a particular line of business and carry out all related activities in Canada.
7. Redefine the relationship with governments. Instead of looking to governments for protection and support, they should cooperate with governments in making publicly sponsored R&D, training and education more commercially relevant.

Labour unions should:

1. Focus on productivity. Unions should press for job enhancement, more flexibility and recognize that pay should also be linked to training and merit.
2. Work with management to upgrade skills and improve training for employees.
3. Work with management to facilitate the introduction of new techniques and organizational changes.

Governments should:

1. Encourage adjustment and upgrading.
2. Minimize direct interventions.
3. Rely on incentives instead of grants.
4. Re-engineer social policies.
5. Improve intergovernmental policy coordination.
6. Maintain an open policy toward foreign investment.
7. Promote a sound and stable macroeconomic environment to complement other initiatives.

Governments should set priorities on:

1. Factor conditions, including:
 - more investment in education and specialized skills;
 - more focused technology development and faster adoption;
 - an increased pace for regulatory reform in infrastructure sectors; and
 - strengthened resource conservation and renewal policies.

2. Demand conditions, including:

- restructured government procurement; and
- stringent and forward-looking regulatory standards.

3. Conditions in related and supporting industries, including:

- consistent programs and policies in all areas to encourage the development of stronger industry clusters;
- policies that build on existing regional strengths; and
- a focus on promoting the development of specialized factors.

4. Strategy, structure and rivalry, including:

- stronger individual and corporate incentives for investment and upgrading;
- extended efforts to increase rivalry; and
- aggressive measures to restore a favourable macroeconomic environment.

Canadian citizens should:

1. Understand that the comfortable old order is disintegrating, and that global trends cannot be reversed.
2. Instead of looking at the past, be prepared to adapt to changing circumstances in their roles as employees, managers, voters and as members of their communities.

**For copies of the summary and report, contact:
Business Council on National Issues, Royal Bank
Centre, Suite 806, 90 Sparks Street, OTTAWA, Ont.,
K1P 5B4, Tel.: (613) 238-3727, Fax: (613) 236-8679.**

**For more information on this and copies of the summary,
contact the nearest ISTC Business Service Centre.
The addresses, telephone and facsimile numbers are
provided at the beginning of this publication.**

ANNEX — Porter's Industry Studies

Michael E. Porter, Harvard University

Aluminum Smelting

Atlantic Groundfish Processing

Auto Parts

Beef Processing

Biologicals/Vaccines

Central Office Switches

Cobalt Radiation Therapy Equipment

Commuter Aircraft

Consulting Engineering

Electric Energy and Equipment

Flight Simulators

Geophysical Consulting

Ice Skates

Industrial Explosives

Life Insurance

Market Pulp

Motor Vehicle Assembly

Newsprint

Nickel Processing

Pre-fabricated Housing

Pulp and Paper Equipment

Styrene

Urban Mass Transit Rail

Waste Management

Whisky

Technology and Innovation in Canada: The Case for National Action

Robert Richardson, Executive Director, National and Regional Conferences on Technology and Innovation
1989

Overview

In 1988, the Prime Minister convened the National Conference on Technology and Innovation. This was followed by five Regional Conferences. The booklet *Technology and Innovation in Canada: A Case For National Action* was prepared by Robert Richardson, Executive Director of the Conferences. The booklet represents a synthesis of the discussions that took place at the National and Regional conferences. It also includes a number of recommendations directed to both the private and public sectors.

The issue being considered at the National Conference on Technology and Innovation was how to mobilize and assist the private sector in Canada to use technology and innovation to improve our competitiveness. Five key constraints to better technology and innovation in Canada were identified: lack of leadership; risk-averse finance and investment; neglect of workplace issues; the lack of quality and relevance of education; and inadequate public awareness of the growing importance and impact of technology and innovation.

Recommendations

1. Leadership in Business — Managing Technology in Canadian Companies

- Canadian companies should re-evaluate their long-term business plans in light of ongoing changes in global markets and the growing role of technology and innovation in competitiveness.
- Senior executives should aggressively seek out opportunities to apply technology and innovation to create competitive advantages.
- Industry should include technology and R&D managers in the strategic corporate planning process.

- Companies must recognize the essential role of technology and innovation in the quest for excellence.
- Large firms should set up specific offices and networks to search out innovative small firms who could act as suppliers and sub-contractors.
- Governments and industry should cooperate to strengthen the market and technology intelligence services available to firms.
- Governments should introduce a wage subsidy support program to encourage small and medium-sized enterprises to hire scientists and engineers.

2. Investment and Finance

- Governments in Canada should aim to provide a more attractive investment environment within the next five years for technology and innovation than in competing industrialized countries.
- The Government should change the balance in favour of the tax laws to enhance equity investment over debt investment.
- The reward/risk ratio of investments favouring new or improved technology should be enhanced.
- A pooling concept within equity markets, possibly involving the insurance industry, to spread risky investments over a broader base should be created.
- Stock exchanges in Canada should establish a separate list and index of high technology firms. This could be particularly important in regional markets, such as the Prairies, not notably associated at present with high technology ventures. The Quebec Stock Savings Plan is an excellent operating example of working through stock markets to support high technology R&D.

- Provincial governments should establish tax policies and programs to encourage R&D, where some measure of risk to investors is preserved.
- The current narrow definitions of R&D for tax purposes and technology transfer should be reviewed and broadened.
- Government policy on intellectual property should be changed to assist the private sector. For example, Government research centres and labs should be able to engage in joint ventures with industry without all rights of ownership reverting to the Crown. Where intellectual property normally resides with Government, if the private sector has contributed to technology development, it might retain the intellectual property by paying a royalty.
- Governments should use their purchasing power to help build technological capability in Canada by acting as a stable, patient client for start-up firms and by contracting out research projects to build broad new capabilities in Canadian companies.
- Governments should assist in the innovation process by providing better access to information, such as by a Science and Technology Information Centre where industry could access information.
- The Government, in conjunction with private sector organizations, should consider establishing sectoral R&D targets over the next 10 years within Canada.

3. *The Workplace*

- Recognizing that labour must be a full participant in the process of technological change, Canadian industry will need to develop new and innovative approaches to managing technological change that stress employee skills updating and retraining

strategies. Industry should regard the spending of a percentage of profits on training as an investment in competitiveness.

- Industry should be involved in the planning, financing and operation of education and training programs, including co-op programs.
- Companies should develop plans for managing technological change that recognize and deal with the uncertainty such changes create in the workplace.
- ISTC should develop a major focus on the issue of human resource management in respect of technological change and competitiveness of Canadian industry.
- Industry should develop technologies for managing technological change and to motivate the work force to innovate.
- A centre of excellence should be established to study the social impacts of technological change and how they can best be managed in the national interest.

4. *Education and Training*

- All sectors should recognize the lifelong nature of the learning process. Work experience should be viewed as an integral component of education, and retraining as an integral part of the workplace activities. This should include greater recognition of students' work-related experience.
- Industry should consider arranging secondments for teachers to provide them with the relevant private work experience.
- Governments should establish industrial advisory boards to examine existing school curricula, funding, teacher training, etc., with the objective of encouraging an interest in science, technology and innovation at all education levels.

- Canada should consider introducing national standardized testing. Although support for standardized testing was not unanimous, there was a general consensus that such tests could be of value, if used in conjunction with other measures of achievement.
 - Business should help students to see the relevance of S&T, through programs such as *adopt-a-school*, cooperative education, internships and advisory committees.
 - Business should establish a mentor program to allow students with average abilities the opportunity to work on projects alongside someone in industry. This could help motivate students and stimulate an interest in the sciences, where traditional teaching methods have failed.
 - Special training subsidies should be made available for small and medium-sized enterprises.
 - Universities should encourage multi-disciplinary studies among students, collaboration among faculty, and provide scholarships for existing primary and secondary-level teachers to undertake science courses and degrees.
 - Industry-university liaison should be strengthened through sabbaticals, joint R&D projects, etc.
5. *Developing an S&T Culture*
- A working group should be established, with wide representation from all sectors and provinces, to implement the ideas from the national and regional conferences.
 - Industry, media and government should cooperate to develop and publicize stories concerning:
 - successful examples of innovation in industry;
 - interesting applications and advances in S&T; and
 - the vast array of ways that technology affects individuals in every aspect of daily life.
 - Mega-projects, such as the Frigate Program and the Space Program, should have a public awareness component built into them.
 - Primary and secondary schools incorporate courses that focus on developing entrepreneurial skills and an appreciation of science. Also, awards programs should be introduced at the primary school level for achievement in science activities, and carried right through to the post-secondary education system as a continuing incentive to students.
 - Industry should become involved in developing awareness of science in the *real world* (e.g. by participating in programs such as *adopt-a-school*). Successful projects such as the Shad Valley program must be marketed more aggressively.
 - Companies should be encouraged to have greater representation by scientists and engineers at management levels or on their boards of directors.
 - The Government should continue the Public Awareness Campaign for Science and Technology in Canada.

**For more information or copies of this booklet, contact:
Publications Distribution Centre, Communications
Branch, ISTC, 2nd Floor, West Tower, 235 Queen Street,
OTTAWA, Ont., K1A 0H5, (613) 995-8900.**

New Visions for Canadian Business: Strategies for Competing in the Global Economy

Alan Rugman and Joseph R. D'Cruz, University of Toronto
1990

Overview

In 1990, Kodak Canada Inc. commissioned Alan Rugman and Joseph R. D'Cruz to produce a strategy for Canada aimed at improving the country's competitiveness. Drawing upon several studies dealing with competitiveness, the authors pitch their recommendations at policy makers in the bureaucracy as well as in politics, business, the media and labour. Although the study does not undertake original research, it is a useful, concise statement aimed at prodding Government and the business community toward implementing policies aimed at increasing Canada's competitiveness.

First, the authors give Canada's competitive position in 1989 according to the World Competitiveness Report, followed by an examination of the country's industrial portfolio. Canada scored well on this index but there is no reason for complacency. Not surprisingly, resource and related industries along with automobiles and parts were found to be competitive. Next, the authors argue that increasing globalization puts competitive pressure not only on traded goods and services, but also on other industries. The authors stress that competitiveness is important for services as well as for the manufacturing sector. They also critique some simplistic solutions, such as higher R&D spending, a lower exchange rate and a lower deficit, which might be construed as helpful to competitiveness. Finally, they disagree strongly with policies aimed at fostering particular industries, such as those in high-tech areas.

Recommendations

Broadly speaking, the authors advocate a free market wherein the Government provides the infrastructure and economic climate. They recommend:

1. Fiscal deficits be reduced. This would ultimately lead to looser monetary policy. They contend that federal power has become weak in the face of lobby groups seeking large expenditures on social programs.
2. Competition be increased. They call for a dismantling of restrictions in such areas as beer, textiles, certain agricultural products and elimination of the protection offered to industries exempted from the FTA.
3. Support for service and manufacturing be balanced.
4. R&D be kept in perspective. Government should resist any policy that advocates targets for R&D. Canada should try to become world-class in its use, not in a hopeless effort to outspend others.
5. The involvement of the Government in business be lowered. This means anything from deregulation to reducing the role of Government in producing goods and services.
6. Improved education and training be supported. This involves a thorough reform of school systems from primary through to university. There is little appreciation of learning and schools often have a bias against business. Better management training in university is also encouraged.

**For more information or copies of this report, contact:
Kodak Canada Inc., Unit 4, 10 Newgate Gate,
SCARBOROUGH, Ont., M1X 1C8.**

Fast Forward: Improving Canada's International Competitiveness

Alan Rugman and Joseph R. D'Cruz, University of Toronto
1991

Overview

This study, commissioned by Kodak Canada Inc. in 1991, reports on Canada's progress on competitiveness since the publication of a similar effort by the authors in 1990. Again, their audience is policy makers, in the broad sense, from government officials to the business press. Their paper draws upon previous work and also presents their own analysis aimed at fostering competitiveness. Concerned about Canada's performance over the past year, the authors recommend calling a national conference on this issue.

First, the authors present the country's competitiveness scorecard, which is found to have slipped a notch since the release of the earlier report. Next, they demonstrate that efficiency in manufacturing depends heavily on competitiveness in services. The heart of their analysis is then presented, using a modified Porter *Diamond* and applying it to 10 *strategic clusters*. The authors stress that competitiveness requires a change in organizational attitudes to one that promotes quality, employee involvement and closer links to customers.

Recommendations

Apart from calling for a national conference on competitiveness, they recommend:

1. Any political or institutional restructuring take account of its effect on competitiveness.
2. All organizations develop attitudes to encourage change and adaptation.
3. Canada's competitiveness be examined through a Porter (Michael E.) framework that recognizes the influence of a *North American Diamond*.
4. The service sector be analyzed through such a diamond and its efficiency be gauged against international standards.

**For more information or copies of this report, contact:
Kodak Canada Inc., Unit 4, 10 Newgale Gate,
SCARBOROUGH, Ont., M1X 1C8.**

Not a Long Shot: Canadian Industrial Science and Technology Policy, Background Study 55

Guy Steed, Science Council of Canada
1989

Overview

As the 21st century approaches, a golden era of S&T is contributing to a historic economic transition. In this Science Council of Canada Background Study, Guy Steed outlines the fundamental changes in the world economy as a result of advances in S&T. These changes influence profoundly the international competitiveness of Canadian industry and consequently the economic well-being of all Canadians. The author reviews the S&T policies of governments and industries in Canada; identifies the leading and current issues concerning the industrial R&D base, industrial modernization and technology diffusion; and recommends changes that would help this country, through S&T-based economic renewal, to maintain its standing as one of the world's advanced industrial nations. This study is the supporting document for the October 1988, Science Council statement, *Gearing Up for Global Markets*.

Recommendations

For Canada's future prosperity, technology policy, geography and manufacturing capability are important factors. The author therefore recommends:

1. More supportive Government financial policies, particularly non-tax supportive measures be implemented.
2. Industry seek self-help. Technical staff need to be in higher and better-paid ranks within management, and boards must have some directors with knowledge of technological affairs. Thorough investigation of markets, particularly foreign markets, should precede research, development and design. Canadian offices in foreign countries should help domestic firms with information on markets and financing, and foreign study and language training should be available to engineers.
3. Canada make special efforts to develop world-class companies capable of growing and operating internationally. Small firms could find niches as suppliers to large firms.
4. Industry and Government consult on sectoral innovation to define the kind of S&T action needed. A start may be with resource-based industries.
5. Industry give better input to help research efforts be more selective in the use of limited resources, which are now spread too thinly.
6. Government allocate funds for research in certain major programs that would have the effect of developing technological expertise. Two such programs might be environmental technologies and engineering and industrial design.
7. Government support pools for cooperative research with broad applications.
8. University-industry achieve cooperation through better links and exchanges.
9. New small, technology-based firms be encouraged to start up.
10. Strategic partnerships between small innovative firms and large corporations with access to capital and markets be encouraged.
11. Federal and provincial governments coordinate regional policies with a view to increasing involvements of municipalities and provinces in industrial strategies.
12. Canadian business develop the expertise to address protection of intellectual property.

**For more information or copies of this report, contact:
Science Council of Canada, Berger Building,
100 Metcalfe Street, OTTAWA, Ont., K1P 5M1,
(613) 992-1142.**

Canada Must Compete

Standing Committee on Industry, Science and Technology, and Regional and Northern Development
December 1990

Overview

The Standing Committee on Industry, Science and Technology, and Regional and Northern Development submitted to the House of Commons, in accordance with its mandate under Standing Order 108(2), a report titled *Canada Must Compete*. In accordance with Standing Order 109 of the House of Commons, a comprehensive reply to the Standing Committee's report was prepared and presented to the Committee through the Clerk of the House of Commons.

Canada Must Compete brings together important perspectives on the S&T policy debate in Canada. It argues that Canada's ability to produce and use S&T in Canadian firms is critical to Canadian industry's ability to compete in new and traditional world markets. Effective use of S&T, the report suggests, will improve productivity, spur economic growth and ensure that Canada's current standard of living can be maintained and improved. S&T, the Standing Committee notes, is the driving force that allows a nation to improve its competitiveness. R&D provides Canadians with the opportunity to develop new products, services and low-cost methods of production.

Recommendations

The Standing Committee suggests 31 recommendations in *Canada Must Compete*. Most of these are directed to activities of the Government.

The report recommends:

1. The Government set a national goal of achieving a level of Gross Expenditures on Research and Development equal to 1.9 percent of the GDP by the year 2000, and 2.5 percent by the year 2005.
2. The Government give consideration to the advisability of allocating its S&T expenditures, such that the:
 - Budgets of the three granting councils be doubled over a period of three years. The adequacy of their budgets should then be reviewed by the Minister for Science, and efforts should be made to preserve their level of funding relative to the total level of federal expenditures on R&D.
 - Budget of the Science Council of Canada be restored to its former funding level of \$5 million. Subsequent budgets should at least preserve this minimum level of funding in constant dollar terms.
 - Industrial Research Assistance Program (IRAP) budget be increased to \$100 million in the fiscal year 1991-92. Subsequent budgets should at least preserve this minimum level of funding in constant dollar terms.
 - Unsolicited Proposals Program be reinstated at its prior annual level of \$25 million. Subsequent budgets should at least preserve this minimum level of funding in constant dollar terms.
3. Big science projects be considered only in the context of established criteria and priorities and that funding for such projects not be at the expense of adequate support for the basic national scientific infrastructure.
4. The Government minimize the rate of change in its programs and staff at ISTC, to provide stability for long-term planning in the R&D sector.
5. To minimize funding uncertainty in the research community, the Government adopt a revolving five-year science expenditure plan. This plan should be published annually.
6. The Government give consideration to the advisability of expanding the Networks of Centres of Excellence Program to ensure productive, established centres can be

- maintained and that newly proposed centres pursuing work in Canada's strategic interest will not be denied funding.
7. The Government respond publicly to Science Council of Canada reports within 90 days of their release.
 8. The reports of NABST be tabled in the House of Commons and referred to the appropriate House of Commons Standing Committee for consideration. The principal conclusions and recommendations of NABST reports should be widely publicized.
 9. The Government maintain a primary role in those fields of basic research that cannot be fully maintained by the university community, and in those fields of basic research of strategic importance to the nation.
 10. The Government establish a secretariat within the Privy Council Office to coordinate federal science policy and related resource allocation across departments.
 11. Believing that the current provisions in the *Income Tax Act* create unnecessary difficulties for scientific research by industry, a review be made of those sections of the Act that affect S&T activities in industry; in particular a re-examination of the definitions of qualified R&D activities.
 12. An autonomous National Council on Education be formed to perform research and provide policy advice on educational issues. The Council should be funded by all levels of government and should work closely with industry and labour organizations.
 13. The Canada Scholarships Program be accorded permanent status.
 14. The Government explore new initiatives to encourage science education at all levels.
 15. Governments seek to eliminate artificial barriers that prevent this country from utilizing the skills of landed immigrants.
 16. The Government be indemnified for the sale of, or transfer to, non-indigenous firms of any intellectual property resulting from direct federal contributions to R&D.
 17. The Government retain ownership of intellectual property developed or funded fully by it, and that it develop clear guidelines for the management and control of intellectual property rights.
 18. The Government's financial support for industrial R&D be maintained at a level of 25 percent of total business expenditure on R&D.
 19. In the face of increasing global competition based on technological advancements, the Government encourage the development of greater scientific, technological and marketing skills within the industrial sector of Canada.
 20. The Government continue to support the creation of industrial pre-competitive research consortia and eliminate tax provisions that hinder the financial viability of such consortia.
 21. The Government give consideration to the feasibility of establishing government-industry consortia to enhance the international marketing capabilities of small and medium-sized, indigenous, high-value-added industrial firms.
 22. The Government expand the mandate of its procurement policy to include a greater support of industrial S&T activities, the development of innovation in the economy and of new business formation, and the promotion of greater regional equity in the country.

23. The Government create a Council on Procurement to support enabling technology development by indigenous firms in areas of preferential Canadian technological strength where Government purchasing could foster the development of world-class Canadian products.
24. The operational departments be encouraged to develop 10 to 15-year plans in consultation with industry for mission-oriented R&D necessary to meet their operational procurement needs.
25. The Government facilitate technology transfer throughout the country by such means as a National Technology Information Network, enhanced technological personnel exchange among government, industry and the universities, government-industry sponsored technology centres, etc.
26. The Government encourage efforts to develop community economic development strategies designed to enhance the application of S&T by local business and industry.
27. To assist entrepreneurs in remote and northern communities, the Government encourage the development of scientific and technical skills within the local labour force, and strengthen and broaden the Industrial Research Assistant Program (IRAP) network, especially in the North.
28. The Government provide greater opportunity for residents of northern communities to participate actively in, and to contribute their knowledge to, the formulation of national science policy and the elaboration of any guidelines regarding the adoption of technologies in the North.
29. On the assumption that the technologies developed by northern entrepreneurs require greater federal support during the commercialization process, the Government assist the northern business community in developing export markets for their technology. Special attention should be paid to the newly developing opportunities in Siberia.
30. The Government re-examine the process for application of industrial and Government-imposed regulatory standards to ensure their application does not pose an unwarranted barrier to the timely marketing of new products.
31. In light of the numerous problems that technology companies face in raising venture capital, the Government undertake a study of the venture capital market to determine ways of improving access to this market for new technology companies.

**For more information or copies of this report, contact:
Christine Fisher, Clerk, Committees Directorate,
6th Floor, 180 Wellington Street, OTTAWA, Ont.,
K1A 0A6, Tel.: (613) 992-6312.**

Annex I

Main Areas of Concentration

	Science and Technology Learning	Financing Growth	Domestic Market	Trade	Other
Business Council on National Issues					
National Economic Priorities: Challenges and Opportunities	✓	✓	✓	✓	✓
C.D. Howe Institute					
Canada At Risk? Canadian Public Policy in the 1990s				✓	
The Innovative Society: Competitiveness in the 1990s	✓	✓	✓	✓	✓
Canadian Advanced Technology Association, Canadian Chamber of Commerce and the Science Council of Canada					
Grassroots Initiatives, Global Success: Report of the 1989 National Technology Policy Roundtable	✓	✓	✓		
Canadian Chamber of Commerce					
Focus 2000 Task Force Report on Education and Training	✓				
Focus 2000 Task Force Report on Entrepreneurship			✓		
Focus 2000 Task Force Report on Harnessing Change	✓	✓	✓		
Focus 2000 Task Force Report on Making Investment Capital Available	✓		✓		
Focus 2000 Task Force Report on Technology and Canadian Business		✓			
Focus 2000 Task Force Report on the Environment				✓	
Positions on Selected National Issues 1988, 1989 and 1990	✓	✓	✓	✓	✓
Positions on Selected National and International Issues 1991	✓	✓	✓	✓	✓
Canadian Federation of Labour					
The Prospects for Innovation in Canadian Industrial Relations in the 1990s	✓	✓			
Canadian Institute for Advanced Research					
Innovation and Canada's Prosperity: The Transforming Power of Science, Engineering and Technology		✓	✓		
Economic Growth: Science & Technology and Institutional Change in a Global Economy		✓	✓	✓	✓
Canadian Manufacturers' Association					
The Aggressive Economy: Daring to Compete	✓	✓	✓	✓	
"Canada 1993" A Plan for the Creation of a Single Economic Market in Canada				✓	
Canadian Competitiveness Index	✓	✓	✓		✓
Conference Board of Canada					
Globalization: Canadian Companies Compete				✓	✓
Strategic Connections: Technology, Innovation and Labour Relations		✓			
Coopers & Lybrand (Canada)					
Reshaping Canada to Compete				✓	✓

	Science and Technology Learning	Financing Growth	Domestic Market	Trade	Other
Crispo, John Can Canada Compete?		✓	✓		✓
de Grandpré, A. Jean Adjusting to Win	✓	✓	✓	✓	✓
Economic Council of Canada The Perspective 2000 Conference	✓			✓	
Adjustment to International Competition				✓	
From the Bottom Up: The Community Economic Development Approach					✓
Good Jobs, Bad Jobs: Employment in the Service Economy	✓				✓
Transitions for the 90s (27th Annual Review)	✓	✓	✓	✓	✓
Kenney-Wallace, Geraldine The Role of Science and Technology in Economic Development	✓	✓		✓	
National Advisory Board on Science and Technology (NABST) Industry Committee Report	✓	✓	✓		
Private Sector Challenge Committee Report	✓	✓			
Financing of Industrial Innovation Committee Report			✓		✓
Human Resource Development Committee Report	✓				
Science and Technology, Innovation and National Prosperity: The Need for Canada to Change Course Committee Report	✓	✓		✓	
Statement on Competitiveness Committee Report	✓	✓			
Ontario Premier's Council on Technology Competing in the New Global Economy	✓	✓	✓	✓	✓
People and Skills in the New Global Economy	✓				
Organization for Economic Cooperation and Development Technology/Economy Programme	✓	✓		✓	
Ostry, Sylvia Government & Corporations in a Shrinking World: Trade & Innovation Policies in the United States, Europe & Japan		✓		✓	
Porter, Michael E. Canada At The Crossroads: The Reality of a New Competitive Environment	✓	✓		✓	✓
Richardson, Robert Technology and Innovation in Canada: The Case for National Action	✓	✓	✓	✓	

Rugman, Alan M. and Joseph R. D'Cruz

New Visions for Canadian Business: Strategies for Competing
in the Global Economy

Fast Forward: Improving Canada's International Competitiveness

Science Council of Canada

Not A Long Shot: Canadian Industrial Science and Technology Policy,
Background Study 55

**Standing Committee on Industry, Science and Technology,
Regional and Northern Development**

Canada Must Compete

Science and Technology Learning	Financing Growth	Domestic Market	Trade	Other
✓	✓		✓	✓
				✓
	✓			
	✓	✓	✓	✓

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An Overview of Selected Studies

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