

# MICRO

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## Writing the Book on Capital Market Issues in Canada

Industry Canada, in collaboration with the Financial Research Foundation of Canada, will sponsor a conference in Toronto from January 31 to February 1 at which the agenda will be the exploration of capital market issues. The meeting will bring together experts previously commissioned by the Department to prepare papers on these issues and will provide the opportunity for a peer review of first drafts.

Issues covered by the papers will include the cost of capital in Canada, business financing and access to capital markets. The conference will pay particular attention to Canadian firms' experiences and will examine recent financing innovations such as labour-sponsored capital funds.

In their final form, papers presented at the conference will be published in 1996 in a Research Volume to be edited by **Paul Halpern** of the University of Toronto.

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## Corporate Decision-Making in Canada: Released in Toronto

The Industry Canada publication *Corporate Decision-Making in Canada* (Research Volume V) was officially released at a book launch in Toronto on December 6 that brought together academics, government officials, business people and media representatives. Prepared in collaboration with the Financial Research Foundation of Canada, the volume contains 20 papers covering various aspects of corporate governance and their relationship to corporate decision-making and corporate performance.

On hand to discuss the Volume and its findings on corporate governance were **Denis Gauthier**, Director General, Micro-Economic Policy Analysis, Industry Canada; **Senator Michael Kirby**; and the general editors, **Ron Daniels** and **Randall Morck**. Speakers noted that the Volume answered a need for research data and empirical analysis on many corporate governance issues stemming from globalization.

Adequate corporate governance rules are essential

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to the maintenance of investor trust and confidence. At the same time, a free-market economy depends on visibly fair legal and economic systems. The Volume concludes that in the global economy, no country can afford to make its corporate governance laws too onerous since companies will seek other, friendlier jurisdictions in which to do business. On the other hand it cannot afford to make the rules too lax. The challenge to law-makers is to establish a balance.

The papers in this Research Volume make it clear that corporate governance in Canada could be improved. The general editors contend that "the best way for the government to improve corporate governance in Canada is to open up the country to international competition quickly rather than slowly, and to prevent poorly governed firms from surviving on subsidies or other government favours."

In addition, the general editors have prepared a concluding chapter which discusses a number of policy options based on research findings in the Volume as well as past research, designed to improve disclosure and transparency as well as the conduct and accountability of managers in Canada. Some of the key recommendations are highlighted below.

### ***Management, Directors, and Boards***

**Daniels and Morck** conclude that there is little to suggest that encouraging greater insider equity ownership of Canadian firms would raise share values. Further, they contend that Canada should continue to require that two public, independent directors be maintained on Canadian boards (so-called outside directors), but the definition of outside director should be strengthened and made more transparent so that no commercial link between a business and an outside director is permitted.

At the same time, **Daniels and Morck** believe that government should not legislate the number of

directors on a Board nor should they legislate a separation of the roles of CEO and chairperson of the board. CEOs, they conclude, should be paid in stock options and they recommend against tying their compensation to corporate earnings because this performance indicator is too open to manipulation.

### ***Director Liability***

**Daniels and Morck** note the increased director liability in Canada in recent years. The rationale is that directors must have strong incentives to monitor corporate activities and prevent corporate wrongdoing. Instead, **Daniels and Morck** recommend that directors be liable to class action suits by shareholders for explicitly legislated corporate responsibilities *provided that the directors' act or omission is the reasonably proximate cause of the harm in question*. Directors and officers that exert a reasonable effort to uncover and prevent potential harm to shareholders should be protected from lawsuits.

In **Daniels' and Morck's** view, the responsibilities of directors and officers should be limited to what they can be reasonably expected to control. Imposing excessive liability simply deters highly qualified people from serving as directors.

### ***Controlling Shareholders***

For political and historical reasons, concentration of economic power is the central issue in Canadian corporate governance. The primary goal of public policy in this area should be the empowerment of shareholders and outside directors. The general editors conclude that the federal government should commence a review of the various federal and provincial regulatory initiatives affecting minority shareholder rights to ensure that minority shareholders enjoy effective and rational protection against abuse by controlling shareholders.

In an effort to further protect minority shareholders, **Daniels and Morck** suggest the board of directors of any public Canadian company

with a dominant shareholder should be required to establish a conduct review committee to approve significant non-arm's-length transactions and contracts. This committee should be composed entirely of outside directors.

Also, minority shareholders must know when and how their interests may be threatened through related party transactions. Therefore, timely and full disclosure to all shareholders of all material contracts and transactions proposed between controlling shareholders, or entities they control, and the corporation should be required.

#### *Institutional Investors*

Institutional investors (e.g. pension fund managers) now control 38 percent of the dollar value of Canadian firms and their importance is increasing. **Daniels and Morck** feel that pension plan beneficiaries should be given as much choice as possible as to how their pension dollars are to be invested. Further, they say, the fiduciary duty of pension fund managers to the beneficiaries of pension funds should be clarified and strengthened. Specifically, this fiduciary duty should be to maximize the value of the portfolio while exercising prudent risk management.

They go on to recommend that senior managers of corporate and public sector pension funds be elected by the beneficiaries and that their compensation be disclosed to the beneficiaries. **Daniels and Morck** feel that pension funds should be run as firms and their top decision-makers should have responsibilities and liabilities analogous to directors. Further, pension funds should disclose information as to the contents and performance of their portfolios to beneficiaries on a quarterly basis. They also contend that Canadian mutual and pension funds should be free to invest as much or as little in Canada as they see fit.

#### *Whistleblowers*

**Daniels and Morck** argue that whistleblowers play

a key role in protecting shareholder interests. Therefore, they recommend that whistleblowers be protected from reprisals. They go on to propose that bounties be offered for uncovering wrongdoing when public money is involved. They also believe that shareholders should be permitted to vote to offer bounties in private firms.

#### *Disclosure*

Some say that the possibility of a takeover stimulates good corporate governance. The public interest is therefore served by allowing the secret accumulation of stock in preparation for a takeover. However, in a heavily concentrated economy like Canada, the glare of public scrutiny is important to ensuring that large investors operate in a constructive and responsible manner. Therefore, **Daniels and Morck** recommend that the identities and stakes of all shareholders holding in excess of 5% of the voting shares of Canadian public companies should be disclosed.

#### *The Role of Banks*

It has been argued that North American firms take too much of a short-term view and managers are too focused on a firm's short-term profitability. In Japan and Germany, on the other hand, partly because of the participation of banks in corporate ownership and management structures, firms can take a longer-term view in their decision-making and focus on the long-term profitability of the firm. For this reason, some have argued that Canada should adopt the Japanese and German corporate governance systems. However, based on evidence presented in this Volume, **Daniels and Morck** conclude that more equity ownership in firms by Canadian banks would not necessarily improve corporate governance in this country.

#### *Public Policy Objectives*

**Daniels and Morck** propose that firms should be required to disclose their research and development spending. They argue that the required disclosure of firms' contributions to such public-policy

objectives as R&D spending or environmental responsibility is a more appropriate and effective course of action than making directors liable for firms' performances in these areas.

#### *Nonprofit Enterprises*

The nonprofit sector is growing in importance to Canada. For this reason, the general editors recommend that both the federal and provincial governments should establish special advisory committees. These committees of professional advisors, representatives of various not-for-profit organizations, and independent experts would review and suggest changes to legislation concerning the governance of nonprofit institutions such as public service organizations, hospitals, and universities.

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### *Sylvia Ostry Calls on International Institutions to Respond to Technology's New Clout*

The growing integration of the world's economy has raised technology to the status of a prime mover of economic growth, world-wide. And, says **Sylvia Ostry**, international institutions should adjust their agendas accordingly.

In a new Industry Canada Discussion Paper, *Technological Change and International Economic Institutions*, **Dr. Ostry** notes that integration has resulted in the development of an expanded list or "template" of international policy issues including some that were previously categorized as "domestic" issues. The main driving force in this process, and itself a prominent item on the list, is the Multinational Enterprise (MNE). The MNE is the primary agent of deeper integration and globalization of trade, investment and technology.

#### *Systems Friction*

Another characteristic of the new template is its shift in focus from trade barriers of the border kind

to structural impediments related to domestic market systems. As a result, **Ostry** notes, there is building pressure for harmonization of domestic market systems, many of which are in a state of friction.

In response, she proposes a number of specific and feasible policy initiatives that could be taken in the OECD and WTO. In addition to reducing frictions, these would spark a process of ongoing, incremental change. The end product would be a global trading system, more suitable to the new world of deeper integration than the present version.

Tracing the history of globalization and deepening economic integration since World War II, **Ostry** identifies certain influences that have helped to globalize both investment and technology transfer. One was Japan's challenge to U.S. dominance in technology intensive sectors. Another has been an increase in intra-industry and intra-firm trade - a trend which has stimulated competition and innovation. A third has been a veritable explosion in strategic technology alliances.

#### *"Technoglobalism" and "Technonationalism"*

In this process of globalized technology transfer -- or so-called "technoglobalism" -- one transferee is "tacit" knowledge -- a term that encompasses, innovative forms of coordination, production control, and marketing ideas.

This migration of knowledge has placed an increasingly higher premium on innovation and has stimulated increasingly fierce competition among countries. As a result, major industrialized countries have adopted policies aimed at stimulating domestic innovation -- in a process she calls "technonationalism".

**Ostry** suggests specific initiatives that could be undertaken in the WTO to improve the Uruguay Round Agreements in areas related to technological change. They deal with three main issues: R&D

subsidies; government procurement; and intellectual property rights.

#### *R&D Subsidies*

In this area, there is considerable untangling to be done starting at the basic level of what words mean. For example, what exactly is a "permissible subsidy"? To sort out such disputes **Ostry** suggests two responses. First the world community should try to arrive at a precise and analytically rigorous agreement on definitions, building on work already done by the OECD. Second, she proposes the formation of an expert group that could be used to settle disputes. In **Ostry's** view this would at least promote constructive debate between countries and could very well bring real progress towards the harmonization of subsidy practices.

#### *Government Procurement*

On government procurement of high-tech goods, **Ostry** proposes the establishment of an international performance centre to include government and business collaboration.

#### *Intellectual Property Rights*

In **Ostry's** view, there are good and urgent reasons to pursue consistency in intellectual property rights regulations, not the least of which is the need to reduce transaction costs. Here too, the world community would not be starting from scratch. The Uruguay Round made significant advances in this area by establishing comprehensive standards for domestic intellectual property laws and rigorous provisions for enforcement and dispute settlement.

Turning to policy options for the OECD, **Ostry** places the following issues high on the agenda:

- measures to lessen strategic dumping, a practice of subsidizing exports through higher home prices sustained by collusive price behaviour and a protected home market;

- launching a project in which policy experts and statistical agencies would explore ways to collect data and improve information on transnational R&D alliances; and
- negotiations within the OCED aimed at harmonizing membership rules for R&D consortia.

**Ostry** concludes with a note of concern about the present status and future of basic research. Pressed by strong competition and an inability to find out what rivals are doing in research, is driving more and more companies and governments out of the business of basic research. **Ostry** thinks the OECD could help counter this trend by encouraging more cooperation and coordination.

**Ostry's** final point is that institutional reform tends to lag developments in the real world and that it is happening again in our time in relation to technological change. She believes that to close the gap will not necessarily require new institutions but changes in the existing ones - notably the WTO and the OECD. The initiatives she proposes could heighten the importance and understanding of the pervasive influence of technological change on the international economy.

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### ***Science and Technology: Study Looks at University-Industry Collaboration***

The notion that domestic industry should benefit from university-based research and expertise has a long history in Canada. In Industry Canada's latest Occasional Paper, *The University-Industry Relationship in Science and Technology*, **Jérôme Doutriaux and Margaret Barker** throw new light on this issue with an updated picture of university-industry (U-I) relations in Canada.

Standard indicators show that the quality of

research effort at Canadian universities is high and has a respectable international profile. Yet, the overall propensity of Canadian business to locate, adapt and assimilate new ideas and technology is low. This leads to a lower probability for innovation and growth in Canada.

Would a strengthening of university–industry links improve this picture? Yes, say the authors, for two reasons. First because, as studies of the socio-economic impact of university–industry linkages show, university research and development and U–I linkages generate a high social rate of return. Second, because Canadian universities perform a large share of domestic research and development and because Canadian firms are not, on the whole, highly innovative, the efficient transfer of technology to the domestic market has special importance in this country.

The authors note that industry sponsorship of university-based R&D in Canada is on the rise and that there is a growing tendency of firms to use universities for their research needs. However they underline that this applies mostly to large, R&D-intensive companies in Canada. For the most part, Canadian small and medium enterprises (SMEs) do not avail themselves of the technology and ideas coming from the universities. It is important, they say, to find ways to increase these linkages.

To do this, **Doutriaux and Barker** examine the literature on the place of U–I collaboration in regional economic growth. The authors find that studies of fast-growing, high-technology regions have shown that even if universities are not a direct causal factor, they are certainly one of the catalysts for effective regional economic development. Successful innovation-based regional growth depends on the existence of a number of conditions conducive to university-to-industry and firm-to-firm communication. In passing, the authors lament, however, the absence of studies on the impact of Canadian regional organizations on U–I interaction and local economic development.

**Doutriaux and Baker** also review government programs that exist to encourage university–industry working relationships. Governments of OECD countries have been engaged in this kind of activity since the 1960s; and have intensified their efforts over the last decade. In Canada, federal and provincial governments have developed programs to promote U–I relationships in science and technology. Matching-fund programs launched in the 1970s and 1980s were mostly geared to the needs of large corporations which looked to the universities for basic and pre-competitive research. The newer federal and provincial programs seem to meet the needs of high-technology SMEs better and are taking a more broad-based approach. For instance, they make more use of electronic networking tools and are characterized in some regions by an emphasis on colleges. At the national level they include a Canada-wide technology extension initiative (the Canadian Technology Network).

#### *Managing the Relationship*

**Doutriaux and Barker** also examine how to manage the U–I interface, focusing on three areas: teaching and training, research relationships, and the role of organizations that promote U–I collaboration. They conclude that university and college industry liaison offices or ILOs, which are becoming more prevalent in Canada, help to foster U–I linkages and technology transfer. A well-run office appears to have a significant impact on the commercial activity generated by a given university. Other intermediary organizations, such as networks, consortia and regional economic development organizations also have critical roles to play in local U–I linkages and technology transfer and diffusion activities, and SMEs find them more approachable. Local economic development, including the forming of U–I links, appears to operate effectively when organizations, including ILOs, co-ordinate their activities and complement one another. The most effective technology transfer and diffusion activity seems to take place where the initiative arises locally.

**Doutriaux and Barker** conclude that basic research should continue to be adequately supported at universities. Research excellence was reported by firms and ILOs alike to be one of the primary factors underlying technology transfer and the supply of personnel to industry. Further, given that industrial sponsorship of university-based R&D is on the rise in Canada, it is critical that sufficient resources be available to improve statistics and analyze this phenomenon. In addition, the policy implications of this trend, such as the impact on the free exchange of knowledge, should be thoroughly explored.

#### *Topics for Study*

The authors observe that the topic of U-I relations, despite its importance, has not attracted much scholarly interest in Canada. To fill the gaps in the knowledge, the authors suggest research in the following areas:

- estimations of the social rate of return of U-I links in Canada, with attention to the probable differences among industrial sectors and geographical regions;
- analyses of the role of the higher-education sector in regional economic growth in Canada, using a case-study approach to generate role models;
- determination on the extent of, and trends in, industrial sponsorship of university-based R&D in Canada;
- analysis of the relationship between university training activities (traditional and externally oriented) and the cultivation of U-I linkages, across all sizes of firms;
- investigation of the commercialization activities of Canadian ILOs at universities, related research institutes, technical institutes and colleges, including the development of standardized measures; and

- exploration of the economic benefits generated by university spinoff companies, including testing the notion that such companies are building technological receptor capacity in Canada.

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#### *Trade and Globalization Don't Hurt Wages: Paul Krugman*

On October 4, the noted American economist **Paul Krugman** was the featured speaker in Industry Canada's *Distinguished Speakers in Economics Series*. In an address to department staff entitled *Trade and Wages*, **Krugman** took aim at those who argue that there is a close link between globalization, growing trade, and declining wages in industrialized countries.

On the relationship between trade and aggregate incomes, **Krugman** said that international competition has not been a major drag on aggregate real incomes in advanced countries and asserted that this position is solidly supported by readily available data. **Krugman** also considered it unlikely that competition from the newly industrializing economies would depress incomes in the future. In the OECD countries today, exports to newly industrializing countries are a small fraction of expenditures - less than two percent. Thus, even a large deterioration in the relative prices of goods exported from the OECD would have small impact on real incomes in these countries.

Nor, says **Krugman**, can redistribution from labour to capital have played a large part in the decline of wages. For example, there has been no rise in the share of capital nor a fall in the share of labour in the national income of the United States. He did not dismiss the possibility that capital mobility might reduce wages in the future, but he suggested that the size of the capital flow required to cause this decline would seem to be implausibly large in practical terms.

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***Deindustrialization and Wage Declines***

**Krugman** was also skeptical, but did not dismiss outright, the theory that trade-induced loss of high-wage jobs or “deindustrialization” has had much to do with wage declines. He argued that with the economic models he has been able to construct, the negative impact of trade is well under 0.5 of one percent. He concluded that while there might be a grain of truth to the hypothesis that deindustrialization has led to declines in the wage rate, it is just a grain.

In the case of arguments pointing to a skill premium, **Krugman** again noted that trade between the OECD and the newly industrializing countries is still not a very large share of OECD GDP. Ultimately, therefore, declining wages cannot be created by skill differences.

**Krugman** was highly critical of commentators who blame declining wages on rising globalization and world trade. World demand, he asserted, is not a given. Therefore, the arrival of new players on the world market does not necessarily hurt those who are already there. **Krugman**, who developed his rebuttal on the basis of four separate economic models, noted in closing that it is exactly when the conclusions produced by our economic models surprise us, that economic theory is most useful. Regrettable then, in his opinion, that so many prominent economic commentators have chosen to ignore the economic results.

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**Baldwin and Bernstein presenters in Distinguished Speakers Series.**

Why do firms innovate and what impact does it have on competitiveness and industrial performance? Research into these and related questions have occupied much of the agenda of the Micro-Economics Directorate of Statistics Canada. In September **Dr. John Baldwin** of that office, presented some of his findings in an address to

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Industry Canada employees in the Distinguished Speakers in Economics Series.

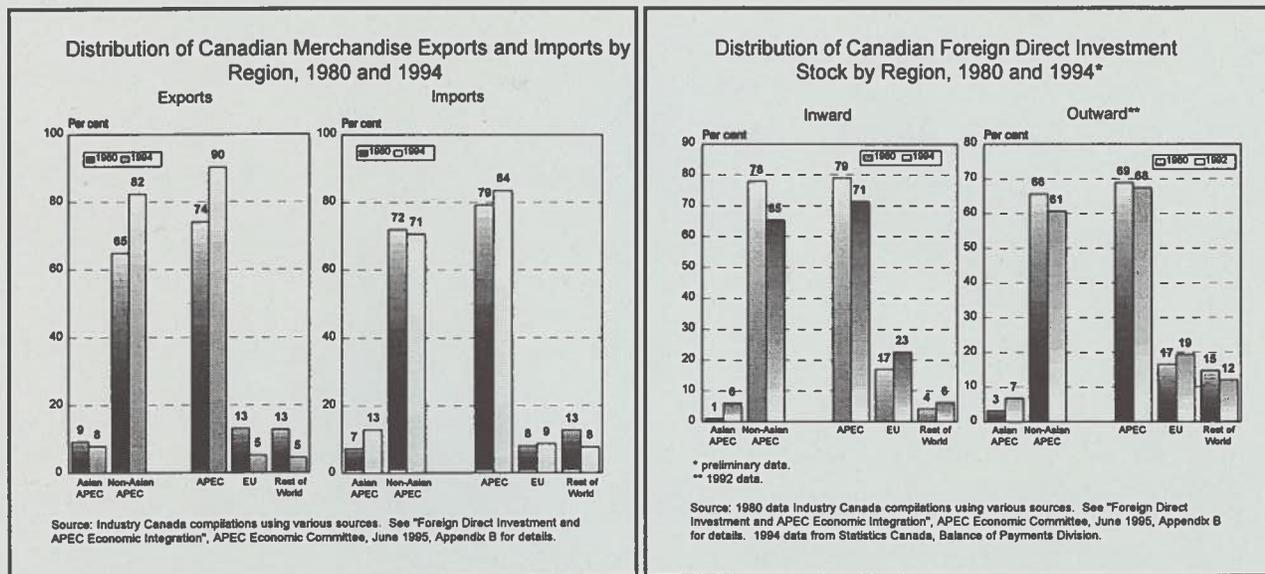
Overall, **Baldwin** says, research indicates a positive relationship between innovation and economic success and he reported evidence of a link between innovation and dynamic industry change. **Baldwin** also reviewed various complementary strategies for growth being used by innovative firms and explored the connection between innovation and the adoption of advanced technologies. He concludes that while technological innovation helps to fuel growth; it isn't the whole story. Successful firms are inclined to break new ground in technology but also often have strengths in other facets of business activity as well, particularly in human resource strategies.

In October, Industry Canada welcomed another Distinguished Speaker, **Professor Jeffrey Bernstein** of Carleton University. **Bernstein** presented a conceptual framework linking research and development (R&D) to knowledge creation. He also highlighted some results from his considerable work on the role of R&D investment in stimulating productivity growth and improving living standards.

According to **Bernstein**, the impact of R&D shows up in the measurement of productivity (TFP) growth by way of its direct effect on efficiency through scale economies or through indirect spillover effects. In the case of Canadian manufacturing, **Bernstein** estimated that two effects — R&D spillovers from the domestic communications equipment industry (9%), and spillovers from U.S. manufacturing (75%) — are largely responsible for much of long-term productivity growth. **Bernstein's** work points to the significant influence of international R&D spillovers, particularly from the United States to Canada, on Canada's productivity performance.

# FROM THE COMPETITIVENESS NOTEBOOK

## CANADA AND APEC ECONOMIC INTEGRATION



- APEC, the organization for Asia-Pacific Economic Cooperation, especially the Asian part, is the most populous and most dynamic region in the world today and has huge potential for continued growth in productivity and income. As such, it represents a huge potential market for Canadian products.
- Intra-APEC investment and trade linkages are strong and growing. Over half of the total APEC direct investment stock has been sourced internally. Over the 1980s, the share of intra-APEC trade in total APEC trade rose from 58% to 70%.
- Between 1980 and 1994, Canadian exports to APEC countries rose from 74% to 90% of our total exports, while imports from APEC countries rose from 79% to 84% of our total imports. The lion's share of our trade is with the United States. Our exports to Asian APEC countries actually declined marginally from 9% to 8% during this time period. Our imports from Asian APEC countries, on the other hand, almost doubled from 7% to 13%.
- Canada's investment linkages with APEC countries declined slightly between 1980 and 1994. This was caused by a fall in the share of investment going to and coming from the United States. The importance of Asia APEC as a home country of FDI in Canada and as a host for Canadian direct investment abroad increased between 1980 and 1994. Asian APEC countries accounted for 6% of the FDI stock in Canada by 1994, while 7% of the stock of Canadian direct investment abroad is now located in these countries.
- Canada's trade and investment linkages with Asian APEC economies are growing very fast, but from a small base. Hence, there is considerable scope for Canada to strengthen its commercial linkages with these Asian economies.

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# PUBLICATIONS

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## RECENT RELEASES

### Industry Canada Research Volumes\*

*Corporate Decision-Making in Canada*

### Industry Canada Working Paper Series

No. 5 - *Steppin' Out: An Analysis of Recent University Graduates into the Labour Market*, Ross Finnie, May 1995.

### Industry Canada Occasional Papers

No. 10 - *Endogenous Innovation and Growth: Implications for Canada*, Pierre Fortin and Elhanan Helpman, August, 1995.

No. 11 - *The University-Industry Relationship in Science and Technology*, Jérôme Doutriaux and Margaret Barker, August, 1995.

## FORTHCOMING

### Industry Canada Research Volumes

*The Implications of Knowledge-Based Growth for Micro-Economic Policies*

### Industry Canada Working Paper Series

No. 6 - *Measuring the Compliance Cost of Tax Expenditures: The Case of Research and Development Incentives*, Sally Gunz, Alan Macnaughton, and Karen Wensley.

No. 7 - *Governance Structure, Corporate Decision-Making and Firm Performance in North America*, Someshwar Rao and Clifton Lee-Sing.

No. 8 - *Foreign Direct Investment and Economic Integration in the Asia-Pacific Countries*, Ash Ahmad, Someshwar Rao and Colleen Barnes.

### Industry Canada Discussion Paper Series

No. 2 - *Technological Change and International Economic Institutions*, Sylvia Ostry.

No. 3 - *Canadian Corporate Governance Policy Options*, Ronald Daniels and Randall Morck.

### Industry Canada Occasional Papers

No. 12 - *Technology and the Economy: A Review of Some Critical Relationships*, Michael Gibbons.

No. 13 - *Management Skills Development in Canada*, Keith Newton.

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A complete list of Industry Canada research publications and information on all publications mentioned above can be obtained from the *Micro-Economic Policy Analysis Branch, Industry Canada, 5th Floor, West Tower, 235 Queen Street, Ottawa, Ontario, K1A 0H5, telephone: (613) 952-5704, facsimile: (613) 991-1261.*

*\*Research Volumes can be purchased from the University of Calgary Press, telephone(403) 220-7578, fax 1-800-668-0821.*