

# The Periphery in the Knowledge Economy

The Spatial Dynamics of the Canadian Economy and the Future of Non-Metropolitan Regions in Quebec and the Atlantic Provinces

Mario Polèse and Richard Shearmur  
in collaboration with  
Pierre-Marcel Desjardins  
and Marc Johnson

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*REGIONS IN THE KNOWLEDGE ECONOMY*

REGIONS ET ECONOMIE DU SAVOIR

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## Preface

This volume is the synthesis of two years' work, and represents the conclusions of discussions, conferences and reports between and by members of a core research team. The team was put together at the instigation of Economic Development Canada (EDC) which had the prescience to foresee the usefulness of an in-depth analysis of trends and policy options in eastern Canada's peripheral regions well before the 2001 census results brought these trends to the front pages of our daily papers. The Atlantic Canada Opportunities Agency (ACOA), made aware of this initiative, saw fit to extend the research, and the research team, to include Atlantic Canada.

The core research team, co-ordinated by Mario Polèse and Richard Shearmur, of the Institut National de la Recherche Scientifique (INRS) in Montreal, consists of four other researchers. Pierre-Marcel Desjardins (Université de Moncton) and Marc Johnson (Canadian Research Institute on Regional Development) co-ordinated the research and participated in the elaboration of this final report from the perspective of Atlantic Canada. Serge Côté (Université du Québec à Rimouski) and Marc-Urbain Proulx (Université du Québec à Chicoutimi) undertook research in the Québec peripheral regions, authored the background reports on these regions, and were instrumental in organising the authors' visits there and in shaping their understanding of the complex phenomena observed.

Beyond this core team, a group of European specialists were invited to Montreal in October 2001. These specialists from Scotland (John Bryden and Andrew Copus), Norway (Arne Isaksen), Sweden (Lars Olof Persson) and Finland (Aki Kangasharju) were presented with the core team's preliminary results and, for two days, discussed these and shed light upon them from a northern European perspective. Their background papers, prepared for the October conference, can be found on the web site. We would like to thank these researchers for responding to the invitation and for presenting stimulating, apposite, and enlightening contributions to and comments on the work being undertaken by the Canadian team.

Contributions to the research effort did not stop at the core team and the five European researchers. Throughout the project, the

authors have benefited from conversations with development officers, policy analysts, and, most importantly of all, local business people, community groups and concerned citizens, all of whom have shed invaluable light upon the complex issues hidden behind the sometimes stark trends which our research portrays.

We would like to emphasise that we do not expect to teach anything new to the people who most generously welcomed us to their peripheral communities and shared their anxieties, concerns and hopes with us. At most we hope to have given substance to the analyses and ideas which they expressed, and to have backed these up with some data and theory.

Last but not least, the invaluable support provided by Johanne Archambault and Julie Archambault regarding matters of translation, presentation and printing cannot go unmentioned: without them the report would have remained an interesting (maybe) but unappealing (definitely) word-processor print-out.

All that being said, this final report has two principal authors and two collaborators. The authors accept full responsibility for the report's contents, and it is they who have made the final decisions concerning the report's contents.

We therefore wish to extend our thanks to the core research team, to our European colleagues, and to all the participants from the regions visited. We wish to thank EDC and ACOA for initiating this research project and for their full co-operation in its elaboration. In particular we wish to acknowledge the untiring support of Hervé Duff (EDC), Wade AuCoin (ACOA), and of all the development officers and analysts from EDC and ACOA—too many to name here—who provided logistical support and key insights into the economies of outlying regions.

We would, in addition, like to thank our families, friends and colleagues for their patience during this captivating, exciting, but sometimes all-consuming adventure.

Finally, we wish to emphasise that we alone are responsible for this report's contents.

Mario Polèse and Richard Shearmur  
INRS-Urbanisation, Culture et Société  
Montréal, 2<sup>nd</sup> April 2002

## Glossary

CED/DEC	Canada Economic Development (for Quebec Regions)/ <i>Développement économique Canada (pour les régions du Québec)</i>
ACOA/APECA	Atlantic Canada Opportunities Agency/ <i>Agence de promotion économique du Canada atlantique</i>
CMA/RMR	Census Metropolitan Area/ <i>Région métropolitaine de recensement</i>
CA/AR	Census Agglomeration/ <i>Agglomération de recensement</i>
CFDC/SADC	Community Futures Development Corporation/ <i>Société d'aide au développement des collectivités</i>
—/CLD	No English abbreviation in use/ <i>Centre local de développement</i>
DREE/MEER	Department of Regional Economic Expansion/ <i>Ministère de l'Expansion économique régionale</i>
RMC/MRC	Regional Municipal County; in Quebec only/ <i>Municipalité régionale de comté</i>
IT/TI	Information Technologies/ <i>Technologies de l'information</i>

### **Geographical Designations and Definitions** ***Découpages et autres appellations géographiques***

Acadie	Generic term: refers to those parts of Atlantic Canada populated by French-speaking Acadians/ <i>Renvoie aux parties des régions de l'Atlantique où habitent les Acadiens (de langue française)</i>
Acadian Peninsula/ <i>Péninsule acadienne</i>	The eastern tip of Gloucester County, New Brunswick/ <i>Pointe est du comté de Gloucester, Nouveau-Brunswick</i>

## Glossary

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Abitibi-Témiscamingue	Quebec administrative region and Statistics Canada Economic Region. French spelling maintained/ <i>Région administrative du Québec et région économique de Statistique Canada</i>
Lower St. Lawrence/ <i>Bas-Saint-Laurent</i>	Quebec administrative region and Statistics Canada Economic Region/ <i>Région administrative du Québec et région économique de Statistique Canada</i>
Chicoutimi	Refers to the Chicoutimi-Jonquière census agglomeration/ <i>Agglomération de recensement de Chicoutimi-Jonquière</i>
Quebec North Shore/ <i>Côte-Nord</i>	Quebec administrative region. Statistics Canada Economic Region includes Northern Quebec/ <i>Région administrative du Québec. La région économique de Statistique Canada comprend le Nord du Québec</i>
The Gaspé/ <i>Gaspésie</i>	Quebec administrative region and Statistics Canada Economic Region. Unless specified otherwise, includes the Gaspé Peninsula and the Magdalen Islands/ <i>Région administrative du Québec et région économique de Statistique Canada. À moins d'indication contraire, comprend les Îles-de-la-Madeleine</i>
Moncton Region/ <i>Moncton</i>	Refers to the Moncton census agglomeration. Kent, and Westmorland Counties, New Brunswick. The Statistics Canada Economic Region of Moncton-Richibucto also includes Albert County/ <i>Agglomération de recensement de Moncton. Comtés de Kent et de Westmorland, Nouveau-Brunswick. La région économique de Statistique Canada, Moncton-Richibucto, comprend aussi le comté d'Albert</i>
Gloucester	Gloucester County, New Brunswick. The Statistics Canada Economic Region of Campbellton-Miramichi also includes Restigouche and Northumberland Counties/ <i>Comté de Gloucester, Nouveau-Brunswick. La région économique de Statistique Canada, Campbellton-Miramichi, comprend aussi les comtés de Restigouche et de Northumberland.</i>
Magdalen Islands/ <i>Îles-de-la-Madeleine</i>	Islands off the east coast of Quebec. Part of the Gaspé administrative region/ <i>Îles au large du Québec, comprises dans la région administrative de la Gaspésie</i>

## Glossary

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Madawaska	Madawaska County, New Brunswick. The Statistics Canada Economic Region of Edmundston-Woodstock also includes Victoria and Carleton Counties/ <i>Comté de Madawaska, Nouveau-Brunswick. La région économique de Statistique Canada, Edmunston-Woodstock, comprend aussi les comtés de Victoria et de Carleton</i>
Prince	Prince County, Prince Edward Island (P.E.I.). The Statistics Canada Economic Region covers all of P.E.I./ <i>Comté de Prince, Île-du-Prince-Édouard (IPÉ). La région économique de Statistique Canada comprend toute l'île</i>
Saguenay Lac St. Jean/ <i>Saguenay-Lac-Saint-Jean</i>	Quebec administrative region and Statistics Canada Economic Region/ <i>Région administrative du Québec et région économique de Statistique Canada</i>
Southern Nova Scotia/ <i>Sud de la Nouvelle-Écosse</i>	Digby, Yarmouth, and Shelburne Counties. The Statistics Canada Economic Region of Southwestern Nova Scotia also includes Queens and Lunenburg Counties/ <i>Comtés de Digby, Yarmouth et Shelburne. La région économique de Statistique Canada, Southwestern Nova Scotia, comprend aussi les comtés de Queens et de Lunenburg</i>
Western Newfoundland/ <i>Ouest de Terre-Neuve</i>	Equivalent to the Statistics Canada Economic Region of West Coast-Northern Peninsula-Labrador, minus the latter/ <i>Équivalent de la région économique de Statistique Canada appelée West Coast-Northern Peninsula-Labrador, moins le Labrador.</i>

Note: unless specified otherwise, all city and town names refer to urban areas or census agglomerations, and not necessarily to municipalities.

*Note : à moins d'avis contraire, les noms de villes désignent les régions urbaines et les agglomérations de recensement; ils ne renvoient pas nécessairement aux municipalités.*



## Executive Summary

Canada's population is spread out over vast spaces. Geography is everywhere, creating unique challenges for regional economic development. Like all industrialised nations, Canada is affected by current mega-trends: the rise of the knowledge-based economy, aging populations; globalization; and the introduction of new information technologies (IT for short). The arrival of IT has raised hopes that the tyranny of distance will be reduced in the future, opening up new perspectives for regions that have hitherto been handicapped by their peripheral location. How realistic are these hopes? What is the likely impact of current mega-trends and what are the implications for public policy?

The study focuses on the prospects of *peripheral regions*. Other names could apply: non-metropolitan regions; remote regions; resource regions; etc. No entirely satisfactory term exists. The regions that are the focus of this study all share certain attributes: low population densities, the absence of a large urban metropolis, distance from major markets. Taking distance as our benchmark, approximately 28% of all Canadians lived beyond an hour's drive of a major metropolis (with populations of over 500,000 in 1996). Although the study examines trends for Canada as a whole, the focus is on Quebec and Atlantic Canada. Eleven regions were selected for in-depth analysis.

The study is the result of a broad-based research effort, involving experts in Quebec, Atlantic Canada, and Nordic nations. Seventeen background studies were produced:

- A review of recent literature on regional economic development, with a focus on the knowledge-based economy and Nordic nations
- An in-depth statistical analysis of geographical trends in population and employment for Canada from 1971 to 1996.
- Five country studies, looking at similar trends and regional policy, for Finland, Sweden, Norway and Scotland. These nations were chosen because their geography and development levels most resembled that of Eastern Canada.
- Specific studies for eleven regions of Quebec and Atlantic Canada. These studies entailed statistical analysis and fieldwork, the latter based in large part on consultations with local experts, entrepreneurs, and practitioners. About 200 persons participated in focus groups.

A two-day workshop was held in Montreal in October 2001 with researchers and practitioners. Findings were brought together, discussed, and digested. The study seeks to summarize this mass of information and accumulated experience. However, the opinions expressed remain the sole responsibility of the authors.

## Findings

1. **Population and employment continue to concentrate in and around large urban centres.** Trends in Canada and in Nordic nations are similar and show no signs of reversal. Peripheral regions continue, with minor exceptions, to be regions of net out-migration. On the whole, this is the continuation of long-term trends whose roots lie in the origins of industrialisation. There is no indication that new technologies will alter this pattern. The evidence suggests that new technologies will continue to fuel the concentration of employment in and around large urban centres.
2. **The net effect of technological change has been to facilitate the geographic concentration of employment.** The impact of IT is analogous to that of earlier inventions such as the telephone and the internal combustion engine. Reduced communications costs allow firms to broaden their markets and realize scale economies. A primary obstacle to higher productivity in Canadian peripheral regions is the difficulty in attaining necessary volume. Improvements in communications increase competition between regions. They allow firms in large urban centres with an initial scale advantage such as Montreal or Toronto to expand their markets. The concentration effects are visible for sectors such as wholesaling, distribution, and food processing.
3. **Distance is not dead.** Information technologies (IT) have lowered the cost of transmitting information, improving the access to information of firms in peripheral regions. However, IT has had little effect on the cost of transporting goods. Merchandise must still be shipped from A to B. For firms in Western Newfoundland or the Saguenay, the additional cost (in money and time) of bringing goods to major markets remains a handicap. When selling to Boston or New York, one is better located in Southern Quebec, which in part explains why regions such as the Beauce and the Eastern Townships have out-performed others.
4. **Distance is not dead *bis*.** IT has not significantly reduced the costs of travel or the need for travel. Business people meet for numerous reasons:

to negotiate; to establish and renew trust; etc. The need for face-to-face meetings is increasing. The knowledge-based economy depends on frequent information-rich interactions. IT does not reduce the need to meet, but rather (like the telephone before) creates new demand. The comparative advantage of large urban centres for information-rich activities remains strong. Firms in outlying regions will continue to bear the additional costs of travel to and from large urban centres.

5. **Geography and low population density compound the effects of distance.** Transport modes (trucks, air, rail, water) are subject to scale economies. Firms in peripheral regions often face higher unit transport costs. Low density and awkward geography translate into lower volume, resulting in reduced service. IT is also subject to scale economies, resulting in higher access cost to wide-band communications. Without volume, infrastructures cannot be maintained (at competitive prices). Rail lines have been dismantled. Transport services are increasingly determined by market forces as governments reduce subsidies to transporters, liberalize regulations, and withdraw from the management of ports and airports. Regions with low population densities, outside main transport routes, remain at a transport cost disadvantage.
6. **Knowledge-intensive industries continue to locate in or near the large urban centres.** Location patterns for knowledge-intensive industries have remained remarkably stable in Canada. High-tech services and high-tech manufacturing remain sensitive to city size. Their propensity to locate in (or near) the largest urban centres has changed very little. This is not to say that knowledge-intensive industries are absent from smaller cities or that they cannot succeed there. Numerous success stories exist. However, the *relative* position of smaller cities and peripheral communities, compared to that of large urban centres, is unlikely to change significantly.
7. **Low and medium value-added manufacturing is de-concentrating, but within limits.** Low and medium value-added manufacturing industries increasingly locate in small and medium sized cities. The cities that have chiefly benefited from this shift are those located within an hour's drive of large urban centres. Beyond the one-hour threshold, cities have been less successful in attracting manufacturing employment. This is especially true for medium value-added industries (transport equipment; electronics; etc.). The distance threshold shows little indication of weakening. Peripheral cities have been more successful in attracting resource-based and low value-added industries: pulp and paper; food processing; refining and smelting of ferrous and non-ferrous metals; textiles and clothing. How-

ever, even for these sectors, relative levels of employment are generally higher in small and medium sized cities located near large urban centres.

8. **Small rural communities (below 10,000) can grow, but location matters.** Rural peripheral communities face very different challenges from rural communities located close to large urban centres. *Central* rural areas, located within an hour's drive of a large urban centre, grew by 16% between 1981 and 1996, compared to 2% for *peripheral* rural areas. Small communities within an hour's drive of a large urban centre have an advantage for attracting manufacturing and also fall within urban tourist, fresh-produce, and long-distance commuting sheds. Within this radius, horticulture is more profitable, yearlong tourist activities are easier to develop, and urban (computer connected) professionals easier to attract. This is a very different reality from that faced by peripheral communities of similar size located on Quebec's Lower North Shore or the Acadian or Gaspé Peninsulas.
9. **Many peripheral communities will enter a phase of sustained population decline; this is a break with the past.** This is not simply the result of industrial location trends. New developments are impacting peripheral communities: growing constraints on (natural) resource exploitation and the effects of the demographic transition. Most peripheral regions have historically been areas of net out-migration. Until recently, the effects of out-migration on population were hidden because of the countervailing effects of births. This is no longer the case. Low birth rates mean that net out-migration will now automatically trigger population decline. Migration has become a critical variable.
10. **Out-migration of the young and the educated makes job creation more difficult.** From the perspective of the individual, out-migration is a natural reaction to unemployment. Individuals who move are generally better off. However, the cumulative effects on the community left behind can be dramatic. In the knowledge-based economy, the effects of out-migration will be even more severely felt than in the past. Out-migration of the young and the educated puts the community at an increasing disadvantage compared to large urban centres. Time and time again, entrepreneurs told us that the primary obstacle to expansion (besides distance) was the difficulty of recruiting skilled workers. The perception of the link between employment growth and workforce quality and diversity is so strong that one entrepreneur reversed the usual (economic) reasoning, stating: "we do not have a big enough labour force to create jobs". In the knowledge-based economy, this statement is not as unreasonable as it sounds.

11. **Knowledge-based institutions are sensitive to volume.** The density of knowledge workers is linked to the quality and quantity of knowledge infrastructures: research centres, technical training facilities, laboratories; etc. To state that such institutions are a vital ingredient for local economic development has become a truism. In Canada, as in Nordic countries, peripheral cities with universities (especially with a strong engineering or applied arm) have been more successful. However, the development of a strong university centre requires a population base. The city of Oulu in Northern Finland (the home of Nokia) services a hinterland with a population of about half a million. Tromsø in Northern Norway services a hinterland of similar size. This is not say that smaller regions cannot house universities or research centres, but rather that the link between population and knowledge institutions cannot be ignored.
  
12. **Constraints on natural resources (coupled with higher productivity) mean declining employment; this is a break with the past.** Employment decline in resource industries is the result of the meeting of two curves: 1. Declining manpower needs per unit extracted; 2. Constant or declining resources (or demand for resources). Until the early 1990's, employment in most resource sectors in Canada was either growing or stable, despite increases in productivity. Since, there has been a generalized downturn, most dramatically in the fishing industry. Sharp declines in employment have occurred in the past, especially in mining. The difference today is that the constraints appear to affect all the traditional resource sectors: fishing and fish processing; mining and smelting; forestry and wood products; electricity-intensive industries (i.e. aluminium). The precise nature of the constraints varies from one sector to another. Even for renewable resources such as trees, fish, and hydroelectric power, we have by-and-large arrived at the limits of what is economically feasible. In some cases (notably, hydroelectricity, fishing, and forestry), ecological considerations and native/non-native relations also place new constraints on the use of the resource. Ecological considerations and natural constraints are pushing in the same direction: a more parsimonious use of resources.
  
13. **We can expect job losses in highly resource-dependent communities.** Closures are easiest to forecast for communities that depend on mining and smelting. Among the communities studied, Val-d'Or (Abitibi), Port-Cartier (North Shore Quebec), and Bathurst (New Brunswick) appear vulnerable. Closures (or downsizing) in the pulp and paper sector are more difficult to predict, but will undoubtedly occur, especially if the trend to recycling accelerates. Employment in aluminium smelting does not appear threatened, although the individual plants may downsize as labour productivity continues to increase.

14. **Entrepreneurs in peripheral communities are dynamic and innovative.** We encountered men and women in all regions who sought to start businesses. They were, without exception, highly motivated, well informed, and entirely conscious of the challenges of doing business in their chosen communities. The issue is not the lack of motivation, but the lack of profitable business opportunities, compared to those in large urban centres. Notwithstanding, businesses do succeed in small peripheral communities, proof of the dedication and ability of their founders. Successful firms can be found in almost every community, often in novel niches, everything from exotic berry jams (Newfoundland's Northern Peninsula) to chitosan, a pharmaceutical by-product derived from shrimp residue (Gaspé Peninsula). However, the jobs created by local success stories rarely compensate for job losses in other sectors.
  
15. **"Peripheral" regions can succeed; but again, city size and location matter.** Some peripheral communities have grown and will continue to do so. Among the ingredients for success are: location on a major transport axis; a diversified regional metropolis; a competitive wage structure and business environment. The greater Moncton area is a model case. With a population of over 100,000, Moncton is the service centre for a large market area, due in part to its central location in the Maritimes, a role further consolidated by the fixed link with P.E.I. Moncton is located: a) in a low-wage province; b) in a region that is not dominated by capital-intensive resource-based industries; c) on a major land transport axis. Added to these location advantages, Moncton has developed into a cultural centre for the French-speaking Acadian community, with a unique blend of institutions and a bilingual labour force. This, plus a vibrant business community (each reinforcing the other), has allowed the region to build a diversified economic base, compensating for past job losses, as well as contributing to the revitalisation of surrounding rural counties.
  
16. **Differences in performance among regions are often due to unique factors.** The eleven peripheral regions studied showed significant differences. The Moncton region and Madawaska County (in New Brunswick) as well Prince County (P.E.I.) generally out-performed the others in job growth and industrial diversification. At the other end of the spectrum, the Gaspé region, Western Newfoundland, and Quebec's North Shore were among the worst performers. As a group, Quebec's peripheral regions did less well as those studied in the three Maritime Provinces. The comparative under-performance of the Lower St. Lawrence is unexpected, given its comparatively favourable location on the Halifax-Montreal transport axis and its proximity to Quebec City.

Various factors contribute to the explanation of differences in regional performance:

- a) *Some peripheral communities are high wage-cost locations.* This is specifically so for small and medium sized towns dominated by capital intensive-industries paying high wages, which set the norms for the community: large pulp and paper mills; mines; aluminium smelters; etc. We have dubbed this the *Intrusive Rentier Syndrome*. Its impact can be devastating on local entrepreneurs seeking to diversify into other (wage sensitive) sectors, acting as a major impediment to the creation of a diversified export base. The majority of medium-sized towns on Quebec's North Shore and in the Saguenay are in this situation, which explains in part why they have found it difficult to diversify and why they remain regions of net out-migration despite high wages. In northern fishing communities with short seasons, the highly seasonal character of local jobs (together with the rules governing employment insurance benefits) can constitute an indirect cost, via their effect on recruitment, for firms in non-traditional sectors.
- b) *Some communities are more "peripheral" than others.* Communities located on major transport routes and with better access to U.S. markets have an advantage. NAFTA and deregulation have increased the importance of geography. The further a community is from major U.S. markets, and the more obstacles (land or sea) have to be overcome, the greater its disadvantage. The communities of Western Newfoundland's or Quebec's North Shore are in a far less advantageous position than Madawaska and South-eastern New Brunswick. The regions of North-eastern Quebec are less well positioned to service U.S. markets than regions further south. Dead-end (transport) or peninsula locations exacerbate the disadvantage.
- c) *Province size and provincial boundaries affect community performance.* The boundary between Quebec and its eastern neighbours makes a difference. Communities on the Quebec side are often at a disadvantage for two reasons: 1) differences in regulations (e.g. decrees in the construction and textile industries; minimum wages) make New Brunswick locations more competitive. This has benefited Madawaska, and helps to explain why it has been more successful in diversifying its economy than the neighbouring Lower St. Lawrence; 2) it appears that communities in small provinces have a "political" advantage. Their voice carries, proportionately, more weight in the provincial capital. Provincial regulations are more likely to reflect local realities. Small provincial bureaucracies are generally more accessible and responsive. This was advanced as one of the factors explaining Prince County's (P.E.I.) success, demonstrating the

importance of a flexible administrative environment, which allows the region to maintain competitive business environment.

17. **Income maintenance does not stop out-migration.** The young leave because of lack of education and career opportunities. Relative income levels have generally improved in peripheral regions. The long-term trend in Canada is towards a lessening of regional income disparities, although the trend appears to have halted recently. Income levels have generally been maintained in peripheral regions, due to the combined effects of progressive taxation and transfer payments. However, out-migration to large urban centres has continued. Ultimately, regional economic development comes back to job creation and location. Ensuring welfare levels is not sufficient, although it will contribute to the maintenance of local demand, and can thus slow down out-migration and population decline.
18. **Economic theory is not always wrong: 1. lower costs translate into more jobs; 2. labour mobility reduces unemployment.** Prince County (P.E.I.) is an example of the first: low relative wages, high employment ratios, and low out-migration. Rural Saskatchewan is a case of the second: high out-migration and low unemployment. Most peripheral regions face a trade-off between high wages (or high costs in general) and jobs. High cost regions will find it more difficult to create jobs. In the absence of jobs, out-migration (or unemployment) will persist. The comparatively high levels of unemployment in Quebec and Atlantic Canada can in part be explained by low labour mobility. However, lower labour mobility also has its roots in identity and language, which cannot be ignored, giving special urgency to the challenge of job creation in the peripheral communities of Quebec and Atlantic Canada.
19. **Peripheral regions will not die.** Population decline does not mean that the affected regions will cease to exist or cease to develop, although some isolated villages will face closure. Rising welfare levels and lower populations are not incompatible. At some future point, population levels will settle at a new (lower) equilibrium, founded on a more knowledge-based employment base. We cannot predict what that equilibrium will be or when it will be reached. Public policy should help peripheral regions to successfully make the transition to the knowledge-based economy.

## Lessons Learned/Public Policy Implications

1. *The limited impact of public policy on mega-trends.* Despite a tradition of public intervention, out-migration from peripheral regions remains a fact in Scandinavia and in Canada, fuelled by more fundamental factors. New information technologies will not change this. Both Canada and Scandinavia have been largely successful in maintaining regional welfare levels. However, this does not appear to have significantly altered long-term job location trends. We should not expect public policy to reverse those trends.
2. *The growth of large urban centres does not necessarily trickle down to peripheral regions.* Peripheral regions are so precisely because they are far from large urban markets. Trickle down effects have limits. Investments in large cities (Montreal, Toronto, etc.) should be justified on their own merits, and not as an indirect means of helping regions. The time has come to bury growth pole strategies and, in a Quebec context, to finally lay the 1970 HMR report to rest (R.I.P. HMR).
3. *Population decline will mean a change in mindsets.* For many communities, population decline is inevitable. This should not be equated with economic decline. Smaller populations and higher welfare levels can go hand in hand. From a public policy perspective, it means rethinking local economic development, with increasing emphasis on flexible policy tools. It will also mean rethinking infrastructure maintenance and public service delivery.
4. *Local economic development (LED) organisations (federally or provincially funded) play an invaluable role in promoting entrepreneurship, helping business start-ups, and fostering innovation.* They should be maintained and continually improved. However, the challenges faced by many peripheral communities often require initiatives at other levels. Local development organisations should be explicitly allowed to go beyond business promotion.
5. *Policies based on “one-size-fits all” criteria will work against the most peripherally located communities.* The continued importance of city size and geography means that strategies need to be adapted to regional characteristics. The persistence of distance as an obstacle (which IT will not change) means that differences should be explicitly recognized. More leeway might be allowed to LED organisations in the application of programmes, within the normal constraints of accountability. This might

mean accepting higher levels of financial risk in the most peripheral regions.

6. *There is a need to better reconcile business promotion and “objective” diagnosis.* Some communities face specific challenges, which make them less competitive: the intrusive rentier syndrome; the border effect in Eastern Quebec; etc. Obstacles of this nature cannot be overcome if the community does not first recognize them, and openly discuss them. If the function of LED organisations is only to *promote* the community, then it is unlikely that these difficult issues will be addressed.
7. *The employment insurance (EI) system, which plays an important role in stabilizing peripheral economies, should be such that there always exists an incentive to work.* Currently, in a context of seasonal employment, administrative rules governing the EI system can create a disincentive to work. This has the effect of reducing the workforce available to local entrepreneurs and of slowing down or preventing the growth of SMEs and economic diversification. Further study is needed of this complex and important question.
8. *Education and skilled labour recruitment are at the heart of any strategy that aims to facilitate the transition to the knowledge-based economy.* Out-migration of the young and the educated will continue in most regions. It is unreasonable to expect public policy to reverse the trend. However, it is not unreasonable to imagine a mix of incentives to increase the attractiveness of peripheral communities, such as:
  - a) Tuition or debt relief for university graduates who settle in targeted regions.
  - b) Scholarships for graduate or post-graduate internships in targeted regions.
  - c) Tax relief for students in post-secondary institutions in targeted areas.
  - d) Research chairs for institutions in targeted areas.
  - e) Increased focus on knowledge-transfer centres and applied learning, specifically via community colleges (CEGEPs in Quebec), including access to the incentives above.

Such incentives might equally be part of a more diversified tool-kit of LED organisations, whether provincially or federally funded.

9. *Certain transportation and communications policies might be re-examined in light of the realities of the knowledge-based economy.* The growing importance of face-to-face contacts makes travel an essential business

cost. A new look at the regulations governing air travel in Canada might be in order. We are not convinced that current service in peripheral regions is a reflection of market forces. Regulations governing IT might equally be re-examined in a similar light.

10. *The Federal and Provincial governments might examine the possibility of greater territorial flexibility in the application of policies affecting the relative competitiveness of communities.* Provincial governments might allow local governments greater flexibility in certain areas. However, greater flexibility should not become a pretext for a “race to bottom” (i.e. subsidy wars ) between communities.
11. *The Federal and Provincial governments might explore the possibility of establishing inter-provincial local development agencies in border areas, or at least, promoting greater inter-provincial harmonization in local economic development initiatives.*