

# *Inédits*

IS QUEBEC  
SPECIAL IN THE  
EMERGING NORTH  
AMERICAN  
ECONOMY?  
ANALYZING THE  
IMPACT OF  
CONTINENTAL  
ECONOMIC  
INTEGRATION ON  
CANADIAN  
REGIONS

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***Paper prepared for the Working Group***

Political Economy of Regional Accommodation: A New Dynamic of Restructuring in  
Europe and the Americas

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## INTRODUCTION

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The object of this paper is twofold: 1.) building on previous work (Pérez and Polèse 1995, 1996; Paelinck and Polèse 1998), to advance our thinking on modeling the regional impacts of continental integration, focusing on North America; 2.) to examine how Quebec fits into this framework, comparing it to other Canadian regions and provinces, specifically with respect to trading relationships with the United States. We shall argue that although Quebec is certainly culturally distinct within North America, the spatial orientation of its economy can nonetheless be largely explained by the same factors (specifically geographic proximity) that apply to other regions. The first part of the paper is largely conceptual, introducing our framework for analyzing the impact of continental integration on sub-national regions. The second part is empirical, drawing heavily on recent data for inter-provincial and international trading patterns of Canadian provinces.

### Quebec's specificity

It is not difficult to make a case for the proposition that Quebec is a special case in North America. A French-speaking island in an English-speaking sea<sup>1</sup>, the majority of Quebec's population has a strong sense of forming a distinct people, some would say a distinct nation. When asked in a recent poll what their primary identity was, some 55% answered Québécois (the figure rises to 76% for the 18-24 age bracket); 24% French-Canadian, and 21% Canadian or English-Canadian (Bernier *et al* 1998). This sense of nationhood finds its institutional expression in the frequent use of the adjective "national" to designate province-wide institutions or events: The National Assembly (in Quebec City); The National Confederation of Trade Unions (CSN, by its French acronym), Quebec's National Holiday (24<sup>th</sup> of June), as well as the author's own institution (INRS). At the political level, the sense of a separate identity finds its most dramatic expression in the existence of a strong independence movement. The current ruling party in Quebec (the Parti Québécois) is officially "indépendantiste", aspiring to take the province out of the Canadian Federation. However, in two referendums on the issue (1980; 1995), the party has failed to convince the majority of the population to follow it along the path to independence, although the results of the last referendum were extremely close. The issue of the political status of Quebec, whether within Canada or outside, remains a hotly debated issue.

However, coming back to the central subject of this paper, should we expect Quebec's distinctiveness to significantly influence its economic behavior, specifically its

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<sup>1</sup> According to the last Canadian census (1996), approximately 83% of Quebec's population had French as its mother tongue. Equally, some 94% of all Quebecois are capable of speaking French. With approximately 7,5 million inhabitants, Quebec accounts for a quarter of the total Canadian population.

evolving trading relationships with its North American partners? There are some reasons to think why this might indeed be the case. Quebecois<sup>2</sup> are arguably more open than most other Canadians to closer relationships with the United States. There are at least two reasons for this. First, Quebec's cultural difference (especially language), which acts as a protective barrier of sorts, means that Quebecois generally feel less threatened by U.S. culture than English-Canadians who share a common language with Americans. Indeed, the most virulent expressions of Canadian (anti-U.S.) Nationalism are generally found in English Canada. Second, because of the political and cultural tensions with the rest of Canada, some Quebecois will often turn to the U.S. as an alternative or counterweight. From a Quebec nationalist perspective, the stronger the links with the U.S. the weaker the Canadian Federation will be. North American economic integration is very much on the Quebec nationalist (i.e. "indépendantiste") agenda as a means both of increasing the province's autonomy (analogous to Catalonia or Scotland in an integrated Europe) and reducing the eventual economic risks of independence.

It is thus not surprising that Quebecois are generally very favorably disposed to NAFTA (North American Free Trade Agreement), probably more so than any other region or group in North America. According to the same poll (Bernier *et al.* 1998), 62% of respondents thought that NAFTA has had a favorable or very favorable impact on Quebec's economy, and 78% answered that North American economic integration should continue along at its current pace or even accelerate. Arguably, NAFTA (at least in its initial version between the U.S. and Canada) would not exist today without Quebec. It was only because of the Quebec electorate's strong support for the (pro free-trade) Conservative party in 1989, that the Mulroney government was able to push through the first free trade agreement (FTA) with the U.S., English Canada being sharply divided over the issue. Since, both political and Chamber of Commerce rhetoric within Quebec has been strongly in favor of ever-increased commercial links with the U.S. To paraphrase an old saying, the advice to Quebec exporters today is "look south young man". In sum, we might reasonably expect that Quebec has re-oriented its trade more rapidly towards U.S. markets than other Canadian regions and that its integration into the U.S. economy is more advanced.

Previous studies by Helliwell (1996) and McCallum (1995) suggest that continental trading patterns, including those of Quebec, can be largely predicted on the basis of classical spatial interaction models. No specific Quebec effect is observable. On the other hand, Villeneuve (1998) suggests that the consequences for Quebec of continental integration remain largely unforeseeable. Before looking at our data, let us

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<sup>2</sup> There is some debate as to how the inhabitants of Quebec should be called in English: Quebeckers; Quebecois; Québécois. I have chosen to follow the programmed directives of my Word97 spelling corrector (U.S. English) which seems to like Quebecois, while I shall reserve Québécois (avec l'accent, s'il vous plaît) for French-Speakers.

establish our conceptual framework. As we shall attempt to demonstrate, geography, location and urban size are of major importance in determining how a region will be impacted by continental economic integration.

## **MODELING THE REGIONAL IMPACT OF CONTINENTAL INTEGRATION**

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Continental economic integration is defined here to mean a situation in which sub-national regions (states; provinces) and nations of a same continent are increasingly linked to each other by trade and factor flows, rather than to regions and nations in other continents. Continental economic integration will necessarily be furthered by treaties to reduce barriers to trade and factor flows such as NAFTA, but may equally be facilitated by technological change reducing transport and communications costs. As barriers between continental trading partners fall, we should expect trade between them to increase, compared to infra-national trade and trade with nations in other continents.

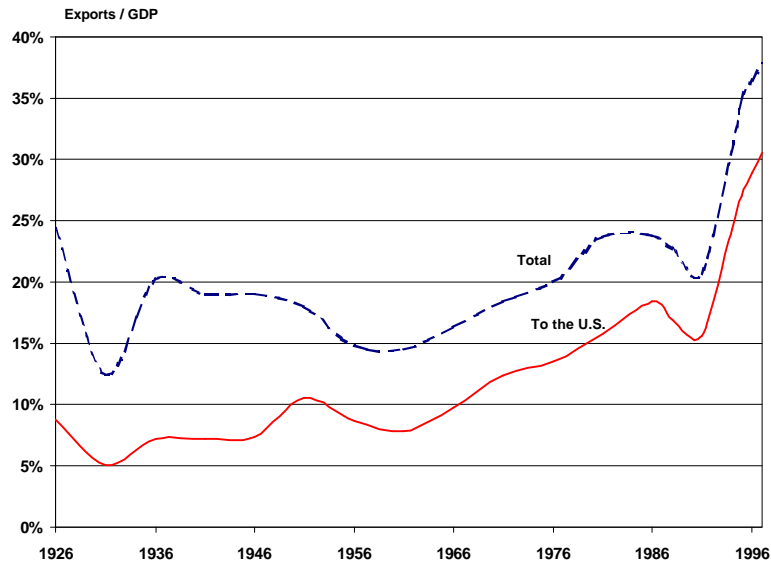
As figures 1 and 2 show, the economic integration of Canada into the U.S. economy has increased at a steady pace since the mid 1950's, with a major upsurge in the early 1990's which can only be attributed to NAFTA<sup>3</sup>. During the early 1950's, Canadian merchandise exports typically accounted for about 20% of GDP, but had risen to 38% in 1997 (figure 1). The share going to the U.S. has risen steadily since the 1920's (figure 2) marking a major spatial shift in Canadian trade. Before World War II, Canada's trade was primarily oriented toward Britain and the British Empire. Since, its exports have become more and more oriented to the U.S., with the U.S. now taking over 80% of Canadian exports. Clearly, we should not expect this shift to increasing integration into the U.S. economy to impact all Canadian regions equally.

International evidence largely confirms that economic integration (both national and continental) will favor the long-run convergence of per capita incomes between regions (Cuadrado Roura 1998; pp. 57-70; Mills and Hamilton 1994; pp. 39-51; Barro and Sali-i-Martin, 1995; pp. 382-413), often accompanied in turn by major geographical shifts in production and population. Both within the U.S. and Canada, regional income disparities have gradually declined since the Second World War, although still significant in many cases. The new Canada-U.S.-Mexico free trade environment is too recent to draw any useful conclusions on income convergence. However, as we shall attempt to show, it is possible to model (predict) the impact of continental economic integration on regional (sub-national) shifts in production and trade.

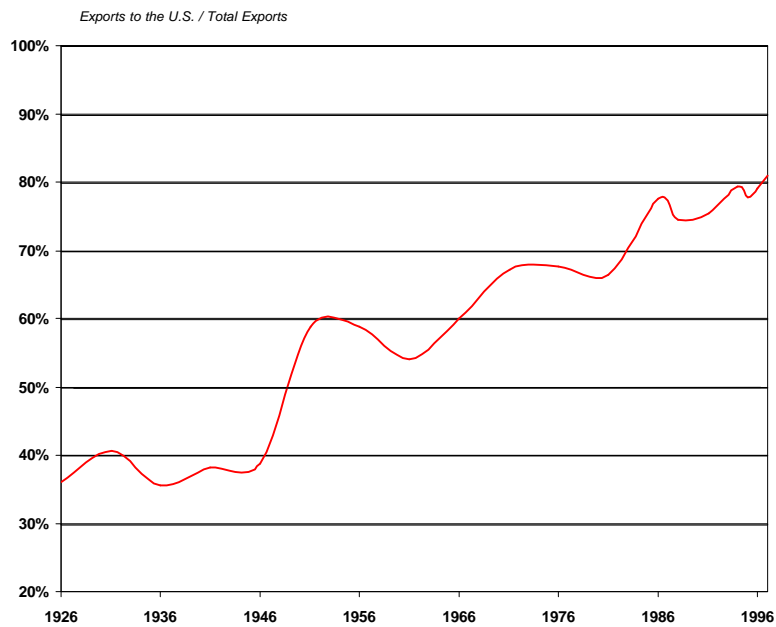
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<sup>3</sup> For the sake of simplicity, we show data only for exports. Merchandise exports include all goods, both processed and non-processed, but exclude services (invisible exports) thus slightly underestimating the total level of export activity (by about 15 to 20%). Data sources are given at the end (appendix B).

**Figure 1 - Merchandise Exports as a % of GDP, Canada, 1926-1997 (Total and to the U.S.)**



**Figure 2 – Percentage of International Merchandise Exports going to the U.S., Canada, 1926-1997**



### A simple conceptual model

In Paelinck and Polèse (1998) and Pérez and Polèse (1995; 1996) we proposed a conceptual model for analyzing the regional impact of continental integration. Two basic postulates of that framework were:



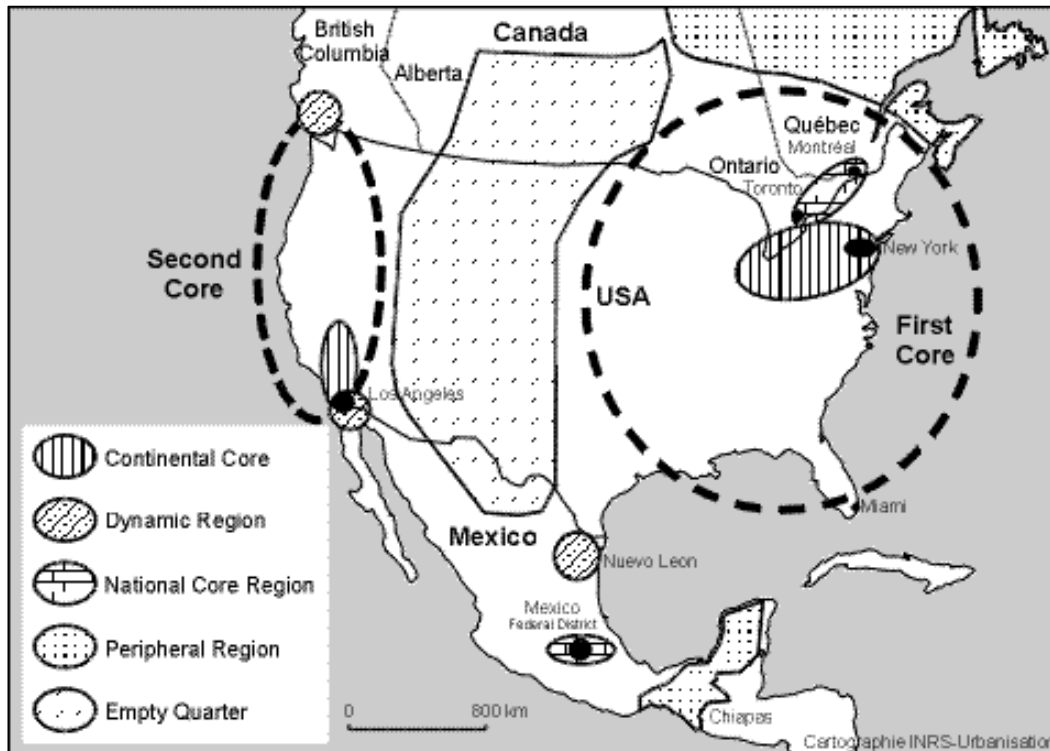
- Continental economic integration will strengthen (i.e. increase their GDP shares) for those regions best located for trade with what we call the continental economic core. This postulate holds up rather well in Western Europe, where the continental economic core can be defined as a banana shaped region going from Zurich in the south to Amsterdam in the north. Thus, in Europe continental economic integration appears to have strengthened the relative positions of Northeastern Spain (i. e. Catalonia), Southeastern England, and Northern Italy within their respective nations.
- As a corollary, those regions most distant from the continental core will be increasingly marginalized (i.e. declining GDP shares). Again, the European experience seems to largely support this postulate. Southern Italy, northern Britain and southwestern Spain continue to lag behind their respective nations. The British case is especially revealing. The re-direction of British trade flows from the Old Empire (to the west) to the European continent (to the southeast) is a powerful factor explaining the decline of Liverpool, the traditional gateway to the west, and the continued strength of London (Hohenberg and Lees, 1995; p.372).

Adapting the same framework to North America requires that we identify a continental economic core, which we have roughly defined as the New York-Chicago axis, with a second core evolving on the Pacific Coast, centered on San-Francisco and Los Angeles (see Map 1). Thus, for the two U.S. trading partners (Mexico and Canada), those regions most accessible to the continental core (or cores) would *ceteris paribus* be the potential winners from continental integration. In the Mexican case, for example, the main potential winners should be the region around Monterrey (Nuevo León – Tamaulipas), best-poised for trade with the U.S. economic heartland, and Baja California Norte (Tijuana-Ensenada-Mexicali) because of its proximity to the evolving Pacific core. Following the same reasoning, southern Mexican regions (Oaxaca; Chiapas; etc.) should be the chief “losers”. Our conclusions in this respect are not different from those of others, especially the emphasis on the continued northward shift of the Mexican economy (Hansen, 1994; Gordon *et al*, 1993).

Our framework, with its strong emphasis on location, is rooted in the classical models of regional economic analysis and regional science, specifically spatial diffusion and gravity models (see for example Isard 1960; 1975). Simply stated, gravity models predict that the potential for interaction between two points is a function of *distance* and *mass*. Thus, trade should be greatest between regions which are both closest to each and which have the greatest mass (regional GDP or population being the traditional variables for mass). These are the regions which should *a priori* gain most from the lifting of trade barriers; that is, to the extent that former protectionism constituted a barrier to “natural” interaction. Stated differently, two economically diversified contiguous regions (divided by trade barriers) stand more to gain from a lifting of trade barriers than

two distant regions. In this respect, Ontario and Michigan stand more to gain from a reduction in trade barriers between the U.S. and Canada than, say, Nova Scotia and Kansas. The former two are natural strong trading partners while the latter are not. The identification of Canadian and U.S. regions is given on maps 2 and 3 (Appendix A).

**Map 1 - Schematic View of North America**



### Metropolitan areas and cross-border economic zones

Let us now refine this simple model by introducing two additional considerations. Let us begin by refining the concept of *mass*. The presence of a major (diversified) urban metropolis can act as a positive factor in developing trade links with other regions, in part by ensuring that a significant proportion of the multiplier impacts (derived from trade) are captured by the region. The regional impact of any increase in trade is in part a function of the complexity of internal industrial linkages. Also, a major metropolis can act as a facilitator of trade via its role as a regional service, communications, and distribution center. The diversity of local service functions (finance; wholesaling; advertising; marketing; etc.) will in part determine the capacity of a region both to facilitate and to capture the gains from foreign trade. We thus modify the notion of *mass* as including the presence of a major urban metropolis. For the purposes of our analysis, we define a “major metropolis” to be an urban agglomeration with a population of over one million. In Canada, three metropolitan areas, Toronto, Montreal, and Vancouver, fall into this class.

We also need to consider the case of cross-border urban agglomerations. Mexican cities along the U.S. border (Tijuana and Juárez being the largest) are not separate urban entities in the true sense of the term, but rather cross-border extensions of larger bi-national urban agglomerations. In Canada, analogous cases are Windsor, across from Detroit, as well as the twin cities of Niagara Falls (Ontario and New York State) and Fort Erie, Ontario, across from Buffalo, New York. A case could equally be made for the proposition that the cities of Vancouver (British Columbia) and Seattle (Washington) today constitute one large cross-border economic area, despite their distance (some 200 km). However, the point we wish to make is this: the potential gains from trade are greatest in regions where urban areas in adjoining nations are closely intertwined in a common urban network, in essence forming a potentially integrated industrial complexes. Brown and Anderson (1997) stress this point with reference to the dense web of trade in intermediate goods (much of it within the automobile industry) linking adjoining urban regions in southern Ontario and the U.S. Midwest. It is in those regions that the potential for agglomeration and scale economies (derived from increased integration) is also the greatest.

Summarizing the above, regions where the gains from a lifting of trade barriers will maximized should, ideally, possess the following three attributes:

- Be close (or adjacent) to a continental economic core; more so than other regions in the nation.
- House a major urban metropolis and service center.
- Be part of a cross-border agglomeration or natural trading area.

Possible permutations are schematically presented on figure 3.

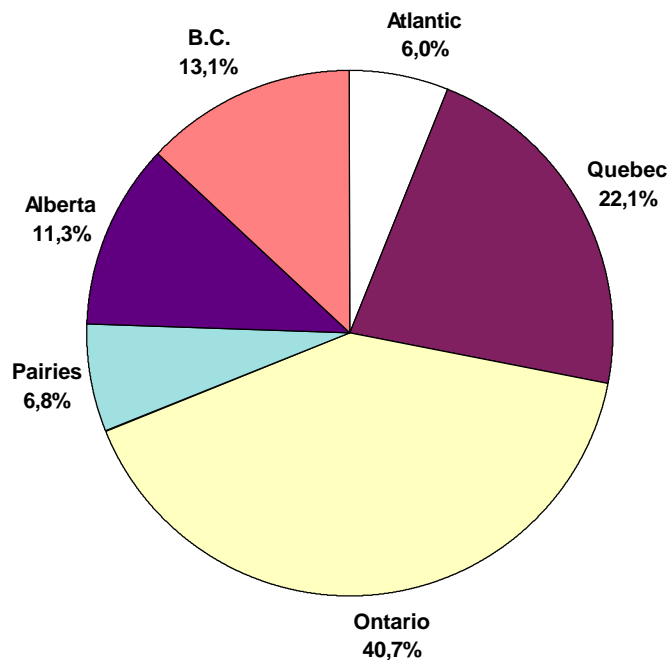
**Figure 3 - Schematic Matrix for Evaluating the Potential Impact of Continental Integration on Sub-national Regions**

<p style="text-align: center;"><b><u>A</u></b>  <b>Potential “Winners”</b> (<i>Growing GDP Shares</i>)</p> <p style="text-align: center;">(1) Adjacent to Continental Pole            +            (2) Major Urban Metropolis            +            (3) Natural Cross-border Trading Partner</p>	<p style="text-align: center;"><b><u>B</u></b>  <b>Indeterminate 1</b></p> <p style="text-align: center;">Adjacent to Continental Pole            +            No Major Urban Metropolis            +            No Natural Cross-border Trading Partner</p>
<p style="text-align: center;"><b><u>C</u></b>  <b>Indeterminate 2</b></p> <p style="text-align: center;">Non-Adjacent to Continental Pole            +            Major Urban Metropolis</p>	<p style="text-align: center;"><b><u>D</u></b>  <b>Potential “Losers”</b> (<i>Declining GDP Shares</i>)</p> <p style="text-align: center;">Non-adjacent to Continental Pole            +            No Major Urban Metropolis</p>

## Positioning Canadian regions

The various regions and provinces of Canada vary greatly in terms of their relative weight within the Canadian economy. Ontario is the dominant regional economy with about 41% of Canada's GDP, followed by Quebec with about 22% (figure 4). These two provinces are often referred as the Canadian heartland (or Central Canada, by Western Canadians), historically the economic core of the federation, united by the St. Lawrence – Great Lakes transport corridor. Thus, contrary to the U.S. experience where a second major core in the West has challenged the historical dominance of the Northeast, the Canadian economy is still largely centered (63% of GDP) in two “central” provinces, located in the eastern part of the nation<sup>4</sup>. Compared to the combined weight of Ontario and Quebec, all the other regions appear more or less marginal or peripheral, with only British Columbia (B.C.) of any major consequence with 13% of GDP. This “unequal “ relationship has given rise to very strong regional identities (and grievances) outside Ontario and Quebec, adding an additional complicating element to the already complex relationship between Quebec and the rest of Canada.

**Figure 4 – Shares of National GDP (in %), Canadian regions, 1996**



<sup>4</sup> It should be noted that almost all of Ontario's population (well over 80%) lives in its southeastern tip, in an area well to the east of Chicago.

Figure 5 positions Canadian regions with respect to the impact matrix (figure 3). Figure 5 predicts that Ontario stands to gain most from continental integration. It should be the most integrated into the U.S. economy and see a constant rise in its share of national GDP. Ontario is strong on all three criteria. It is geographically part of the New York – Chicago axis. It is home to Canada’s major metropolis, Toronto, and its southern tip (where most people live) forms part, as already noted, of a dense bi-national urban network of inter-linked cities. British Columbia (B.C.), by comparison, although well positioned, especially with respect to Pacific Rim economies (not necessarily in NAFTA), remains fairly peripherally located within North America. At the other extreme (the “Losers”), the Atlantic Provinces are the least well positioned to gain from continental integration. They are peripherally located with respect to a continental economic core. The largest urban area, Halifax (population: 250,000) is of very modest size, and the Atlantic Provinces are not part of a dense bi-national urban system. The only overland transport connection with the U.S. goes through sparsely populated northern Maine. Manitoba and Saskatchewan are also poorly positioned because of their inclusion in the “Empty Quarter”(see discussion below) and the absence of a major metropolis.

**Figure 5 - Classification of Canadian Regions according to Impact Matrix**

<p style="text-align: center;"><b>A</b> <i>Potential “Winners”</i></p> <p style="text-align: center;">(1) <i>Adjacent to Continental Pole +</i> (2) <i>Major Urban Metropolis +</i> (3) <i>Natural Cross-border Trading Partner</i></p> <p style="text-align: center;"><b>Ontario</b> (OK on all points); <b>British Columbia</b> (weak on 1) <b>Quebec</b> (Southwest)</p>	<p style="text-align: center;"><b>B</b> <b>Indeterminate 1</b></p> <p style="text-align: center;"><i>Adjacent to Continental Pole, but with no Major Urban Metropolis and Natural Cross-border Trading Partner</i></p>
<p style="text-align: center;"><b>C</b> <b>Indeterminate 2</b></p> <p style="text-align: center;"><i>Non-Adjacent to Continental Pole but with a Major Urban Metropolis</i></p> <p style="text-align: center;"><b>Alberta</b> (in part : weak on 1 and 2; no 3)</p>	<p style="text-align: center;"><b>D</b> <i>Potential “Losers”</i></p> <p style="text-align: center;"><i>Non-adjacent to Continental Pole and no Major Urban Metropolis</i></p> <p style="text-align: center;"><b>Atlantic Provinces</b> <b>Prairies</b> (Manitoba and Saskatchewan) <b>Quebec</b> (Eastern Part)</p>

But what of Quebec? According to our framework Quebec is a divided province, with a foot in both extreme quadrants. It is strong on criterion 2, home to Canada’s second largest metropolis, Montreal (population: 3,3 million), located in the southwestern corner of the province close to the U.S. border, where about 65% of the

population lives. Although well located for trade with the Northeastern U.S. “core” states (criterion 1), it is not linked into a dense bi-national urban system (criterion 3). The U.S. areas on which Quebec borders (upstate New York and Northern New England) are sparsely settled with no major cities. The eastern and northern parts of the province are in many respects similar to the Atlantic Provinces, weak on all three criteria. Thus, our framework would lead us to predict that Quebec will be less integrated into the U.S. economy than Ontario, but more so than the Atlantic Provinces, and that the evolution of its GDP share is difficult to predict *a priori*.

### **A digression: on North America’s specificity?**

Before we go on to examine our empirical evidence, let us take a closer look at the role of history and geography. North America is not Western Europe. The simple transposition of our earlier framework (Paelinck and Polèse *op cit*) to the North American case is not self-evident. We cannot simply proceed as if North America were a homogenous plain without history. Regional shifts in GDP must be interpreted taking into account the historical pattern of North American settlement.

For Canada and the United States, long-term regional shifts in population and GDP are in part a result of the simple fact that both are settler nations, first colonized from the east by Europeans, and by their imported slaves in the case of the U.S. South. The period 1650-1910, broadly speaking, was largely concerned with “filling up” the continent with settlers; thus, the gradual westward shift in the center of population gravity, especially in the United States. North America (north of the Rio Grande) is nearing the end of this long settlement process. Traditional geographical constraints, together with the accumulated weight of man-made artifacts and capital investments (agglomeration economies, transport systems; technological change; etc.), will then, as in Western Europe, be the decisive factors determining the comparative advantage of regions.

However, the westward shift in production and population is not over. This movement is in large part modulated by two factors: 1.) the intrinsic carrying capacity (fertility; water; climate; etc.) of lands west of the Rocky Mountains; 2.) the economic dynamism of trading partners across the Pacific. This makes it difficult to apply a simple center-periphery model to North America, which is why we have referred to two rather than to a single continental core (some might wish to go even further). Also, geographical and ecological constraints, modern technology notwithstanding, will continue to favor regions with temperate climates, located near oceans or navigable waterways, in contrast to regions that are land-locked with inhospitable climates. In North America, the demographic and economic weight of the “dry” land-locked interior has been gradually declining since the 1930’s, following the initial waves of settlement (1870-1914). Garreau (1981) coined the term “Empty Quarter” to describe the sparsely

populated North American interior (see Map 1). Most American States lying, roughly, along a line from Regina (Saskatchewan) to Amarillo (Texas) have seen their share of the US total population decline since the Second World War. This includes notably, the two Dakotas, Nebraska, Wyoming, Kansas, and Oklahoma, and also holds for the provinces of Saskatchewan and Manitoba with respect to the Canadian total.

In sum, given the settlement process of North America, we would expect the GDP shares of the old eastern settler provinces, including Quebec and Ontario, to decline on the long run, acting as a countervailing force to the positive effects of continental integration. In the case of the other old settler region, Atlantic Canada, the predicated impact of continental integration would simply reinforce the historical process of relative decline, while at the same time accelerating the relative rise of the most westerly provinces (Alberta and B.C.).

## **REGIONAL DIMENSIONS: EMPIRICAL ANALYSIS**

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Let us begin by examining long term shifts in GDP shares by region (figure 6).

### **Long term shifts in GDP shares**

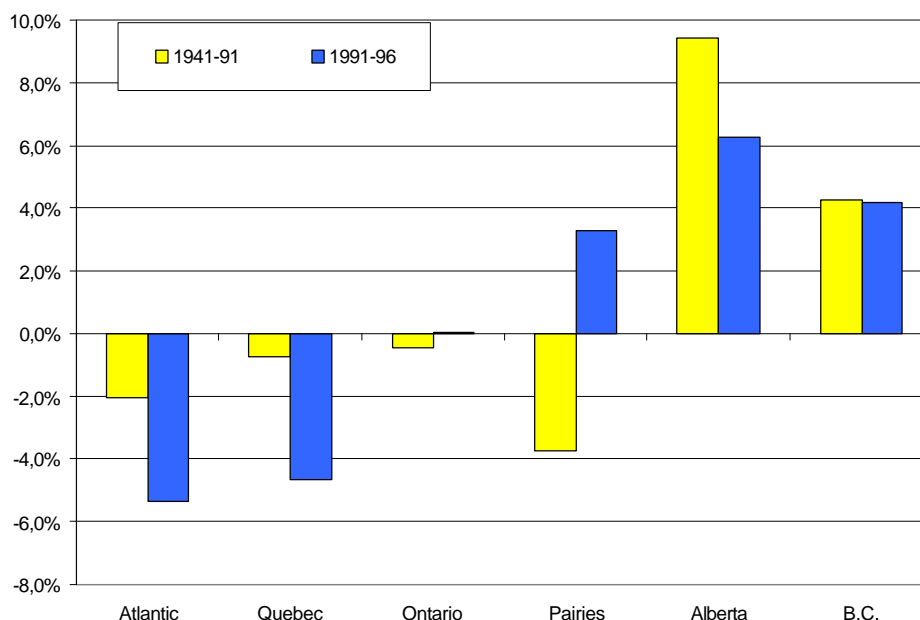
As predicted above, the westward “settlement” shift in population, also reflected in GDP shifts, clearly favors Canada’s two most westerly provinces (Alberta and B.C.). The results for the most recent period (1991-96) suggest that accelerated continental integration following NAFTA has not significantly modified this historical process. On the other end of the geographic spectrum, the Atlantic Provinces in the east continue their historic process of decline, but with seemingly a sharp acceleration since 1991. The story of Atlantic Canada suggests a fate analogous to that of Western Britain, specifically the case of Liverpool cited earlier, as Atlantic Canada’s location becomes increasingly peripheral as the nation abandons Atlantic (Commonwealth) ties in favor of continental links. Both emotionally and economically, the Atlantic Provinces have historically been the closest to Britain, and as such have stood to lose most from a weakening of Commonwealth trading links<sup>5</sup>. Turning to the two eastern Prairie Provinces, the negative “Empty Quarter” effect clearly shows up from 1941 to 1991 with a significant decrease in GDP share. However, the decline seems to have been reversed since 1991, contrary to what our matrix (figure 5) would predict. A purely

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<sup>5</sup> My apologies here to the (French-speaking) Acadian community of Atlantic Canada whose emotional ties, understandably, are not necessarily with Britain. In this respect, it is perhaps not entirely coincidental that continental integration has gone together with an impressive resurgence of Acadian entrepreneurship, especially in the Province of New Brunswick. Acadians make up barely 10% of the region’s population (but about 33% in New Brunswick).

cyclical effect may be at play as the economies of these two provinces are largely based on volatile primary product exports (notably wheat for Saskatchewan).

**Figure 6 – Relative Change in GDP Shares, 1941-1991 and 1991-1996, Canadian Regions (5 year average)**



Ontario's share of the national total has changed only slightly over the past half a century with a slight decline from 1941 to 1991, but which seems have been halted since. Clearly, Ontario's position as the dominant regional economy does not appear to be threatened, quite on the contrary. It is important to underscore the nature of Ontario's continued strength. Were Ontario an American State, its fortunes would "normally" have been different. The two U.S. States with which southern Ontario shares a land boundary, Michigan and New York (specifically the Detroit and Buffalo regions), have seen their shares of U.S. GDP decline over the past fifty years. Ontario could have shared the same fate as its "Rustbelt" neighbors. By the same token, Toronto should have seen its dominance challenged by West Coast financial and entertainment centers, along the lines of the Los Angeles' and San Francisco's challenge to New York city. But unlike the U.S. case, Vancouver on the West Coast, despite its steady growth, does not seem to pose a threat to the continued dominance of Toronto as Canada's pre-eminent financial and entertainment center. Our matrix (figure 3) provides part of the answer. Despite Ontario's "Rustbelt" location from a U.S. perspective, Ontario clearly is the best located region *within Canada* for interaction with the American economic core, *compared to other Canadian regions*.



The results for Quebec are less encouraging: a slight decline for the 1941-1991 period, but with a proportionally much higher rate of decline since<sup>6</sup>. Others, including this author, have noted the accelerated rate of Quebec's decline in recent decades (Mathews 1998). Part of the explanation lies in the decline of Montreal since the 1960's, previously Canada's largest metropolitan area (Coffey and Polèse 1993; Polèse 1990). Montreal's share of the Canadian urban total has been steadily declining since the 1960's, the decade during which Canadian integration into the U.S. started its upward swing (recall figure 1). Although we cannot rigorously establish causal links, it is possible to argue that continental integration has hurt Montreal in three ways: 1.) Toronto, its historically rival, is geographically better located, as noted earlier, for interaction with the U.S. economic heartland; 2.) The automobile industry<sup>7</sup>, the first historical beneficiary of free-trade, is largely concentrated in Southern Ontario near and around Toronto; 3.) The rise of French has made Montreal increasingly "alien" in an overwhelming English-speaking continent, where English is the language of commerce and boardrooms. Language differences remain powerful barriers to communication, especially for services (Coffey and Polèse, 1991). While the language difference may make Quebecois more culturally confident vis-a-vis the U.S. than other Canadians, it may also raise the costs of doing business with the U.S. Going back to our first matrix (figure 3), we might say that Montreal is located further from the U.S. (in economic cost terms) than mere distance geographical suggests, pushing Quebec towards the "D" quadrant.

The impact of language should not be overstated. We have already noted that Quebec is a divided province with a foot both in the potential "winner" and "loser" quadrants. However, the data do show that Quebec's relative decline is concomitant with a period of accelerated continental integration. At a minimum, this suggests that Quebec has not been as successful as its Ontario neighbor in re-orienting its economy to U.S. markets. This is the question to which shall now turn with the help of data on international and inter-provincial trade.

## **Trends in international and inter-provincial trade**

In the following figures (7 through 13), the definition of Canadian regions sometimes changes, due to changing data series. Thus, the label *Prairies* includes Alberta when the latter is not specified. The *West*, when used, includes B.C. plus the

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<sup>6</sup> Please note on figure 6 that the first bars (1941-1991) refer to a 50-year period while the second bar (1991-1996) refers to a 5-year period, and that the data refer to 5-year averages. If one wishes to compare total change between the two periods, the 1941-1991 bar should be multiplied by a factor of 10.

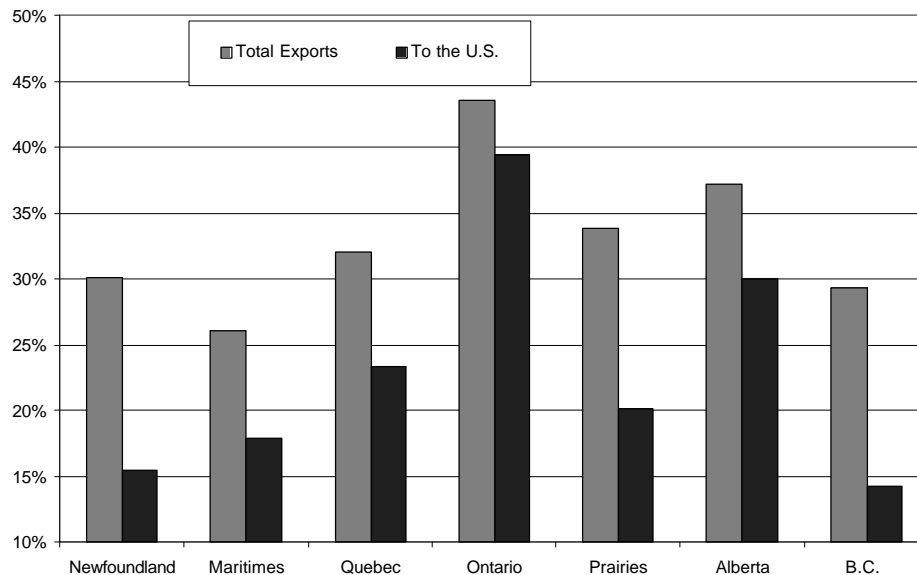
<sup>7</sup> Predating the current free trade agreement, Canada and the United States signed a free trade agreement for the automobile industry in 1965, the so-called Autpact.

three Prairie Provinces. The term *Maritimes* refers to Atlantic Canada minus Newfoundland (see also Map 2, Appendix A).

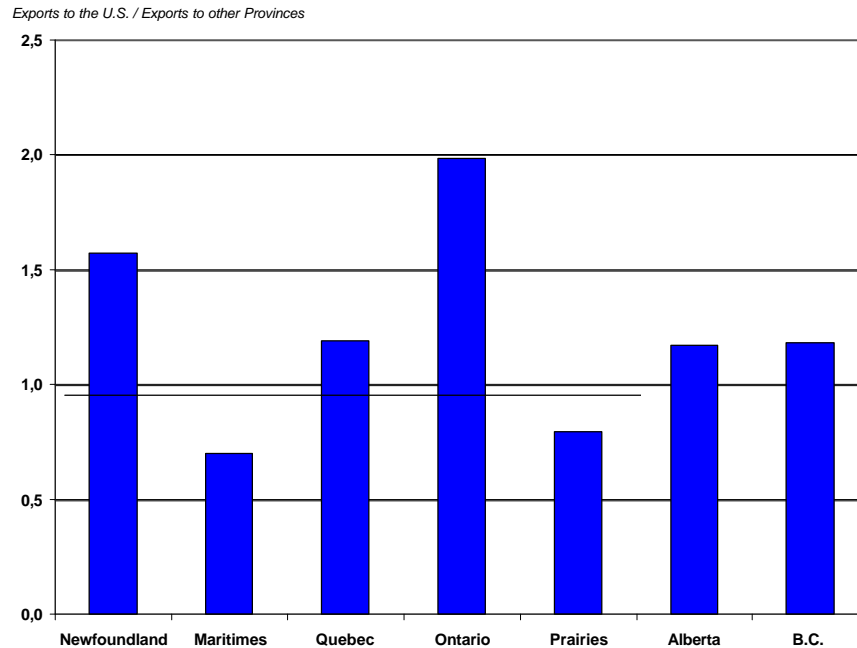
### *Export destinations*

Figure 7 shows exports as a percentage of GDP by Canadian region. The percentages are given both for total exports and for exports to the U.S. The resulting pattern demonstrates the impact of geography. The distribution of exports going to the U.S. (the darker bar) is almost pyramidal, systematically declining as one moves further away from the economic heartland province of Ontario to the Atlantic and Pacific coasts. A clear third party effect is also visible in the more peripheral provinces, Newfoundland and B.C. (located on each coast), trading relatively more with non-U.S. partners. Thus, Newfoundland looks to the Atlantic and B.C. to the Pacific. The somewhat less than symmetrical performance for Alberta and the Prairies is most probably explained by the specialized nature of their exports: Prairie wheat to non-U.S. markets and Alberta oil to the U.S. However, the major point remains the high level of integration of Ontario (as measured by exports) into the U.S. economy. Quebec's performance does not stand out, positioned halfway between Ontario and the Maritimes as geography would predict.

**Figure 7 – Exports as a % of Provincial GDP, 1996-97 (Total Export and to the U.S.)**



**Figure 8 – Relative Level of Integration into the U.S. compared to Canada :  
Exports going to the U.S. over Exports going to the Rest of Canada, by Region,  
1996-97**



On figure 8, we have calculated a rough index of relative integration into the U.S. economy by Canadian region: i. e. the value of exports going to the U.S. over the value of exports going to other Canadian provinces. The results are surprising. With the exception of the two eastern Prairie Provinces and the Maritimes, all Canadian regions now export more to the U.S. than to the rest of Canada. This is a recent occurrence as will be shown below (figures 12 and 13). Clearly, continental integration has meant a (relative) weakening of the economic ties between Canadian provinces. Here again, let us insist on the impact of geography, or rather on a return to the “normal” constraints of geography. Canada, with the exception of the Quebec-Ontario tandem, never was a natural trading area linked by waterways and historical trade routes. B.C. is separated from the rest of Canada by the barrier of the Rocky Mountains, with a major impact on transport costs. Newfoundland (excepting Labrador) has no overland link with the rest of Canada. It is thus no overly surprising that these two provinces should be weakly integrated into the Canadian economy, feeling both the pull of the U.S. and of third parties (see previous figures). On the other hand, let us recall that both the Maritimes and the eastern Prairies are relatively poorly located for trade with the U.S. economic heartland, as indeed for trade with the Canadian heartland, a major reason why both regions (as well as Newfoundland) have found it historically difficult to industrialize.

The pull of the continental economic core (or heartland) is visible in the results for Ontario which exports twice as much to the U.S. as to other provinces, a level of integration significantly more advanced than that of Quebec. Quebec may perhaps feel

more separate emotionally or culturally but, in relative terms, it is more integrated into the Canadian economy than Ontario. Perceptions, geography, and economics do not necessarily coincide. By the same token, it is interesting to reflect that the province (i.e. Ontario) that is today the least integrated into the Canadian economy and the most dependent on U.S. markets (at least as indicated by figure 8) has historically been the cradle of anti-American Canadian nationalism. Opposition to NAFTA was (and remains) most vocal in Ontario which exports some 40% of its GDP to the U.S., an irony which will undoubtedly not escape the reader.

The impact of geography is again demonstrated by table 1, which gives the destination of exports to the U.S. by Canadian region of origin and U.S. region of destination (for the definition of U.S. regions see Map 3, Appendix A). Where one is located in Canada in large part explains where one exports in the U.S. Thus, in order, the Atlantic Provinces export first to the New England States (40,3% of exports to the U.S.), Quebec to the Mid Atlantic States (with New York in first place), Ontario to the Midwest (with Michigan the most important customer), the Prairies to the Midwest (Minnesota first), and B.C. to the American Northwest (Washington State first). Hayward and Erickson (1995) observe an analogous geographically symmetrical trade pattern for U.S. exports by state to Canada. Table 1 not only underscores the pull of geography but also confirms the importance of a densely populated cross-border urban network for the development of trade links (criterion 3 on our matrix). In dollar value (1997), Ontario's exports to Michigan were about nine times those of Quebec to New York State. Indeed, Ontario exported twice as much to New York State as Quebec, in part a reflection of the densely developed cross-border urban network on the Ontario-New York border in centered on Buffalo-Niagara Falls area.

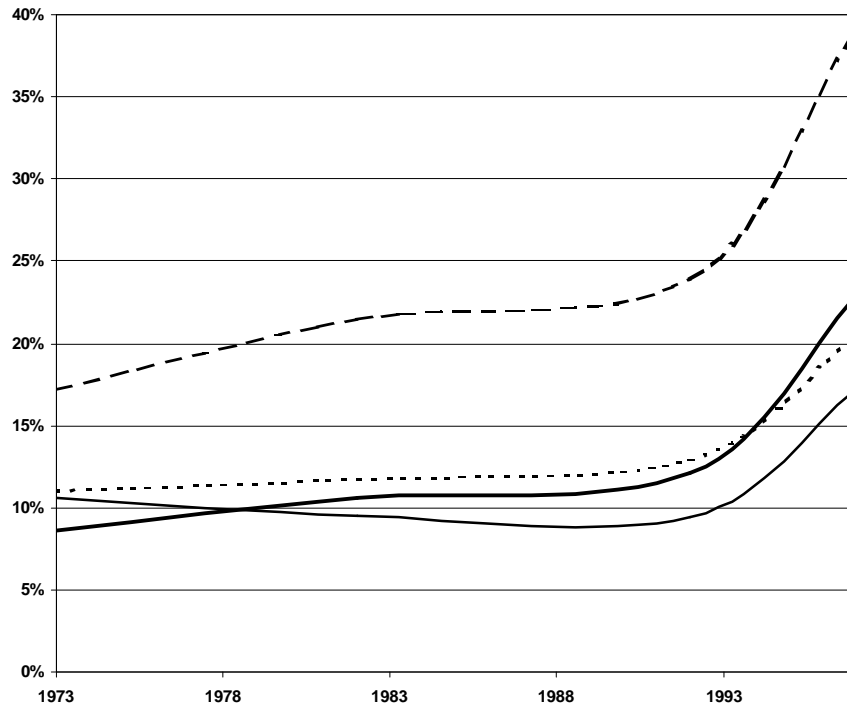
**Table 1 – % Distribution of Exports to the U.S. by Canadian, Region of Origin and U.S. Region of Destination, 1997**

U.S. Destination	Canadian Exporting Region				
	Atlantic	Quebec	Ontario	Prairies	BC
<b>New England</b>	<b>40,3%</b>	19,0%	3,6%	1,1%	4,6%
<b>Mid Atlantic</b>	20,3%	<b>31,1%</b>	18,8%	11,1%	7,6%
<b>Midwest</b>	12,0%	23,2%	<b>57,0%</b>	<b>38,2%</b>	17,1%
<b>Plains</b>	0,9%	3,0%	3,8%	19,2%	6,0%
<b>South</b>	23,6%	16,8%	9,0%	13,5%	15,5%
<b>Northwest</b>	0,6%	1,6%	1,8%	10,3%	<b>35,2%</b>
<b>West</b>	2,3%	5,3%	6,0%	6,5%	14,1%
<b>Total Exports to U.S.</b>	100%	100%	100%	100%	100%

## The dynamics of integration

All regions have increased their integration into the U.S. economy (as measured by exports) over the last twenty-five years (figure 9). The impressive upsurge in exports to the U.S during the 1990's, following FTA and NAFTA, affected all Canadian regions. Ontario has always been the leader. However, the changes have been dramatic. The share of Ontario's GDP going to the U.S. has gone from 17,2 % in 1973 to 39,2 % in 1997. For Quebec, the corresponding percentages are 8,6% and 23%. On the basis of Figure 9, we may assume that all Canadian regions have significantly restructured their markets. Figure 9 also suggests that Quebec has been restructuring at a faster rate than other regions. From last place in 1973, Quebec has moved to second place in terms of the relative share of its GDP accounted for by exports to U.S. markets. Figure 10 reinforces this impression, but with the added specification that Quebec's market reorientation (compared to other regions) has been particularly impressive since 1992. Indeed, for all regions growth in the share of GDP going to the U.S. has been greater during the 1992-97 (5-year) period than in all the previous twenty years. However, the rate of change in Quebec (and in Atlantic Canada) outstrips that of Ontario. Both regions appear to be catching up with Ontario.

**Figure 9 - % of GDP Exported to the U.S., Canadian Regions, 1973-1997**



**Figure 10 – Relative Change in % of GDP Exported to the U.S., Canadian Regions, 1973-1992 and 1992-1997**

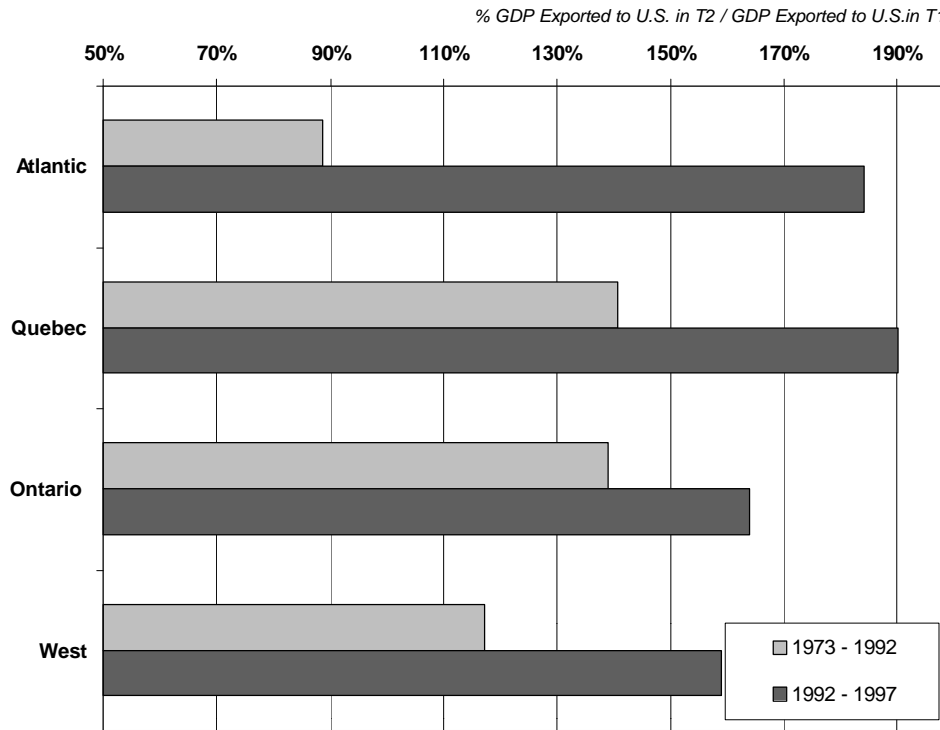
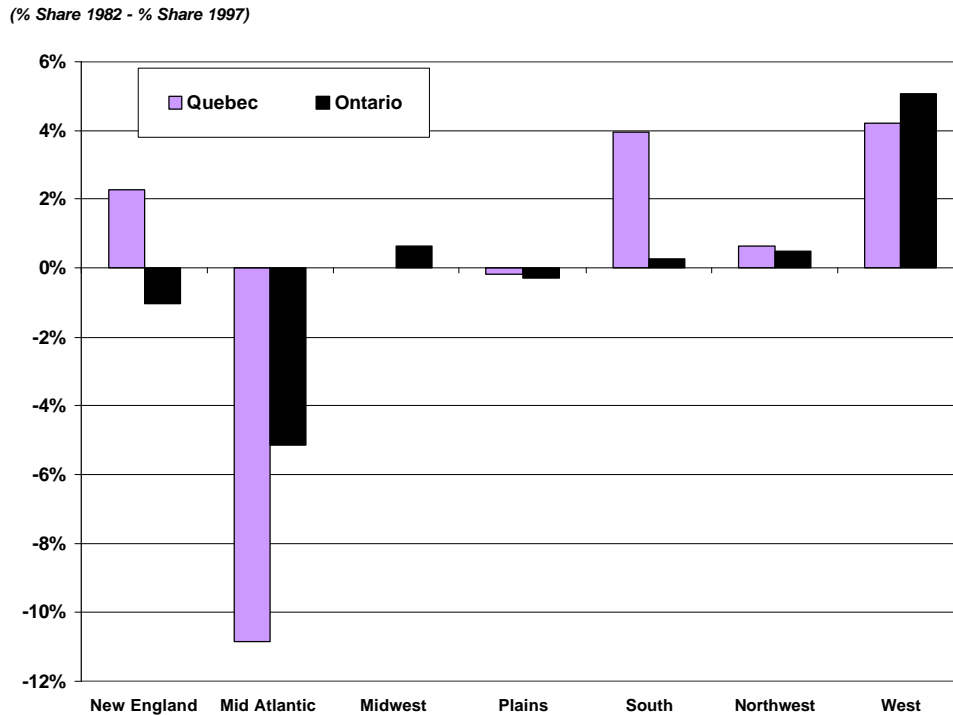


Figure 11 seems to support the hypothesis of a more rapidly restructuring Quebec, although the evidence is by no means conclusive. Both Ontario and Quebec are increasingly shifting their exports to U.S. to markets in the South and the West. In this respect, both are largely following the spatial evolution of the U.S. economy. However, the relative decline in exports going to the Mid-Atlantic States and the corresponding rise in the share of exports going to the U.S. South is much sharper for Quebec than for Ontario. Figure 11 does not tell us why this should be so. What it does tell us is that Quebec is reorienting its exports both to the Southern U.S. and Western U.S., while Ontario's spatial reorientation is almost exclusively directed to the Western States. Part of the answer may lie in Quebec's location on the Gulf of St. Lawrence with the ports of Montreal and Quebec City, giving it direct maritime access to ports in the U.S. South. By the same token, note also the share of Atlantic Canada's exports going to the U.S. South (Table 1). Ontario, by comparison, remains landlocked.

**Figure 11 – Shift in the Destination of Exports to the U.S., Quebec and Ontario, 1982-1997**

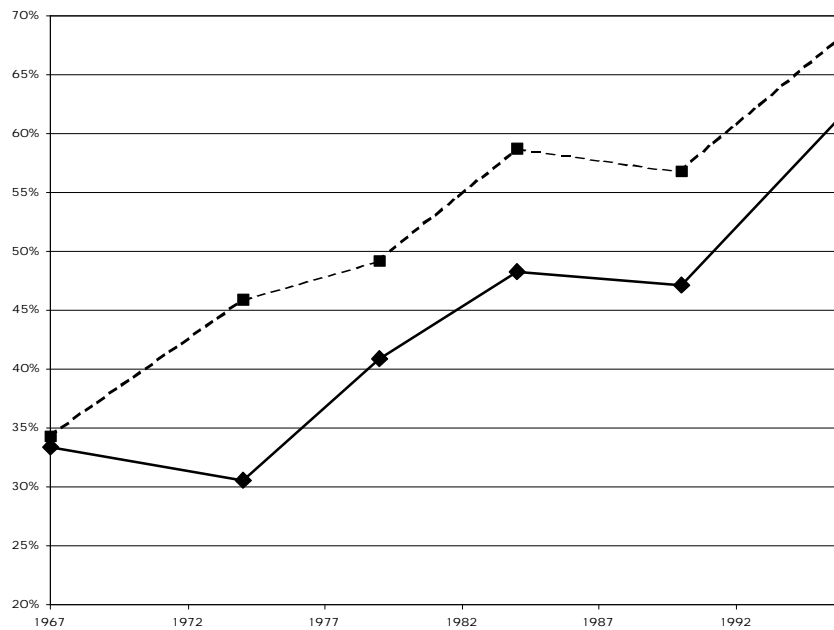


The results on figure 12 equally lend credence to the “catching-up” hypothesis. The share of international exports as a percentage of total “exports” (both international and interprovincial) for Quebec is rapidly reaching the the same level as Ontario. It is interesting to note that both provinces started out in 1967 with comparable (low) levels of international trade as a percentage of total trade: about 33%. Ontario then rapidly moves ahead of Quebec, but with Quebec moving up faster since the early 1990’s. This suggests that much of Ontario’s apparent succes in accessing U.S. markets before FTA (but after 1967) is attributable to the prior Canada-U.S. free trade agreement in automobiles and automobile parts (Autopac), signed in 1965. Stated differently, FTA and NAFTA have leveled the playing field between the two provinces in terms of relative access to U.S. markets. Free trade is no longer limited to the automobile industry, which is largely concentrated in Ontario. This also suggests that Quebec’s “catching up” is not necessarily due to a special Quebec effect (linked to perceptions or culture), but rather to the broading of free trade to include products in which Quebec also has a comparative advantage.

Figure 13, which gives similar results for Atlantic Canada, the Prairies, and B.C., again demonstrates the influence of geography. Both of Canada’s geographically extreme regions, B.C. and the Atlantic Provinces, appear always (at least since 1967) to have traded more with rest of the world than with the rest of Canada. This the third-

party effect alluded to earlier, referring to the pull of trading partners on the Atlantic and Pacific seabords. The results for recent years do not suggest dramatic changes, although we know that an increasing share of international trade is being directed to U.S. markets. On the other hand, the trend for the land-locked Prairies, starting from a low level (about 25%), is clearly towards an increasing share of exports destined to non-Canadian markets.

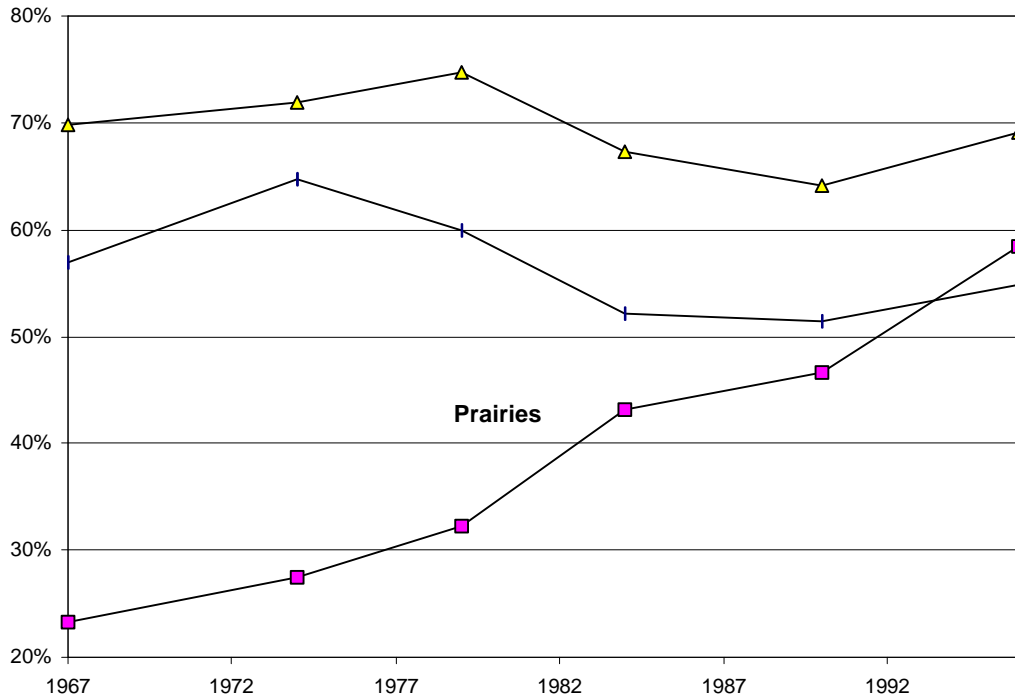
**Figure 12 – International Exports as a % of all Out-of-Province Exports, 1967-1966, Ontario and Quebec**



However, what is perhaps most striking in both figures (12 and 13) is the manifest trend towards the “disintegration” of Canada as a trading block, certainly for merchandise trade. We may also speak of convergence, in that all Provinces and regions appear to be headed, more or less, to an outcome where at least twice as much merchandise is exported to non-Canadian markets than to Canadian markets. Ontario and B.C. have simply arrived there earlier. It is difficult to argue that Quebec’s behavior stands out. Quebec is detaching itself from the Canadian market, but than so are all the others.



**Figure 13 – International Exports as a % of all Out-of-Province Exports, 1967-1996, Atlantic Provinces, Prairie Provinces and British Columbia**



## CONCLUSIONS

The results of our analysis reveal a number of contrasting and opposing trends. As our conceptual model predicts, Ontario, not Quebec, is most strategically located within Canada to profit from continental economic integration. There is little evidence to suggest that NAFTA has served to strengthen Quebec's relative economic position within Canada. Quite to the contrary, Quebec's economic weight within Canada (as measured by GDP shares) has declined since 1990 while Ontario has consolidated its position. Those who see the growing links to the U.S. as a means of arresting Quebec's current decline may be overly optimistic. However, Quebec appears to be restructuring its trading relationships (with respect to U.S. markets) at a more rapid rate than Ontario. The latter result suggests a "catching up" process with all Canadian regions, not just Ontario, converging to analogous high levels of trade integration into the U.S. economy.

Canada as an economic unit appears to be rapidly unraveling with all Canadian regions trading more with the U.S. than with other Canadian Provinces. There is no evidence that Quebec's evolving trading relationships are special in this respect. The impact of geography remains strong with location a good predictor of trading

relationships. In this respect, the Quebec economy appears to be driven by two contradictory forces. On the one hand, its location on the “declining” North-eastern periphery of the North American continent would appear to spell further relative decline in the future as it increasingly integrates into the continental economy. On the other hand, the rapid restructuring of its trading relationships, especially towards the U.S. South, suggests that Quebec may in time succeed in offsetting the negative forces of continental economic integration. However, it is difficult to establish a rigorous causal relationship between the recent (relative) decline of the Quebec economy and the rapid acceleration of continental economic integration following from NAFTA.

By the same token, it is difficult to predict the political consequences of accelerated continental economic integration. There is no evidence to suggest that the unraveling of Canada as a trading block will necessarily weaken Canadian national identity, most specifically for English-speaking Canadians. The effect may be quite the opposite as the example of Ontario demonstrates, the province traditionally both the most integrated into the U.S. economy and the most nationalistic. Proximity and trade may provoke a greater need for identity. Turning to Quebec, whether the trend towards increased trade with the U.S. will further the separatist agenda is equally open to argument. Quebec’s sense of identity is strong, but this has always been so. It could be argued that Quebec will become more culturally and linguistically distinct in the future as the continent integrates, but there is little evidence to suggest that this will dramatically affect the nature of its trade relationships.

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# MAP 2 - CANADA : REGIONAL DIVISIONS



# MAP 3 - UNITED STATES : REGIONAL DIVISIONS

(For Canadian Exports)



## APPENDIX B: DATA SOURCES

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