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**NORTH AMERICAN ECONOMIC
INTEGRATION: ISSUES AND
RESEARCH AGENDA**

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1. INTRODUCTION

The purpose of this paper is to promote discussion on policy issues and identify critical research needed on North American (NA) integration from a Canadian perspective. Its main object is to outline a framework and a set of issues that require further research in light of the probable policy demands on NA governments, and the Canadian government in particular, over the next few years. The subject is hardly new. Indeed, it is one of the most durable themes in Canadian economic and political research. Since the signing of NAFTA, and prior to that the Canada-U.S. FTA, there has been a large amount of research attempting to detail the impact of these agreements on the Canadian, Mexican and U.S. economies. But a combination of factors has heightened concerns about this integration, its future potential, and the manner in which policy should react to, or attempt to direct it. Clearly, in terms of trade statistics and interactions among the governments, firms, and inhabitants of the NA countries increased integration is a fact. At the same time, the process that is known as globalization has raised considerable alarm in some quarters. From the perspective of Canadians, the reality is that Canada has become a) smaller in relative terms in the global economy, and b) more dependent upon North American developments for its economic future. It is thus critical to identify the key research and policy questions about NA economic integration in order to have a better understanding of the current state of economic integration in NA, and what the future risks and opportunities are for Canada as the three NA countries respond to and anticipate these developments. In the interest of sparking a debate, the paper also proposes specific policies that address some of the current concerns and that would merit further research.

A few caveats are in order. First, many of these issues cannot be easily organized within the conventional linear trade policy integration framework of moving from a free-trade area to a customs union to a common market. This well-known textbook integration paradigm was motivated in large part by the EU integration program. It is useful but limited. It fails to deal with a number of complexities that modern technology, commerce and politics have raised. In the NA case, for example, it does not offer an analytical framework that deals with the asymmetry of relationship between the United States, Canada and Mexico due to differences in economic size and geographic links. For these reasons, it is useful to think about NA integration along the multi-dimensional lines laid out in Section 2. Second, the list of research questions is limited by our focus on economic issues. Obviously, potential changes in political institutions may occur but, assuming a medium-term policy time horizon, it is natural to expect that the basic political structure of the three countries is not likely to change drastically. For example, the paper does not contemplate a type of European federalism for North America. Thirdly, the paper is not intended to be exhaustive on either what has been done on each of these issues in the past, or on the set of issues that are pertinent to future integration. Rather, it attempts to provide an overview on the broader themes of integration around which specific policies can be discussed. As most readers will be aware, this is one topic where everything is interconnected. One cannot talk about integration of environmental policies without also talking about trade, taxation, regulation, and so forth. No attempt is made to detail the nature or the extent of all these interdependencies. Lastly, the focus here is largely on Canadian integration relative to the United States, but obviously many of these issues will, of necessity, have to be dealt with in a Canada-Mexico-United States framework.

The paper is organized as follows. The next section sets out the context of NA integration — the who, why, where, with whom and when. Section 3 deals with trade and investment issues, including questions of regional growth, and the prospects for a customs union in the NAFTA area. Section 4 goes over a large number of traditional policy areas, many of which are usually viewed as domestic, but all related to the general theme of moving NAFTA toward a North American common market framework. Research issues are summarized at the end of each section; they are numbered consecutively, flagged by the letter R, and set in italics. The paper concludes with a review of the major policy issues that North American integration poses for Canada.

2. THE CONTEXT OF DEEPER NORTH AMERICAN INTEGRATION

There is a close interaction between the existing level of integration and the policy reaction to that state of affairs. The 1988 Canada-U.S. FTA was in part a response to an already high level of trade integration and to some particular circumstances of the 1980s. It is useful to ask why more integration and why now? Economists too often look at economic integration questions within a strictly normative framework that considers the economic costs and benefits of alternative forms of preferential trading arrangements running from free trade areas to common markets. Before one gets to prescription, it is important to identify what factors are driving the demand for policy.

2.1 What Form Is Economic Integration Taking?

There is a wide variety of measures of regional economic integration. These include trade flow data, foreign direct investment (FDI) flows and stocks, mergers and acquisitions, labour movements across borders, cross-border tourism visits, winter-based temporary residency of Canadians in the United States, cross-border transportation flows, telecommunications traffic of all forms including e-mail, web access, Internet shopping, and B2B e-commerce linkages. Non-economic measures of integration include bilateral indicators of political interactions at the federal, state-province and local level, NGO participation, various measures of networking, student exchanges, university and corporate collaborative research efforts, conferences, and cultural and athletic exchanges via traditional and non-traditional media. Some forms of bilateral interactions are unintentional and unwanted as in the case of cross-border pollution, or illegal migration. Other than traditional trade, investment and migration data, our knowledge about most of these other forms of interactions is weak at best and further research and data collection in these areas are needed.

R.2.1 A potential research issue is the documentation of trends in non-traditional cross-border interactions in North America and comparisons with other regional trading areas.

2.2 Who Is Involved in these Interactions?

Trade data as collected by our statistical agencies are anonymous with respect to the 'who' in an international transaction other than in identifying goods and countries involved. In understanding the process of integration, getting a better understanding of the individuals and organizations that are the locus of the various micro-interactions which form the basis of integration is an important research issue for a number of reasons. These include questions such as who is driving the integration process, and whether it is highly concentrated among a few economic actors or widely diffused throughout the economic population. The 'who' might be divided into classes such as individuals, firms, NGOs and governments. Each of these classes could be further categorized in a number of ways. There is some need for statistical creativity here. An index of individual interaction, for example, might be constructed to try to measure how many times the average Canadian visits the United States, does business with a U.S. company, reads a U.S. newspaper, and so forth. One question is to what degree NA integration is being driven by people interactions or business interactions, etc. While such research is perhaps more properly the domain of demographers and sociologists, these measures would be invaluable to economic researchers who need better measures of integration in product and factor markets, and are concerned with the transfer of knowledge across borders.

R.2.2 Efforts to measure the extent of cross-border interactions should be undertaken to identify who (individuals, firms, organizations) is involved and to construct indexes of cross-border interactions which could be used by researchers for comparative purposes.

2.3 Why Is North-South Integration Occurring?

Here we seek to identify the potential causal factors that have been driving the recent trends in integration across the two main North American borders. The potential drivers would include:

- Technology: telecommunications, the Internet, air travel and airports, the U.S. Interstate highway system, and border highway linkages
- Geopolitical events: end of the Cold War, emergence of the EU, political reform in Mexico
- Demographics: the baby boom and bust
- Economic policy: Canada-U.S. FTA and NAFTA
- Geography: the unique nature of the long Canada-U.S. border, the proximity of most Canadians to the U.S. border, and the harsh Canadian winters.

It would be useful to quantify the relative importance of each of these factors in the observed integration measures. Given the one-off nature of many of these changes, particularly the FTA, this may be difficult to do.¹ Nevertheless, an assessment of the important causal factors that have been driving the integration observed thus far is a critical input to the cost-benefit analysis of alternative policies that might impact on future integration. For example, it would be desirable to augment quantitative research with a case study comparative approach, based on the integration of the smaller European economies into the EU.

R.2.3 What are the causes of increased NA economic integration? Can growth in trade, investment and other interactions across NA borders be quantitatively attributed to a few significant factors. Would a case study approach to the integration of the smaller open economies of Europe into the EU — Ireland and the Netherlands for example — improve our understanding of the integration process in North America?

2.4 What Are the Major Concerns Driving Canada's Interest Toward North American Integration?

Despite the success of the FTA/NAFTA in terms of increased trade flows, there appear to be a number of concerns about national and international economic developments which are driving the current interest by Canadians and Canadian business toward stronger economic linkages with the United States. Understanding these concerns is important in order to assess, from a Canadian perspective, alternative policies directed at NA integration. In no particular order, here is a brief description of some of these concerns.

The Standard-of-living Issue

The 1990s saw a fairly strong gap open up between Canadian and U.S. living standards, due in part to weaker Canadian productivity and employment performance. These trends were mirrored in a historically unprecedented real exchange rate decline that raised concerns about the sources of Canadian economic performance relative to the booming U.S. economy throughout the 1990s. This has been extensively discussed in policy circles, the media, and by the government's main economic agencies including the Department of Finance and Industry Canada. Reviews of these debates are contained in Fortin (1999), Harris (2000a), and Industry Canada (2000a). There are widespread worries among Canadian decision makers that future Canadian economic prosperity is at risk, and that Canada is slipping in the ranking of industrial country leaders. There is little doubt that the living standards issue is one reason why the NA integration issue is front and centre again on the policy agenda.

The Lack of Progress in the WTO and the Multilateral Trading System

Two prominent multilateral policy failures occurred in the late 1990s: first, the collapse of the OECD Multilateral Agreement on Investment, and then the perceived discord at the December 1999 Seattle meeting of the WTO. This has not only bolstered the anti-globalization movement, but has also raised concerns as to the prospect that the multilateral system will make much progress in the near future. The lack of forward movement on the multilateral front leads naturally towards a trade agenda for Canada focused on North America, which can be handled within NAFTA, or on more speculative bilateral trade initiatives with non-North American partners.

Strong and Sustained U.S. Economic Growth in the 1990s

The phenomenal economic growth in the United States during the 1990s, with low inflation and low unemployment, has had a two-fold effect on Canada. First, it has quashed a lot of doubts by anti-market proponents about the performance and merits of U.S. style market capitalism. Historically, there has always been a lot of antipathy by Canadian policy makers toward the U.S. model of economic development, and while this has certainly not disappeared it has been considerably muted by the developments of the 1990s. Second, the fact that the United States has done so well relative to Canada has raised the export dependency of Canada on the United States and increased the potential benefits of catching-up with the United States. Together with the lack of progress in the WTO on multilateral liberalization, the strong U.S. expansion has raised the odds that deeper Canada-U.S. economic integration is the only realistic option for further progress in developing significant export market access for Canadian producers.

The New Economy Paradigm and Natural Resource Price Declines

The pickup in productivity growth in the knowledge-intensive sectors, or *knowledge-based economy* (KBE), which has fuelled U.S. growth occurred at the same time as substantial declines in global commodity prices, a source of traditional Canadian comparative advantage.² These joint events have raised serious concerns as to whether Canada might be caught in an unfortunate pattern of economic specialization concentrated in commodity production, and whether special steps are called for to support the growth of the *new economy* in Canada. Aggravating these trends is the 'death of distance' due to the emergence of the 'borderless' Internet, and the evident forces of agglomeration in the technological clusters of certain U.S. states. Together, they all fuel the concern that Canada may be substantially behind the curve in the new knowledge-based economy. This would be a policy issue for Canadian economic development with or without the North American integration agenda. Stronger North American

integration, however, is critical for the development of a Canadian knowledge-based economy. It is only with secure access to the NA market that Canada has a better than even chance of getting a proportionate share of employment and investment in the inherently footloose activities associated with the *new economy*.

A Weak Foreign Direct Investment Record

Foreign direct investment is widely regarded as a critical element for ensuring growth in small open economies. The growth performance of Ireland is often attributed to its success at attracting FDI within the EU. It is felt by many that Canadian growth can only be secured if Canada is competitive in the global market for FDI. But in addition to weak economic growth through much of the 1990s Canada's relative position as a location for globally-sourced foreign direct investment within North America has deteriorated substantially — despite absolute growth in both inward and outward FDI. Specifically, Canada's share of total North American FDI declined from about 26 percent in 1985 to about 16 percent in 1997. For major foreign investors, Canada is to some extent 'off the map'. The reasons are not entirely clear, but a lack of integration into the NA market may be a major contributing factor. There is a clear perception among many observers that Canada needs deeper links with the U.S. economy than NAFTA has provided thus far if this trend in FDI share is to be reversed.

2.5 What Are the Major Policy Issues?

Clearly, no Canadian government is contemplating greater formal political integration between Canada and the United States. Practically, the policy options for greater NA integration are in the range of a) strengthening NAFTA in certain key areas; b) pursuing policy convergence and, in some areas, policy harmonization; c) making potentially radical changes in certain domestic policy areas such as the currency, immigration, and tax policy, and finally d) considering progress toward a common market framework, if not in NAFTA, at least in the Canada-United States context. The last option is the most controversial. Progress towards a formal common market would require creation of a range of bilateral or NAFTA-based political and legal institutions which currently do not exist. The paper will discuss this spectrum of policies both as a response to the NA integration that has already occurred, and as a contribution toward the goal of promoting further North American or Canada-U.S. economic integration.

3. TRADE AND INTEGRATION: FREE TRADE AGREEMENTS, CUSTOMS UNIONS, AND REGIONAL AGGLOMERATION

3.1 Trade and Investment Patterns in North America

The basic evidence on Canada-U.S. trade and FDI over the last decade is well-known. Since the inception of the Canada-U.S. FTA, Canadian export volumes with the United States have increased dramatically with the U.S.-destined share of Canadian trade rising from 70 percent to more than 80 percent. Between 1989 and 1998, total trade volumes with the United States rose by 140 percent — far in excess of GDP growth. As a Canadian trading partner, Japan is a distant second behind the United States, taking only about 4 percent of Canadian exports. Canadian exports as a proportion of GDP have risen from the 27 percent range in 1988 to more than 40 percent in 1999. Canada continues to export heavily in the areas of resources and automobiles, although the share of other sectors such as electrical machinery, and business services has been growing rapidly. Canada is also the United States' largest trading partner — a fact few Americans actually know. Paralleling the growth of international trade over the same period has been a fall of interprovincial trade within Canada — from 27 percent of GDP to less than 19 percent. As emphasized by Courchene and Telmer (1998), Canada is evolving toward a series of linked North-South regional economies within the larger North American area, and away from an East-West orientation of trade between provinces.

On the FDI side, there has been a large growth in two-way FDI between Canada and the United States. In 1998, the United States accounted for about 67.7 percent of total inward FDI in Canada. The largest growth in the stock of U.S. FDI within Canada has been in the service industries (ex-FIRE) and in wood and paper. The more troubling trend for Canada, as noted in the last section, has been a dramatic decline in its share of North American FDI, from 26 percent in 1986 to about 16 percent in 1997. This reflects in part the strong position of the United States as a location for foreign investment by other large industrial country multinational corporations (MNC). Canada accounted for a little more than 9 percent of total FDI in the United States in 1997, although in recent years Canadian investors have been involved in some of the largest acquisitions in the United States. As is well-known, a great deal of this investment has been in the form of M&A activity. Some recent research takes a fairly sanguine view of these trends. For example, in an overview of regional integration agreements and their FDI consequences, Blomstrom and Kokko (1997) note that for both Canada and the United States “regional integration seems to have reduced the relative importance of intra-regional FDI, but stimulated inflows of FDI from the rest of the world. . . . For Canada, the net result appears to be close to zero, where increased inter-regional inflows barely make up for reduced intra-regional investment. In the U.S. case, there seems to be a positive net effect, with increases in FDI inflows from the rest of the world dominating the reduced Canadian shares.”³

From the perspective of the impact of the FTA and NAFTA, the trade trends appear generally consistent with the basic theory and empirical work on preferential trading arrangements. If anything, we can say that the results have been even more successful than one would normally predict.⁴ Historically, with the formal and informal barriers they present to commerce, international borders have substantially reduced international trade relative to internal trade. The well-known study of McCallum (1995) on Canada and U.S. province-state trade using a gravity model claims that trade between Canadian provinces in the mid 1980s was more than 20 times that between provinces and U.S. states. But at the same time, the FTA has been shown to be a powerful trade-creating force, with international trade now substantially exceeding intra-national trade. However, the growth in North American trade post-NAFTA is not unique; global trade has also increased significantly over the same period — at about twice the rate

of world GDP. Scholars have yet to agree on why this has occurred. But technological change in transport and communications, the end of the Cold War, and the shift to outward-oriented development policies in less developed countries (LDC) are all potential explanations.

The structure of NA trade does appear to be changing in a number of dimensions — geographically, by sector, and by degree of intra-industry specialization. A better understanding of the extent of these changes and why they are occurring should be part of a comprehensive research project on NA integration. Without further discussion, the following research issues warrant attention:

- R.3.1 To what extent is the increase in Canadian trade with the United States influenced by U.S. exports to other countries? Is Canada exporting indirectly to other countries by providing intermediate imports to U.S. firms?*
- R.3.2 Is Canada-U.S. trade in resource industries becoming more or less price-sensitive to international price and supply movements, or is trade in natural resources a reflection of deeper integration at the level of the firm and region, and thus less subject to extra-NA shocks?*
- R.3.3 Are NA changes in trade shares to any extent unusual in light of other non-NA regional trading patterns that have emerged in the last two decades?*
- R.3.4 Is NA trade likely to become a) more or less inter-industry based, b) more or less vertical or horizontal intra-industry trade, and c) more or less intra-firm based? It is true that for all three trends, there is no emerging consensus on where they might go, or on their implications for future trade relations between the NA partners.*
- R.3.5 Is NA trade tending to become more regionally-specialized in production as measured by value added or labour cost intensity? Is it true that Mexico is attracting labour-intensive activities, and the U.S. the bulk of the human capital-intensive activities?*
- R.3.6 What are the key causal factors in the decline of the Canadian share of NA FDI? What economic theories best explain the location of FDI within North America?*

3.2 The Regional Agglomeration Question

Historically, economic integration seems to have triggered two sets of divergent trends. In the case of the completion of the U.S. internal market, there was substantial specialization across regions in economic activity. Free movement of factors led to the concentration of certain industries in some regions. Economists from the neoclassical tradition argue that this will lead to a more efficient allocation of resources based on regional comparative advantage. With the completion of NAFTA and the EU single market initiative, a new set of policy concerns has emerged about the consequences of regional agglomeration within each of these areas. In parallel, some new theory and evidence on the impact of mobility on regional concentration of industries, and more particularly on regional income differences, have received a great deal of attention. This literature, based on the early work of Krugman (1992) [referred to as the *new economic geography* (NEG)], which thus far has attracted the most attention in Europe, raises the question of whether greater freedom of location on the part of manufacturing and service firms will lead to a re-allocation of activities across region in response to the forces of spatial agglomeration. In the EU, there is freedom of movement for labour and capital while NAFTA essentially

allowed for the free movement of goods and capital. The evidence thus far is mixed, but certainly in the United States there is evidence both of general economies of agglomeration, and industry-specific agglomeration or localization.⁵ The sources of agglomeration include general or industry-specific spillovers, as in the case of technological clusters (Silicon Valley), increasing returns to scale at the firm or industry level, factor cost advantages, and unique site-specific natural endowments. There is growing consensus in the literature on the presence of strong economies of agglomeration in manufacturing. Agglomeration can be either at the city or the regional level.⁶ The fact that the evidence is mixed is not surprising. In contrast to the notion that agglomeration causes dispersion in incomes, the growth-convergence literature points to increased trade and openness as a powerful force for reducing income disparities across regions. In the Canada-U.S. case, a natural question is whether greater economic integration in the NA context will lead some activities, in particular the new economy sectors, to agglomerate primarily in the larger U.S. urban areas, and how policy affects this agglomeration trend. These concerns are evident not only in the case of Canada vis-à-vis the United States, but also in the slower growing states of the U.S. relative to the faster growing states on the East and West coasts.

Closely related to the regional agglomeration question are two related issues upon which research is lacking. First, there is the possibility that the shift toward North-South and away from East-West trading patterns in Canada, emphasized by Courchene and Telmer (1998), will continue to be exaggerated. E-commerce may in turn be a technology that could easily exacerbate and accelerate these trends. If Canada also specializes heavily in a few industries, as predicted by the NEG theory, this is almost certain to occur. Second, and possibly more important, is the critical role that specialization within cities will have on trade and investment patterns. Cities are either economically specialized into financial, business services or manufacturing, with significant differences in education levels associated with these different city types, or they are diversified. Diversified cities tend to be larger than specialized cities, and diversity also tends to promote innovation. For example, Feldman and Audretsch (1999) find in a data set on U.S. product innovations in 1982 that 96 percent of all innovations were made in metropolitan areas, which account for only 30 percent of the U.S. population. Specialized cities have some advantages — stronger localization economies within the sector of specialization and thus the ability to attract new plants and firms entering that sector. But they also have disadvantages — less innovation and greater exposure to risk as the specific sectors/technologies rise and fall. Canada is a small country with a large geography and only four major metropolitan areas: Montreal, Toronto, Calgary and Vancouver. How much non-resource Canadian trade is being generated from the activity of these cities? In particular, how much of the newer high growth activity is located in these cities? The answer is almost certainly a lot. The question about whether Canada can sustain itself as a high-income country within an integrated North America almost certainly comes down to how these cities will fare in relation to major U.S. cities. We need to know a great deal more about the sources of competitive advantage for cities and the relevant policy levers than we do now. The absence of policy relevant research on this issue is striking.

R.3.7 How much of Canadian trade is specifically generated in the major metropolitan areas? How has NAFTA changed the specialization patterns within these cities?

R.3.8 Are localization economies, knowledge spillovers, or economies of scale driving agglomeration of knowledge-intensive sectors to particular regions in North America? Which Canadian regions are most affected? Would further NA integration tend to enhance or abate these forces on Canadian cities and regions?

3.3 The Case for a North American Customs Union

Currently, regional trade within NAFTA is organized along free trade area (FTA) principles. A step towards deeper regional economic integration would naturally involve a move towards a customs union, which would involve the harmonization of external trade barriers between Mexico, Canada, and the United States. This would have a number of positive economic effects. It would (1) reduce the administrative and efficiency costs of the rules of origin system (ROO) currently in place under NAFTA; (2) promote simplification of border procedures for both NAFTA produced goods, and non-NAFTA imports; and (3) promote more liberal external trade with non-NA partners if a common trade policy meant 'harmonizing down' to the lowest common external barrier. On the negative side, there would (1) be an obvious loss of national sovereignty on trade policy toward non-NAFTA countries and (2) a possible reduction in commitment of member states to the multilateral process under the WTO.

Rules of Origin

Rules of origin are an intrinsic part of FTAs as they allow member countries of an FTA area to liberalize against each other, but maintain independent trade policies vis-à-vis other countries. Krueger (1997) and others have been quite critical of rules of origin. ROO can serve protectionist purposes by providing an opportunity for individual interest groups to lobby to avoid competition from imports, and they can give rise to problems of bureaucratic implementation and interpretation. This leads to increased costs for producers. For example:

It is estimated that when EFTA countries' producers provided documentation on origin to enter EU markets duty-free, the cost of providing the documents were the equivalent of 3–5 percent of the delivered cost of the goods. Producers chose on occasion to pay the duties rather than provide the documentation necessary to establish origin.”⁷

Efficiency losses can emanate from an imperfect ROO system through trade deflection as firms seek to route imports through the country with the lowest external trade barrier. A customs union eliminates trade deflection with a common external quota or tariff barrier.

The proliferation of FTAs has complicated matters further by creating overlapping FTAs. Recently, NAFTA has experienced such problems as all three NAFTA partners have signed FTAs with other countries.

With one FTA, the problems associated with ROO are already troublesome. Moreover, since ROO are adapted in each case to the particular tariff structures of the trading partners in an FTA, negotiations must take place on new ROO for each new applicant wishing to join the FTA. That feature of a single FTA is a major problem with overlapping FTAs. Each new entrant provides an occasion for lobbyists to seek insulation (through restrictive ROO) and to generate delays as each applicant seeks admission. With overlaps, even more export protection and disputes with customs over origin and satisfaction of ROO would likely result. Inevitably, the customs clearance process itself would become more complex, if not more prolonged.⁸

In addition, under overlapping FTAs, factors that may bias the location choice of local producers will also affect potential foreign investors as they seek out low-cost locations.⁹

Estimates of the general equilibrium efficiency costs to NAFTA countries of the ROO system are few. One general equilibrium calculation by Appiah (1999) suggested they might be on the order of 2–3 percent of NAFTA GDP, not an inconsequential number and one which excludes rent-seeking costs. More worrisome for Canada and Mexico is the fact that the existence of ROO creates uncertainty for potential investors as to the actual application of the rules. This uncertainty contributes to the bias toward investment in the large country market (the United States). A full customs union would eliminate at least in part these problems.

R.3.9 What would be the consequences of eliminating ROO within NAFTA and of harmonizing external trade barriers? The analysis should pay close attention to the transaction and administrative costs of the current ROO system and to its impact on the location of firms within the NAFTA area.

R.3.10 What are the long-run economic consequences for Canada of the proliferation of overlapping FTAs within NAFTA? These would be bilateral FTAs between Canada and other countries, and bilateral FTAs between the United States and other countries.

Regionalism vs. Multilateralism

There is a voluminous literature on the political economy and welfare consequences of regionalism versus multilateralism, both pro and con. One argument is that regionalism runs counter to multilateral liberalism and may create constituencies for regional protection. On the other hand, as is equally often noted, ‘regionalism is here to stay’. It reflects the reality that recent FTAs in fact go far beyond trade liberalization and deal with investment issues, regulation, product standards, competition issues, etc., on which little progress was made in the multilateral rounds.¹⁰ NAFTA and NA integration concerns are being driven by many of these non-trade issues. Since neighbouring countries trade a lot more with each other than with distant partners, the incentive to resolve these irritants to trade between neighbours is much greater. Would a move towards deeper NA economic integration weaken the commitment of Canada, Mexico, and the United States to the WTO process? Undoubtedly, this may be the case or it may not. In general, to the extent that liberalization proves to be economically positive in the long run, it may further a global liberalization agenda. Regionalism does run into natural political constraints which may prove to be overriding. For example, a full NA customs union would require a common and joint negotiating position of the three NAFTA partners within the WTO. Many would argue that this implies a degree of policy coordination and sacrifice of national sovereignty that is infeasible given the constraints of domestic politics in each member country.

Steps Towards a Customs Union

Economic objectives would best be served by achieving a customs union, while demands for national sovereignty are more consistent with the independence in trade policy that FTA offers.¹¹ In reality, of course, there is a trade-off between these objectives. A major objection to movement towards a custom union would be the loss of sovereignty for each country in its ability to impose contingent protection such as countervailing duties (CVD) or anti-dumping duties (AD). This has been a long-standing issue within NAFTA. There were intentions to make some inroads on these problems but progress has been slow. In principle, complete harmonization of external trade policies in NA would call for a common administered

protection regime. A formal and complete NA customs union would imply that these procedures be available to all NA-based firms. This would undoubtedly be problematic to accommodate within the U.S. or Canadian legal regimes on trade, and major changes to these would have to be negotiated.¹²

It may be useful to create an intermediate policy objective which secures many of the benefits of a customs union but without the full harmonization of all domestic trade policy that the latter requires. Admittedly, this is a difficult step. Some possibilities do suggest themselves however. For example, it might be possible to harmonize all external tariffs, and possibly quotas, without harmonization of the administrative trade policies (CVD and AD) of the three countries. This would mean that the bulk of NA trade procedures dealing with ROO could be eliminated, substantially reducing transaction costs, eliminating incentives for trade deflection, and expediting border procedures. The main problem remaining would be when one country in the customs union chose to impose temporary duties under its administrative protection regime, but the other members did not. How could this be accommodated? For example, if Canada chose to levy AD duties against a particular type of Chinese shoes but the United States did not, how could trade deflection of imports of the shoes into Canada through the United States be avoided? With final physical goods a partial solution is the following. All goods either produced within NAFTA, or imported and subject to the common external tariff, could be labelled 'NAFTA goods', which would exempt them from a number of border procedures referred to above. Such labelling would be subject to monitoring, enforcement, and penalties in the event of illegal labelling. Cooperation amongst NAFTA customs authorities would be necessary at external borders, both to collect the common external tariff and to enforce exclusions from NAFTA labelling in the event of an administrative trade action by one of the three member countries. If Canada, for example, chose to levy an AD duty on a particular type of Chinese footwear, it would be declared ineligible to receive a NAFTA label no matter at which border it arrived.

In the case of intermediate goods or components (for example, a semi-conductor chip) that showed up at the Canada-U.S. border without a NAFTA label, they would be subject to the usual external border procedures. This would not create a seamless border but it would reduce a number of costs associated with the existing ROO system. The remaining problem is with goods that embody parts or components upon which one NAFTA country has levied a temporary duty but not another NAFTA country. In the case of well-established manufactured goods, it could work similar to the way the GST system now works, for example in the case of U.S. retailers shipping to Canada. A U.S. manufacturer shipping to Canada would be required to pay the Canadian duty on the component when the final good is shipped to Canada. The final good would be ineligible for the NAFTA label unless compliance was assumed. Undoubtedly, this would be an imperfect system, but at least the imperfections would be the exception rather than the rule. For high profile goods subject to an AD or a CVD, it would be easy to monitor compliance, while the bulk of NA trade could operate within a fairly seamless market. Among other possibilities, relying on the use of technology might well become feasible. In general, attempts should be made to move as far as is practically possible towards a customs union.

R.3.11 What are the administrative and technological means by which NAFTA can eliminate the ROO on the bulk of NA trade, while retaining the ability of individual countries to selectively apply AD and CVD actions?

4. TOWARDS A COMMON MARKET

4.1 Preliminary

In this section, we look at a number of areas where policy harmonization is the hallmark of a common market. Under other circumstances, these would be viewed as domestic economic policies, over which national sovereignty is a paramount concern. Within a free trade area, these policies would not be harmonized. At least that is the theory. The real world is substantially more messy. For example, under NAFTA there are a number of areas in which some attempts to harmonize were made: environment, labour standards and investment rules. Even the WTO under the GATS (General Agreement on Trade in Services) is now seeking to implement *national treatment* for investment, and to secure access for service firms in what were previously viewed as non-tradable sectors. The other part of reality is the fact that sub-national governments — states and provinces — have substantial powers. When integrating federal states this is a major concern, complicated by the fact that different nations have different assignments of powers across levels of government either *de facto* or by virtue of the constitution. The Europeans took a very deliberate top-down approach towards harmonization, with the ultimate objective of achieving political union of the EU states into a federal structure. The North American integration ‘project’ is quite different. While NAFTA represents the more formal aspect of such integration, a great deal of it is a ‘bottom-up’ pragmatic approach, involving the interested parties. Border water management and product standards are good examples. Border water management is done by the relevant border states and provinces. In the case of product standards, cross-border industry associations are often the responsible party. The other characteristic of North American integration is that it has tended to be a process of policy convergence rather than formal policy harmonization. Convergence occurs because of the realities of managing complex interdependent economies, and the role of political competition between states and provinces. In some cases, it is simply a matter of the smaller countries choosing to harmonize as a best response to the ‘first-mover’ policy of the United States. In other cases, competition occurs between countries, but equally important is the competition between states and provinces. The prevalence and acceptance of inter-state policy competition is in contrast to the European model of economic integration. The fear is that such competition induces a ‘race-to-the-bottom’ phenomenon if unconstrained. These fears are commonly expressed in areas such as the environment and capital taxation. The evidence on this does not seem conclusive however. In the end, whatever political and economic integration occurs is supported by a commitment to open markets, capital and labour mobility, backed by the discipline of competition among the governments of the jurisdictions making NAFTA. This is not to imply that cooperation and coordination is not necessary in some areas, but that less of it may be needed than the EU Commission seems to want.

The view taken in this section is that North America can secure a very high level of integration with at least a substantial progress towards achieving a common market without a formal market agreement. This can be achieved via the processes of a) policy convergence driven by pragmatic considerations and competitive pressures within an integrated North American region, and b) explicit cooperation when necessary. Formal cooperative agreements when called for can be negotiated between national governments, perhaps embedded in NAFTA itself, between the states and provinces, particularly across the border regions, and between interested industries, or individual organizations.

4.2 Border Issues

A major component of a comprehensive research program on stronger North American integration should be a re-examination of border costs and border management. How large are border costs? Do border costs seriously reduce the potential economic gains of greater movement of goods and people between the NAFTA countries? Some additional evidence on this question would be worth pursuing. Helliwell (1999) argues that borders matter, based on an examination of trade patterns, and he further argues that the benefits of additional trade are probably low. On the other hand, the fact that border trade has grown rapidly in so many regions of the world suggests that border barriers were higher than previously thought.

R.4.1 Research is needed on the extent of transaction costs imposed by border procedures and on how procedural changes at the border could reduce these costs.

R.4.2 What would be the welfare and trade consequences of zero border costs within NAFTA?

Of course, border issues go far beyond trade and tourism. In particular, a range of security concerns must be dealt with including illegal drugs and other prohibited goods, unauthorized migration, terrorism, and interception and collection of fees on 'dutiable' items. Reconciling the security aspect of the border while reducing economic transaction costs is a major challenge.

There has been substantial official progress on improving border management. The NAFTA countries signed the Shared Border Accord in 1995, which established new mechanisms for managing the trans-boundary movement of goods and persons, including reducing the number of stops for carriers moving goods-in-transit through either country; promoting the use of joint or shared border facilities; and introducing new technologies to detect drugs and to enable remote inspection of travelers. At the Ontario-New York border, for example, an experimental program is in place for the automated handling of NAFTA truck traffic.

In a recent report from the Carnegie Endowment for International Peace, an interesting and provocative set of proposals on NAFTA border issues are presented.¹³ They argue essentially for an 'open borders' concept within NAFTA. Part of the proposals envisions a dramatic devolution of border management to the local communities involved. The view is that NAFTA's internal borders could gradually become irrelevant to the point where their abolition could proceed *without any real compromise* on any of the important security or revenue collection priorities of each partner. This implies, of course, a substantial change from the current situation. The authors propose a number of steps to arrive at a 'borderless NAFTA'.

1. Each border inspection agency should consider whether any of its functions could be done elsewhere (e.g., Customs Services inspecting and *collecting all applicable duties*) specifically at the point where the cargo is loaded in North America. For non-NAFTA goods, the inspection and collection of tariff duties for *all NAFTA partners* would be done only once at the first point where cargo from a non-NAFTA country enters NAFTA space.
2. Non-NAFTA immigration controls could be done at a person's first point of entry into NAFTA space.
3. A common visa regime for Canada and the United States could be implemented for non-NAFTA entrants.

4. Complete liberalization of movement of each other's nationals between Canada and the United States.

This set of proposals would make the Canada-U.S. border begin to look very much like an internal EU border. This is clearly some way off, but nonetheless a visionary policy objective that merits serious consideration and research.

4.3 Labour Mobility

One hallmark of a true common market is labour mobility. NAFTA has some provisions on labour mobility — in particular the temporary migration of business persons and professionals under the TN visa program, which has been extremely successful. Within a true common market there is labour mobility but not necessarily citizenship mobility. That is an individual's rights to social and transfer programs can be defined by citizenship and not available unless one resides in one's home country. Practically, however, in both Canada and the United States most citizenship rights currently go more or less in hand with residency. Increasing labour mobility therefore may or may not imply increasing access to local social programs and public goods for non-citizen workers. This is the case, for example, for workers moving between cantons within the Swiss confederation.

Why is Labour Mobility Likely to Become a Bigger Issue in the Future?

There are a number of specific reasons why labour mobility within NAFTA is likely to become one of the more important items should a deeper integration agenda go forward.

1. The growth in service trade is expanding rapidly between member countries, particularly in business services. Given the potential size of this market, it is reasonable to assume the after-market and complementary aspects of most service activity are often both firm- and place-specific. Customers want to be serviced in their home location. The existing TN visa program goes part way in this regard, but reducing border frictions completely for these types of labour flows would facilitate better integration of service markets and stimulate growth of Canadian service exports to the United States.
2. MNEs routinely move staff across borders and the ease with which this is accomplished can affect FDI decisions. Reducing the barriers for MNEs to easily move staff between Canada and the United States may help to remove the bias against Canadian locations for North American-based FDI. This would help Canada attract its share of North American-destined FDI and, at the same time, discourage Canadian firms from moving South of the border.
3. Telemobility is likely to increase in importance. Already, virtual mobility is a substitute for physical labour mobility in many areas. Call centres in various Canadian cities that service the entire NAFTA market provide in essence a form of mobile labour service. The Internet has dramatically enhanced the ability of firms and individuals to deliver labour services via digital-based telecommunications. Doctors located in one city assisting in performing surgery in another and university professors delivering courses via distance learning technology are two common examples — but there are many others. Virtual labour mobility is perhaps better discussed in the context of service markets integration, but it is not clear that this is the correct economic perspective. As in the definition of any market, the key issue is the degree of substitutability between alternative sources of supply, in this case the virtual and the physical

factor supply. Firms may seek to source labour via the Internet when possible. In an integrated market, the location of virtual labour services should not be an issue in principle. Reducing barriers to firms in these types of virtual employment decisions should be a major objective. Most worker-firm relationships are heavily conditioned by local labour laws and various tax policies. It would be advantageous to create new forms of cross-border worker-firm contractual relationships that would facilitate the telemobility of labour services across borders. This would expand the NA market for virtual labour services, and potentially increase employment of skilled labour in those regions where job growth has been slow but labour supply has been ample.

At the moment, there are few restrictions beyond general labour market regulation on this type of activity. However, that situation could change. If telemobility of labour services grows, we can expect labour that is adversely affected by it to seek such restrictions on competition. A North American integration program should at a minimum try to preserve the rights of NA-originating labour to deliver services digitally in any NA location from any other NA location when this is technically possible and economically desirable.

4. The brain drain debate. Within Canada there has been, over the last two years, serious concern about the loss of highly-skilled workers to the United States, particularly in the high technology area. The mobility of high-tech workers is de facto a reality as long as supply shortages in this area persist in the U.S. economy. Initiatives to further ease the extent to which workers can move between Canada and the United States may encounter public resistance in Canada given the concerns about the brain drain toward the United States. To be fair, the brain drain is as much about other policies such as taxation and currency depreciation as it is about labour markets. The current degree of mobility, however, is a function of current circumstances and not a permanent institutional characteristic of the NA labour market. What is needed is research on the consequences for Canada and the United States of a state of permanent mobility for most types of labour. There are a number of ways to tackle this task. One research possibility would be to look at the smaller European countries, Ireland for example, and determine what has happened to the demand for their skilled workers in response to the EU integration program.

The Welfare and Growth Consequences of Greater Labour Mobility

Full labour mobility is not absolutely essential in a common market but generally the consensus view is that the greater the mobility the larger the efficiency gains. Certain types of skilled labour are already quite mobile — nurses for example — but that mobility is dependent upon tight labour markets for that occupation. On economic grounds alone, the long-term policy objective would be to arrive at a situation where mobility is not dependent upon either the skill level or the state of local labour markets. In the spectrum of practical policy options on labour mobility, one can imagine a number of piecemeal improvements.

The NAFTA studies did not identify the static or dynamic efficiency gains to internal NA labour mobility — this remains a largely uncompleted task for general equilibrium modellers. Given the human capital intensity of the new economy, this a potentially an important research issue. In addition, there is a need for research on the distributive consequences of greater labour mobility. Disaggregation by skill and/or occupation will be a necessary feature of this research program. A potential consequence of increased cross-border movements is the knowledge spillovers that might result. While there is now an

extensive literature on R&D spillovers and aggregate *human capital* stock, we know relatively little on the contribution of international labour flows to knowledge spillovers and thus productivity gains.

- R.4.3 *What is the degree of mobility by skill and occupation internally to Canada and the United States and how responsive would the labour flows be to wage differences between the two countries should internal NA migration restrictions be reduced?*
- R.4.4 *What would be the general equilibrium consequences of increased 'freedom to move' on labour supply in various occupations?*
- R.4.5 *Skill-biased technical change is widely regarded as increasing wage inequality in both Canada and the United States. Would greater labour mobility within North America exacerbate or dampen this trend?*
- R.4.6 *How would increased NA labour mobility affect cross-border knowledge spillovers, technology transfers and productivity growth?*

Some Policy Dimensions with Respect to Labour Mobility

The NAFTA TN visa program has led to increased mobility for professionals and basically anyone with a technical university degree. A useful approach would be to increase the scope of that program to other classes of labour by creating a negotiated schedule of dates for liberalizing movements of various occupations. Generally, one could imagine moving from the highest to the lowest skill categories. Certainly, it would be relatively easy to extend the program to technical and trade workers, for example.

There are some specific concerns in a couple of areas. On the human capital supply side, some are worried about opening the markets for *higher education* in Canada under NAFTA.¹⁴ Many of these fears seem exaggerated, but research on this issue would be useful. A similar comment applies with respect to Canadian immigration policy. Would increased NA labour mobility imply that the United States would dictate Canadian immigration? The simple answer is no, but immigration issues — in particular border management issues — are a concern, and greater cooperation would be useful in that area.

NAFTA created labour institutions to specifically address the issues of labour rights in a cooperative spirit. The North American Agreement on Labor Cooperation (NAALC) is a historic agreement. It represents the first instance where labour standards have accompanied a trade agreement. However, the NAALC does not impose harmonized labour standards on member countries. The agreement has created institutions and a process that can be used by any person to raise labour concerns arising in the territory of another NAFTA country. In general, the *labour standards* issue is not one likely to be of high priority in the Canada-U.S. context, although with respect to greater integration with Mexico the issue may need revisiting.¹⁵

4.4 Tax Competition and Integration

There are two major tax issues (at least) linked to closer NA integration. First, as deeper integration occurs, business location may become more sensitive to tax incentives relative to other factors. Business tax competition is an important force that impinges on the choice of tax levels and bases by governments. Secondly, a similar factor is at work with respect to personal taxes (income and consumption), although the effects may not be as pronounced, as individuals are more concerned about non-tax factors in choosing where to live. Tax considerations are often cited as one factor leading to the brain drain of high-

technology professionals from Canada. Taxation is also cited in virtually all surveys as a major factor for firms locating senior management functions in Canada. For this reason, the type of personal tax system that Canada chooses to have will undoubtedly influence FDI decisions. Formal evidence on the impact of personal taxation on locational decisions of firms and individuals is sorely lacking and needs further research. The rest of this section deals with the locational effects of business taxation about which a good deal more is known.

The least controversial, and most solidly established, case is that high corporate tax rates in small open economies are bad for investment, and furthermore are poor at raising revenue.¹⁶ The ‘marginal efficiency’ costs of taxes on corporate income stand in the range of 2 to 10 times the marginal efficiency cost of all other taxes. With a fixed supply of world capital in the short run, countries may be essentially engaged in a zero-sum game in competing with each other for capital. This observation is at the root of various proposals for tax policy coordination. Canada cannot change what is done in most other countries, but its growth will be conditional upon getting a reasonable share of global investment. The current state of business taxation in Canada is regarded by many as being seriously non-competitive. The current average OECD corporate tax rate is 34 percent — the average Canadian rate is 43 percent. Under the 2000 Budget, the statutory rate will go to 36 percent by 2004 — about the same as the United States. However, Canada will still have a rate exceeding that of a number of other countries, including Australia, Sweden, Ireland and the United Kingdom. How important is this?¹⁷

In the case of either national economies facing large multinationals, or sub-national areas such as provinces or states facing firms making location decisions within a larger national economic space, there is a growing number of studies showing that the level of investment is increasingly tax sensitive. It is interesting that most of these studies have been completed within the last 8 to 10 years, although the basic idea of ‘tax competition’ has been around for a very long time.

Just how sensitive is FDI to taxation? In a recent survey, Hines (1999) puts the median tax elasticity of investment with respect to after-tax returns at -1 , which translates into a tax elasticity of about -0.6 , that is a ten percent increase in the tax rate reduces FDI by about 6 percent. However, newer studies are finding much larger tax effects. For example, Altshuler, Grubert and Newlon (1998) examine investment decisions by U.S. manufacturing affiliates in 58 countries from 1984 to 1992, and they find a tax elasticity of FDI of -3 in 1992 relative to -1.5 in 1984. This very substantial increase suggests that the elasticity of supply of outward FDI from the United States to any single country has increased substantially. The implication is that the net impact of a Canadian tax cut on U.S. FDI in Canada would be twice as large as it was 15 years ago. Given the economic integration that occurred in North America over the 1990s, these numbers are likely to be even higher today than they were in 1992. There is also a lot of evidence on inter-state mobility of business in response to changes in state and local taxes. Within an integrated NA market, these studies would indicate how business would shift between Canadian provinces and U.S. states in response to changes in the rate of taxation in one state or province, holding the others constant.

Wasylenko (1995) reviewed 75 studies of employment growth, investment growth, firm location and taxes at the state, city and regional level. In these studies, he finds estimates of the tax elasticity of economic activity in the range of -0.1 to -0.6 , that is a 10 percent reduction in taxes by a state government will raise employment or investment in that state by 1 to 6 percent, holding the taxes in other jurisdictions constant. Not surprisingly, jurisdictions compete for business by offering a combination of public services and taxes. The tax effect is extremely powerful, holding the level of services fixed. A 10 percent reduction in taxes induces more than a 10 percent increase in the level of business activity,

usually measured by employment. However, the power of these effects does depend on the degree to which states differ in their initial tax levels. As Wasylenko observes:

The effect of a specific state's taxes depends not only on the elasticity, but also on the extent to which the state's overall (state and local) tax levels are significantly different from the average of the states it competes against. A large deviation from the average tax level, multiplied by the tax elasticity, will yield a large location, employment, or investment effect.

In conjunction, these studies strongly support the view that business taxes can have a powerful effect on business location. On balance then, one can conclude with considerable certainty that lower taxes on business are likely to attract firms that are ex ante mobile within an integrated NA market. Moreover, to the extent that Canada does not remain tax competitive with the United States, Canadian firms that can do business from a U.S. location will, over time, tend to migrate to the United States.

There are two ways to look at the tax issues. Deeper NA integration may force Canadian governments to more closely match U.S. tax levels — a sort of lowest common denominator equilibrium — although this is far from certain given the observed variability in tax rates across U.S. states. Alternatively, one could take the view that, by forcing more competition on governments, closer NA economic integration would facilitate social-political product differentiation across states and provinces that would be reflected in different tax/public good/social policy mixes.¹⁸ Local governments would compete by niche or differentiation strategies rather than Hotelling-like minimum differentiation strategies. Whether or not this actually occurs is an open question that would merit further research. By and large the available research on tax issues is reasonably good thanks in part to the work of the Mintz Committee. However, a couple of issues deserve further attention:

R.4.7 How important are differences in personal taxation between Canada and the United States to the locational decisions of MNEs within the NA market?

R.4.8 Will NA integration induce more extensive tax competition between Canadian provinces than is currently the case?

4.5 Exchange Rates and Monetary Union

During 1998–99, there was a vigorous debate in Canada on the merits of the current floating exchange rate regime, as well as speculation on the merits of some form of monetary union with the United States.¹⁹ The advent of the Euro in January of 1999 provided considerable impetus to this debate. Certainly, one aspect of deeper NA integration could be closer monetary relations, perhaps even a single North American monetary union, in which the Bank of Canada would become the 13th federal reserve district. In the medium term, any move in that direction would imply a change of monetary policy in Canada, from targeting the domestic inflation rate towards a fixed exchange rate regime. The arguments linking economic integration and movement towards a fixed exchange rate or single currency area can be summarized as follows.²⁰

The Productivity Consequences of Floating Exchange Rates

Exchange rate depreciation provides a cost disincentive to investing in productivity improvements. A 10 percent fall in the dollar also means a 10 percent rise in the price of U.S. or U.S.-priced capital equipment for productivity enhancements.

One consequence of an undervalued exchange rate is that it protects inefficient operations from otherwise appropriate market signals. In the Canadian case, the robust demand growth in the [mid-1980s] recovery plus the low exchange rate probably delayed appropriate productivity-improving investments in our manufacturing industry until much later in the decade.²¹

Long-run Impact of Floating Rates on Industrial Structure and Comparative Advantage

An exchange rate misalignment problem can have different long-term consequences during periods of major structural change as in the case of Canada's shift away from a resource-based economy and towards one increasingly driven by human capital and technology. In the former, floating rates are less of a problem, since organized commodity spot markets mean that most resource exports are already priced in U.S. dollars. In this case, exchange rate volatility largely affects residual resource rents. However, in non-resource areas where (unhedgable) long-term bilateral contracts loom important and where the economy has a significant import-competing manufacturing sector, movements in the exchange rate are bound to be problematic. There are two main problems here: one, a lack of predictability in terms of cost structures and two, the dynamic response of human capital (skilled labour) to the exchange rate misalignment. From the perspective of the firm:

The problem arises because free trade requires stable and predictable rates of international exchange and cost calculations to support the volumes of trade and degree of specialization associated with it. . . . Unfortunately, floating exchange rates provide inherently volatile and unpredictable cost structures Students of international business observe that major determinants of direct international investment decisions have been exchange rate volatility and anticipated protectionist actions in the markets of the major industrial countries. The argument is made that flexible exchange rates have induced a pattern of location based on criteria other than comparative advantages, thus undoing many of the benefits achievable through international trade²²

The dynamics of a response to a misalignment vary significantly with the human capital intensity of a given sector. For human capital intensive enterprises, firm exit (or re-location) is the ultimate response in the case of overvaluation. With an undervalued exchange rate, the effect of the depreciation is to shift income from wages to profits. Wages in the U.S rise sharply relative to those in Canada and skilled labour begins to migrate in response to the higher paying jobs abroad. For efficiency-wage reasons, firms resist raising wages in the short run choosing to let the best workers leave in response to the external U.S. wage offer. Both exchange rate volatility and misalignment can have permanent effects due to their consequences on investment and the reallocation of resources across sectors. The net impact of this is that, as the United States shifts to high technology/high growth sectors, the exchange rate essentially locks in a comparative advantage for Canada based on resource extraction.²³ On the other hand, with falling resource prices, Canada's ability to generate and sustain high-wage jobs depends ultimately upon sustaining human capital intensive, but otherwise footloose, industry within the North America market.

North-South Economic Integration Between Canada and the United States

While common currencies and large volumes of trade go hand in hand there are important questions as to how important the currency regime is for trade. As pointed out in section 3 Canada and the United States are increasingly integrated on the basis of trade and investment flows. In contrast with the 15 countries comprising the European Union, this integration has gone much further. On average, 62.9 percent of these 15 countries' exports are to their sister EU countries, whereas 82.0 percent of Canada's exports are to the United States (Courchene and Telmer, 1998). In terms of GDP, EU exports to sister countries represent 16 percent of GDP whereas Canadian exports to the United States are 30 percent of GDP. At the aggregate level, Canada is integrated trade-wise to the United States to a greater degree than the average EU member is to the EU. Hence, on *economic integration* grounds, the argument for a common NA currency from Canada's vantage point is at least as compelling as that for the average EU member state.

Given that Canada-U.S. trade is already large, would a common currency have that large an effect? Rose (2000) estimates that common currencies more than triple the volume of trade holding other factors constant. Frankel and Rose (2000) look at the impact on income growth of adopting a common currency for countries that trade a lot with one another. They get some interesting predictions for the two NAFTA partners of the United States. The estimated impact of adopting the U.S. dollar should increase trade in Canada by 184 percent (as a percentage of GDP), and the GDP impact is predicted to be 81 percent. In comparison, if Canada decided to adopt the Euro, the figures would be, respectively, 36 and 3 percent. However, the authors are themselves suspicious of these large numbers, and thus assert: "Indeed, for Canada and a number of other countries, the predicted effect is too large to be believable." They conclude: "A country boosts its income when it adopts the currency of a natural trading partner, one that has high income, and preferably is geographically nearby as well".²⁴

Pricing in Product and Factor Markets

Flexible and volatile exchange rates encourage price setters to delay changing prices or re-negotiating nominal contracts in the face of a real shock. In labour markets, wage negotiations can be hampered by the inability to make firm cost comparisons between similar industries in different countries. The ability of small highly open economies such as Ireland and Finland to operate successfully under fixed rates suggests that, even though these countries faced differential shocks relative to core-Europe (the region against which they are fixed), price- and wage-setting institutions respond endogenously to the exchange rate regime in which they operate.

Exchange rate changes induce asset price changes. Changes in nominal exchange rates impact on the foreign currency values of assets and liabilities. In particular, Canadian assets priced in Canadian dollars become cheaper with a depreciation of the Canadian dollar. This can induce a host of wealth effects in the economy. One is referred to as "fire-sale FDI." Foreign firms can and do acquire Canadian firms (whose assets are priced in Canadian dollars) at bargain-basement prices. Beyond this, Canadian firms face higher acquisition costs in terms of entry to the U.S. market. Also, to the extent that Canadian and U.S. equity markets are integrated, Canadian firms' balance sheets deteriorate in U.S. dollars and this limits their ability to raise new capital in U.S. markets. Finally, firms that have U.S. dollar liabilities suffer from a deteriorating balance sheet when the exchange rate depreciates.

The implications of these observations with respect to Canada-U.S. exchange rate arrangements are as follows. First, one can expect that Canadian wage- and price-setting institutions would also change, should the exchange rate be removed as a nominal adjustment mechanism between the two economies. Second, commodity risks would be more usefully diversified through capital markets and other risk

management tools, rather than accommodated through an aggregate adjustment in *all* relative prices between the two economies, which an exchange rate change induces. Third, an exchange rate depreciation, even if it imparts a short-run competitive cost advantage, will almost certainly carry with it other less beneficial asset-price effects which can be detrimental to longer-run growth.

Transactions Costs Efficiencies of Single Currencies

The use of money is like language; there are a large number of efficiencies which arise from use of a common standard. Transactions costs from currency conversion are typically small, on the order of 0.5 percent of GDP. A much broader range of transaction costs now exist as a consequence of the border and the use of two currencies which fluctuate in value against each other. For example, Canadian firms operating in the North American market could eliminate the accounting costs which arising from the use of two currencies in a common currency business environment. Companies which currently hedge exchange rate risk would not find it necessary to do so, and most of the costs associated with providing exchange-rate-related derivatives would no longer be necessary. Menu costs associated with providing price information and invoicing in two currencies would be eliminated, which might prove particularly important to e-commerce firms. Capital markets would be deeper and interest rate spreads on government and corporate debt would be reduced, thereby improving the efficiency of financial intermediation and reducing borrowing costs in Canada. Canadian issuers of new equity offerings would find a larger market in the absence of exchange rate risk. In product markets, price discrimination across national markets would be less prevalent, resulting in better price comparison information among consumers.

On balance, these are compelling arguments for adopting a single currency in NA. Most of the gains would be captured by Canada and Mexico as they would be adopting the world's premier reserve currency. Monetary independence is still highly valued on grounds of national symbolism, so politically any move in this direction will proceed cautiously.

4.6 Regulation and Competition Policy

Common markets are often conventionally defined by a uniform regulatory and competition policy regime. A fundamental question is how far it will be necessary to go towards a fully integrated competition and regulatory regime in NA to capture the major economic benefits of a common market.

Regulatory Policy

The extensive literature on regulatory harmonization in the European Union provides a natural starting point for a discussion of more closely integrated regulatory policies. Within Canada, the subject of regulatory competition and harmonization has also received extensive treatment in the policy and academic literature on federalism. The NAFTA agreement went a considerable distance in dealing with product, health and safety standards and these matters continue to receive attention. The analytical framework laid out in the economic theory of federalism starts with the assignment of a particular function to a level of government. *Subsidiarity* is the basic principle that a particular function of government should be assigned the lowest level of government in the absence of compelling cost-benefit calculus to the contrary. Given an assignment of functions to different levels of government, there is the matter of how different jurisdictions recognize their respective regulatory standards. The three basic principles used are:

- national treatment,
- mutual recognition and
- full harmonization.

Within NAFTA, depending on the area of regulation, there is a substantial mix across these approaches. The process seems to be working well; one characterized by pragmatism with sufficient scope for competitive differentiation across jurisdictions where warranted.

In both Canada and the United States, there have been parallel experiences in de-regulating in a number of sectors formally characterized by public monopoly and more or less closed borders; these include the transport industries, but also electricity, telecommunications, financial services and agriculture. In all cases, these sectors have moved in the direction of being part of the larger NA market, in which firms both export and import. How and whether to preserve competition in these industries is currently a major issue on the policy agenda.

Competition Policy

Along with liberalization in trade and investment, increased opportunities for market entry have opened up in a wide range of service and manufacturing sectors, including some that were previously publicly-regulated monopolies.²⁵ As entry into these sectors occur, competition policy comes into play in two ways. First, in circumscribing the anti-competitive actions of the incumbents, and second in defining under what circumstances mergers, often of a cross-border nature, are admissible. The policy issue is complicated by the fact that the definition of the relevant 'market' is no longer limited to one country. Thus, of necessity, economic integration calls for some form of coordination across national competition policies. How much is a matter of debate. Some experts such as Carstensen (1981) have argued that a single competition policy is a necessary complement to NAFTA. The EU has a single competition policy and associated legal framework one would expect in a full common market. The more conventional view in Canada and the United States is that independent competition policies are both necessary and valuable, but cooperation is likely to prove increasingly necessary.

*Increased international cooperation has the potential to facilitate more effective enforcement of competition laws, particularly in the context of transnational mergers and other business arrangements. It can also help to reduce uncertainties arising from multi-jurisdictional review under potentially conflicting standards.*²⁶

Historically, the Canadian approach to competition policy has been heavily dependent upon the *industrial structure* consequences — in particular the issue of foreign ownership, size or scale of enterprises in the domestic marketplace, and the importance of domestic versus foreign competition as a market discipline device. It is universally agreed among economists that preserving competition is a good thing. But non-economists often have different concerns. Most recently, the competition objective has clashed with efforts aimed at preserving certain domestic markets for political and social non-economic objectives. This has occurred in banking, airlines, and railways, among others. In addition, the cultural industries have long been protected in a variety of ways and were explicitly exempted under NAFTA. It is clear that there is a major tension in Canadian policy at the moment in these areas.

The Canadian Industrial Structure Question

Historically, both protection and monopolies have been allowed in Canada, and at times promoted due to concerns about the small size of the Canadian market and the vulnerability of domestic firms to foreign competition. These issues are once again front and centre on the policy agenda with the recent Air Canada-Canadian Airlines merger, and the prohibition imposed by the Minister of Finance on bank mergers in 1998. At the same time, scale economies and efficient firm size are on the increase. Industry Canada research has shown that there are systematic innovation and productivity problems in SMEs in Canada. Market access and economies of scale continue to be an issue for Canadian business. Moreover, foreign acquisition of Canadian business has been front page news in the media throughout the last couple of years. The Business Council on National Issues, for example, expressed great concern at the extent of foreign takeovers of major Canadian corporations.

The Canadian industrial structure is an important issue in the context of deeper North American integration because (a) it cuts across a range of existing regulatory, trade and competition policies, and (b) there appears to be a clear trade-off between promoting domestic control of the corporate sector and the market access benefits brought by deeper global integration. Canada, like many modern industrial democracies, has placed considerable value on having national companies headquartered in Canada, employing Canadian management, and identifying with Canadian social, cultural and political institutions. It appears that most of the post-war trade liberalization and deregulation was consistent with the preservation of a distinct Canadian corporate identity. Moreover, a number of Canadian corporations have become successful MNEs with a prominent global presence. A fundamental policy question is whether deeper NA integration threatens this important non-economic objective, or whether these fears are unfounded. Ireland, for example, seems to have done extremely well with relatively little in the way of an Irish corporate identity. My own bias is that it would be a mistake to sacrifice the benefits of competitive markets in an attempt to promote the Canadian corporate identity. Unlike the U.S. economy, competition in many industries cannot be sustained by domestic Canadian competition alone. The 'Porter model' of achieving international competitiveness via domestic competition may simply not work in many sectors in Canada. This leaves two options: either protected monopolies (possibly regulated), or competition that can be sustained by allowing foreign entrants. The latter is clearly preferable based on economic criteria. This suggests the following research questions.

R.4.9 How will the Canadian corporate sector fit into a larger NA business model, and can any national distinctiveness be preserved in this integration?

R.4.10 Will deeper NA integration tend to foster the growth of large Canadian-based corporations, or is it more likely that the Canadian corporate structure will become a non-identifiable part of the U.S. corporate structure? If the latter is the case, will there be any particular bias in the functional structure of these firms across the existing border which will affect Canadian employment and growth prospects?

It is clear that the state of competition and integration in three key previously regulated *network industries* — telecommunications, transportation (air, rail, trucking and ocean/Great Lakes shipping), and financial services — are critical to the success of North American integration. These three industries provide the key backbone infrastructure necessary for deeper and broader integration of both services and manufacturing industries. They are characterized by extensive network externalities and economies of scale and scope which may be cross-border in nature. One issue is the extent to which these industries are continental or global in scope. From both a research and a policy perspective, things have been changing

quickly enough in these areas — technology and policy-wise — that it is quite likely much of our current knowledge is dated.

R.4.11 The research program should re-examine the transportation, telecommunications and financial services sectors to assess (a) the extent of scale and scope economies and the potential cross-border nature of these economies; (b) the nature and degree of network externalities and their geographic dimension; (c) the likely impact of further bilateral liberalization on market structure in a more fully integrated NA market; and (d) an assessment of the long-run impact of preserving distinctly national Canadian markets in these areas with barriers to foreign entry in light of global technological and policy trends.

Merger policy figures prominently here for obvious reasons. There have been an increasing number of cross-border mergers and alliances between Canada and the United States, and the global economy more generally. The traditional economic justification for such mergers is the need to achieve economies of scale or scope, but they pose a problem for competition policy if they lead to a dominant market position for a single firm. What has motivated the recent wave of Canada-U.S. mergers and the nature of their consequences is certainly one research issue that needs further investigation prior to revisiting the merger guidelines. In particular, the following questions need to be addressed:

R.4.12 a) What have been the cost, employment and consumer welfare consequences for Canadians of recent mergers; b) what has been the net impact on competition in the relevant market; c) is there evidence that these mergers have contributed to NA market access for Canadian-produced goods and services; and d) is there any evidence of dynamic efficiency effects such as increased R&D or improved technology transfer?

With better answers to these questions, we may be in a better position to judge how Canadian industrial and merger policy should be reformulated in light of the competitive demands of greater Canada-U.S. integration.

4.7 Administrative Trade Policy

A common market would imply a common trade policy. Ideally, it would extend to administrative or contingent protection but this is not likely to happen soon. Nevertheless, it is useful to think about what changes might be effected to in the trade policy regimes of Canada and the United States, either through harmonization or convergence, to capture some of the benefits that a common administrative trade policy regime could deliver. Two areas where there are clear hindrances to a better integration of the NA market are anti-dumping and CVD/subsidy.

Countervailing Duties and Subsidy in High-technology Sectors

There is an extensive trade policy literature, both in the NAFTA and WTO context, on subsidy and countervailing duties (CVD). Some of these issues will need to be re-visited as deeper NA integration occurs, in particular with regard to high-technology sectors and the role of industrial policy in those sectors. The Canadian problem is that the large (U.S.) economy can use the threat of CVD against Canadian exports to the United States to effectively thwart investment in Canada in the high technology area. In the *new economy* technology consortia that undertake joint R&D projects are now commonplace.

These consortia can and do occur across the Canada-U.S. border for a large number of Canadian companies. Government policies which include locational subsidies (often offered by local governments), government funding of R&D, and government procurement in the area of advanced technology are all potential flashpoints for the misuse of CVD. During the 1990s, the U.S. government has gradually changed its approach on subsidy. Despite a long history of opposing subsidy, it has extended substantially support and promotion of ‘dual use’ defence R&D that has a significant commercial component. It has also been proactive in pushing for a wider range of limits on government R&D support before triggering ‘actionable subsidies’ under the WTO Subsidies and Countervailing Duty Measures Agreement (SCM). In the event of deeper integration with the United States, there are two strategies Canada might pursue, assuming the United States, and the EU continue to use government-funded R&D subsidies as industrial policy instruments.

- a) It could attempt to negotiate a NAFTA inclusion agreement, whereby for purposes of dealing with non-NAFTA partners, Canada and the United States would be viewed as a single entity with respect to R&D subsidies. Given the increased importance of cross-border technology consortia and the difficulty of defining cross-subsidies within a large R&D project, this may be inevitable in the longer run.
- b) Alternatively, Canada could continue to maintain an independent stance, and argue for greater discipline on the use of subsidies such as to limit the use of countervail duties and avoid the perennial U.S. ‘sideswipe’ problem.

R.4.13 To what extent would it be possible or beneficial to have a fully integrated NA based CVD/subsidy regime?

Anti-dumping

Both Canada and the United States continue to use anti-dumping rules as a means of either limiting or disciplining import competition. While intended to limit predatory pricing, the reality surrounding the use of anti-dumping rules is quite different. Most economists take the view that it is in fact a protectionist instrument that limits effective price competition. Within a common market, the issue of predatory pricing should in principle be dealt with by a common competition policy. In the case of NAFTA, attempts to move in this direction have so far failed.²⁷ The strong economic expansion of the 1990s naturally reduced the incidence of use of AD between Canada and the United States but this may not be permanent. The issue is whether the timing is correct for some new initiatives which would either eliminate or help to constrain the use of these policies within NAFTA. For example, some progress might be made on procedures for a common methodology of cost measurement. This could be of some importance in the *new economy* sectors, where fixed costs are large in relation to marginal costs.

R.4.14 What have been the consequences of the current anti-dumping practices within NAFTA, and what changes could be made to improve the current system, including a fully integrated NAFTA anti-dumping policy within a customs union framework.

4.8 Environment and Natural Resources

Deeper NA integration will almost certainly involve new agreements on the environment and natural resources. The issues here are extremely complex and vary incredibly — ranging across multiple levels of governments in both countries, border-specific issues, global issues, and industry-specific issues.

Under NAFTA there has been some harmonization of environmental standards, but it is clear that there is a great deal of scope for both cooperation and conflict as matters stand. The general view seems to be that NAFTA provided the first framework for the common implementation of environmental standards in North America. The industrial structures of Canada and the United States and their enforcement of environmental regulation are sufficiently similar that the issue of 'dirty imports' has not been a problem until now. Under other circumstances, there might be demands for environmental anti-dumping rules, or harmonization of environmental standards across jurisdictions. NAFTA has not gone this far despite demands from environmental groups for such initiatives. The institutions created by the Agreement, in particular the Commission for Environmental Cooperation (CEC), are still operating on a very limited basis and there is scope for improved cooperation and monitoring between the NAFTA countries. We have identified four areas that will almost certainly be flashpoints in the future and that merit further research.

Water Exports

Given the water supply problems in the United States, particularly in the Southwest, the issue of water exports is almost certain to come up again. Water was excluded from NAFTA provided bulk exports did not occur. However, that situation may be untenable. Canada should review its policies in this area and consider how water might be exported with an appropriate pricing policy. This will no doubt prove to be a very difficult debate, but now is the time to give the matter some detailed thought.

North American Emissions Trading

The United States has been trading emission permits since 1994 for SO₂, most of which come from utilities. Canada has substantial SO₂ emissions, and these may increase with heavy resource industry development (more INCOs) or a shift to fossil-generated electricity in provinces like Ontario. It would be natural from an economic efficiency standpoint, given the extent of cross-border SO₂ pollution, if Canada were to join the United States SO₂ trading program in the near future. This would integrate a market in 'regional pollutants' and provide experience for future policy initiatives in emissions trading.²⁸

Global Warming

A future agreement between the NAFTA countries will certainly address global environmental problems, such as global warming. While it is conceivable that Canada and the United States might choose to meet their Kyoto commitments in different ways, there would be considerable advantage in having a common policy. Whatever happens, Canada and Mexico have a strong incentive to harmonize with the United States. In the event quotas are implemented, it would make sense to allow trade in permits between firms in Canada and the United States.²⁹

Biohazards and Biotechnology

This is a subject we have already heard a lot about, and no doubt will hear a great deal more about in the future. Genetically modified foods (GMF) and mad cow disease have added new life to trade disputes in the areas of food and agriculture. The issues are sufficiently complex, with such strongly held views by both sides of the debate, that it is not clear how they will be dealt with domestically, and even more so in a trade context. The WTO has a major working group on biotechnology, and there have been some highly publicized disputes among members of the EU in this area. In the Canada-U.S. case, however, these questions will have to be dealt with given the volume of agricultural and food trade between the two countries.

4.9 Intellectual Property Rights and the Knowledge-based Economy

Both intellectual property rights and the knowledge-based economy (KBE) have been the subject of extensive research and policy attention in the last decade, and will not be reviewed here. Much of the integration literature in this area has focused on the WTO and the TRIPS agreement. The United States has been pivotal throughout this process by systematically pushing for stronger intellectual property rights. In the search for balance between incentives to innovate and incentives to diffuse, the United States has more or less consistently weighted on the producer side of the scales — a natural position given the strong comparative advantage of the United States in sectors such as software, semiconductors, biotechnology and entertainment. NAFTA went beyond the TRIPS agreement by using a comprehensive definition of investment which included intangible property.³⁰ Thus, intellectual property comes under the NAFTA investment chapter, including protection against expropriation, national treatment, the right to transfer earnings abroad, and access to investor-state dispute settlement mechanisms. From a Canadian perspective, there is already a considerable degree of integration with the U.S. intellectual property regime. There have been problems of course with respect to drugs, which led Canada to drop its compulsory licensing regime on patents. Other problem areas include:³¹

- Section 104 of the *U.S. Patent Act* still requires invention to occur within the United States as opposed to NAFTA countries in order for an invention to qualify for a U.S. patent under its first-to-invent rule. This effectively biases the location of inventive activity within NAFTA towards U.S. locations.
- Canadians have been denied access to U.S. patents under *U.S. Statute*, 35 USC, Section 204, which restricts the exclusive right to use or sell an invention discovered in the United States through a production licensing agreement with U.S. government agencies or laboratories to persons who manufacture in the United States, which is in contradiction with the NAFTA investment chapter.
- Section 337 of the *U.S. Tariff Act* and the *1988 Omnibus Trade Act* permit owners of intellectual property rights to block infringing imports by obtaining temporary or permanent exclusion orders from the U.S. International Trade Commission. This allows for unilateral action by U.S. interests against Canadian exports and violates a ‘national treatment’ perspective on intellectual property. There has been some progress in resolving this matter.

Future issues with respect to intellectual property (both patents and copyright) will no doubt stem from developments in electronic commerce and biotechnology. It is clear that Canada has a very strong incentive to harmonize with the United States in these areas. A common intellectual property regime backed by a transparent set of rules and effective enforcement may be necessary if Canada is to successfully develop its knowledge-based sectors. Canada has lagged behind the United States in a number of important KBE indicators, most importantly in employment and exports.³² The nature of these industries is such that (a) market size matters a lot (the Canadian market is too small) and (b) the firms and individuals in these sectors are extremely mobile. Failure to integrate effectively with the U.S. market is not a viable option.

The overall effectiveness of the innovation system is usually described at the national level. In the evaluation of greater NA integration, it would be useful to take a continental perspective, and thus evaluate as a whole the innovation system of North American with respect to its efficiency and effectiveness. Innovation in the KBE is increasingly characterized by two important trends: (i) growth in technology consortia and R&D joint ventures involving multiple enterprises and often cross-border in nature;

(ii) a blurring of the distinction between public and private research activities as defence, medical and university research is commercialized at a more rapid pace. For these reasons, harmonization and cooperation in the area of CVD/subsidy, tax policy, and competition policy will all be necessary if there is to be a level playing field for KBE development, and if an effective NA innovation system is to be fostered.

In summary, this suggests the following research and policy questions:

R.4.15 How can Canada and the United States effectively integrate their IP regimes to create a locationally neutral environment for R&D investments by firms?

R.4.16 What changes are necessary to trade, tax and competition policy to allow for the effective cross-border functioning of technology consortia and R&D joint ventures?

R.4.17 How can the effectiveness of the NA innovation system be improved by cooperation in the areas of university, defence and medical research?

4.10 Electronic Commerce³³

The growth of all forms of electronic commerce continues unabated and the actual statistics are only eclipsed by the predictions of various experts. We now have a large body of legal, technical and policy related literature on the subject. Under the auspices of the WTO and regional trade agreements, governments have begun to negotiate the rules which will govern international commerce in this area. It is too early to tell whether the ultimate set of rules will be multilateral, WTO-based, covered for example by the GATS, TRIPS and TRIM agreements, or whether an entirely new set of rules, will emerge specifically for e-commerce. At the moment, there are some differences of opinions between the United States and the EU on exactly what should be done. While these discussions are no doubt significant at the global level, the situation within NA is far more likely to evolve in the framework of existing NAFTA agreements on trade, services, and intellectual property. More realistically, however, day-to-day cross-border practice and experience should be the major determinant of how this fast-evolving technology will impact on the international e-commerce relations between Canada, Mexico, and the United States.

E-commerce, while potentially global in nature, has a strong local geographic bias. For B2C e-commerce, the physical delivery of non-digital goods and services may ultimately determine the success or failure of this particular mode of buying and selling. If you live in Vancouver, it is useful if you are purchasing from Amazon.com, located in Seattle. For Canadian firms located near the U.S. border, e-commerce represents a tremendous export opportunity in areas previously thought of as local non-traded services — accounting, advertising, and education, for example — as well as more conventional e-selling. Already, according to the ITU, 83 percent of Canadian e-commerce sales are exports. Expediting border crossings of the physical goods may well turn out to be the single biggest factor in two-way B2C trade between the NAFTA countries. Most of the other problems (payment systems, security, infrastructure access) have already been solved for B2C at the business level if not at the official level.

Real opportunities and impact are likely to be felt in B2B e-commerce. In a recent report on e-commerce, Goldman Sachs (1999) predicts that B2B will be more than 12 times greater than B2C by 2004. Moreover, the cost reductions in B2B are considerable, with cost savings ranging from 2 to 39 percent, depending on the cost structure and the number of intermediaries in the supply chain. B2B will allow a reduction in process costs of between 10 and 25 percent, which will lead to a reduction of total costs of between 3 and 12.5 percent. Additionally, B2B will reduce production costs by an average

of more than 20 percent.³⁴ The numbers are quite high in some manufacturing sectors: chemicals, 10 percent; electronic components, 29–39 percent; forest products, 15–25 percent; and metal machining, 22 percent. These are, of course, estimates of impact and ignore any feedback effects. At this point, we can only speculate about the potential long-run impact of this technology on NA integration — both the trade and factor market implications. Formal quantitative general equilibrium modeling of this technology might shed some light on the magnitudes involved. The new trade and geography theory has identified the transaction costs of trade as a major determinant of the long-run allocation of economic activity across regions when firms are mobile. Many of the costs that B2B might reduce or eliminate could conventionally be thought of as trade transactions costs. Therefore, it is theoretically possible that the reductions in these costs have a large impact on the long-run allocation of economic activity across regions within an integrated NA market.

Most accounts of Internet and e-commerce refer to it as a technology that is both liberalizing and integrating. In line with this view, a number of proposals, particularly from the industry, have advocated that the Internet (e-commerce) be free of all duties and/or taxes — essentially an Internet free trade zone which would be global in scope. As NAFTA is essentially a *preferential* trading arrangement, it is useful to ask whether it is logical to allow non-NAFTA countries the same access as to other NAFTA partners, if that access is by means of e-commerce? This question is a potentially new and important question in the theory of preferential trading agreements based on a particular distribution technology as opposed to a particular set of trading partners. To my knowledge, there is little if any theory worked out in this area. In the NA context, if such a principle were adopted it might have some substantive effects in areas where external barriers are present and the Internet provides a viable delivery mechanism.

The research agenda in this area should focus on the following set of related questions:

- R.4.18 How will the WTO proposals and process interact with the current treatment of electronic commerce within the NAFTA zone as a whole, and across border regions.*
- R.4.19 How will trade, investment patterns, and factor markets within NA be impacted by the growth in B2B e-commerce?*
- R.4.20 Is there a case to be made for NA participation in an Internet global free trade zone? How would the existing preferential trade agreements function if overlapped with an Internet free trade zone?*

5. CONCLUSION AND POLICY RECOMMENDATIONS

In this paper, we have reviewed a large number of issues related to North American integration, from a Canadian perspective. Deeper economic integration of Canada into North America carries both costs and benefits for Canada. The economic agenda naturally tends to emphasize the benefits that larger and more liberal markets yield. On the other side of the calculus, there are costs that include a loss of sovereignty, the costs of additional coordination, and the costs which would arise if some of the integration arrangements were to end or have to be reversed. There are also significant political sensitivities in all three NAFTA countries revolving around identity, language, and culture which will figure prominently in the cost-benefit analysis of any given policy.

The policy implications of the research identified fall roughly into two categories. Some policies could be implemented largely within the existing political and regional integration framework provided by NAFTA and existing national and bilateral institutions. This is really a matter of degree — any policy innovation requires some ‘institutional change’. Other policies are much bolder and would demand obvious and substantial institutional change either within the NAFTA framework, or through a bilateral agreement, a new domestic political, regulatory or legal institution, or all of the above. Economic research is notably weak on how these institutional changes might unfold. But the experience with trade negotiations, and from Canada’s own intergovernmental relations, clearly points to the fact that these changes are neither simple nor costless. In parallel with economic research then, there is a need for political and legal background work, together with substantial discussions between government officials on how an appropriate institutional structure might evolve. Economic research should focus on a basic cost-benefit analysis of each policy. However, there is a major complication. Because NA integration is proceeding outside a formal common market framework it is important that the research evaluate, in each case, how one policy would function, should it be implemented, in the event that some of the others would not. Think of these as alternative integration policy ‘scenarios’. Because policy interdependence is high, the number of potential integration policy scenarios is also high. Unfortunately, this means that the research task is all the more demanding.

The following is a tentative list of these two types of policies. One can add, subtract or move items between the two lists. It is useful to keep in mind that some of these could go forward on a much faster timetable than others. Moreover some could be bilateral (Canada-United States) and others trilateral (Canada-Mexico-United States) depending upon circumstances and opportunities.

Possible Integration Policies Under Existing NAFTA, Bilateral and National Institutions

1. A change in the status of NAFTA from the existing free-trade agreement to one in which most external trade barriers would be harmonized, with the elimination of the rules-of-origin system. This would have to be accomplished while preserving some national independence in the areas of safeguards, countervailing duties and anti-dumping duties.
2.
 - a) The elimination and/or streamlining of internal NAFTA border procedures with respect to customs for the transit of most NAFTA goods. This would include greater coordination by customs authorities, such that entry of non-NAFTA goods or persons could be treated as a single entry into the NAFTA area.
 - b) A further reduction in internal border procedures for the transit of NAFTA nationals.

3. a) An increase in the degree of formal labour mobility within NAFTA through extension of the TN program to a wider class of occupations beyond the professional category.
- b) An extension of NAFTA with some specific provisions allowing for the unrestricted cross-border delivery of e-labour services. This would cover both workers and firms and allow effectively for an integrated North American market for the Internet-mediated delivery of virtual labour services.
4. a) A reduction in Canada's corporate tax rates with the objective of having a rate below that of the United States by 2004; otherwise, a full implementation of the recommendations of the Report of the Technical Committee on Business Taxation.
- b) A re-examination of the personal tax system with the objective of increasing the tax competitiveness of Canada for MNEs considering to locate within the NAFTA area, and to retaining existing Canadian firms. This is of particular concern in sectors with strong links to the global knowledge-based economy.
5. A reduction in the regulatory barriers to entry in the key network infrastructure sectors of transportation, telecommunications and financial services, in all NAFTA countries. The objective should be to free market access for any NAFTA-based firm within NA in their respective transportation, telecommunications or financial services markets.
6. a) NAFTA provisions should be extended such that all existing NAFTA trade, service, investment and intellectual property obligations explicitly apply to e-commerce transactions and investment.
- b) NAFTA governments should be prepared to quickly and effectively review and change border, tax, regulatory or trade policy that impede business-to-business e-commerce, based on NA economic integration.
7. a) Any remaining trade and competition policy impediments to Canada-U.S., NA-based, technology consortia and R&D joint ventures should be eliminated.
- b) The United States should amend some specific laws (Section 104 of the *U.S. Patent Act*, Section 204 and Section 337 of the *U.S. Tariff Act*) which facilitate discriminatory protection of intellectual property (patents and copyright), and whose elimination would result in a consistent treatment of intellectual property with all forms of investment, tangible and intangible, within the current NAFTA agreement.

**Deeper Integration Policies Requiring Major Institutional Changes
to Either NAFTA or Domestic Institutions**

8. The development of a fully harmonized NAFTA-based regulatory regime in all or some subset of the following sectors: air transport, trucking, shipping, telecommunications and financial services.
9. A fully harmonized NAFTA competition policy with an appropriate legal and enforcement infrastructure, accompanied by elimination of the ability to use domestic anti-dumping laws against other NAFTA partners.

10. a) A change in Canadian monetary policy from a regime of inflation targeting to a fixed Canada-U.S. exchange rate regime.
b) The creation of a formal North American monetary union based on the U.S. dollar.
11. The creation of a fully integrated NA tradable permit systems for SO₂, and possibly CO₂ emissions.
12. A fully harmonized intellectual property regime within NAFTA covering patents and copyright, together with a common external policy towards non-NAFTA-based intellectual property.

NOTES

- 1 There is an extensive literature on the economic impact of NAFTA and the FTA on Canada. See Hunter, 1998, for an overview. It is extremely difficult however to empirically isolate the impact of a trade agreement from other economic policies or external shocks in the case of a single event. Consequently, all ex-post NAFTA studies must be interpreted with considerable caution.
- 2 This observation holds as of the summer of 2000. The recent rally in energy prices is unlikely to prove durable. Long-term pessimism about Canadian resource prices seems justified on the part of most people given the trends of the last four decades.
- 3 See Blomstrom and Kokko, 1997, p. 19.
- 4 There is now an extensive set of studies on this issue. Many of these have been carried out by Industry Canada, and are available on their website at www.strategis.gc.ca.
- 5 See Brulhart, 1998.
- 6 See Ellison and Glaeser, 1997.
- 7 Krueger, 1997, pp. 15–16.
- 8 *Idem*, p. 18.
- 9 *Idem*, p. 20.
- 10 The debate as to whether NAFTA has promoted multilateral liberalization is quite extensive. For an overview of the debate and a recent bibliography, see Abbott, 1999.
- 11 This is admittedly a guess based on the Appiah, 1999, estimates. It is possible, for second-best reasons and complicated terms-of-trade effects, that some of the NAFTA partners could be made worse off with a customs union.
- 12 There are also a number of legal issues with respect to the status of safeguards, the administration of quotas regimes and WTO requirements. See Laird, 1999.
- 13 See Papademetriou and Meyers, 2000a and 2000b.
- 14 There have been a number of concerns expressed about the impact of NAFTA on Canadian sovereignty in the areas of culture, water, health, environment, education and immigration.
- 15 It may be useful to examine labour standards along with other social policies, particularly health and education.
- 16 A recent review of the evidence on taxation and the investment response is provided in Hines, 1999.
- 17 Recent evidence on Canada's comparative business tax situation is provided by Mintz, 1999, prior to the February 2000 budget.

- 18 At the risk of simplicity, this argument is much like the one on the impact of freer trade on product variety. Many people feared that free trade would actually reduce choice by limiting the number of varieties of any particular good. As we now know in almost all cases, exactly the opposite occurred: product variety increased. Competition among governments for people and firms may induce a similar sort of outcome. This model also has the desirable feature that competition may encourage public policy innovation by governments, as well as adoption of best-practice methods in public service delivery.
- 19 A summary of these arguments is contained in a symposium reported in the Fall 1999 issue of *Canadian Business Economics*. There is also a forthcoming issue of *The North American Journal of Finance and Economics* devoted to the pro and con arguments.
- 20 Some of this material is a summary of Courchene and Harris, 1999, and Harris, 2000b.
- 21 Harris, 1993, pp. 36–37.
- 22 *Idem*, pp. 39–40.
- 23 In Harris, 2000b, it is argued that, paradoxically, the terms-of-trade buffering characteristic of flexible rates can actually be a fundamental cause of the slow response of economies to new technology. In effect, it delays the necessary creative destruction that must accompany the arrival of the *new economy*.
- 24 Frankel and Rose, 2000, p. 38.
- 25 Useful overviews of the interaction between trade and competition policy is provided by the OECD Joint Group on Trade and Competition, 1999a, 1999b. A European perspective is provided by Cini and McGowan, 1998.
- 26 Anderson and Khosla, 1995, p. 91.
- 27 These arguments are reviewed in Christie, 1994.
- 28 There is an extensive literature on SO₂ trading and its economic welfare consequences. An excellent bibliography is available on the Acid Rain website of the EPA, at www.epa.gov/docs/acidrain/ardhome.html.
- 29 The Canadian literature, including a discussion of domestic global permit trading, is summarized in a number of documents on Canada's National Climate Change Process website at www.nccp.ca.
- 30 NAFTA, article 1139(g).
- 31 For a more comprehensive discussion of these, see Luton, 1995.
- 32 See Industry Canada, 2000a. The KBE economy is growing at roughly 2.5 times the growth rate of the aggregate economy. Other than Internet infrastructure access, Canada lags behind the United States in virtually all other KBE development indicators.
- 33 This section draws on OECD, 1999c, Hart and Chaitoo, 1999, and Mann, 2000.
- 34 Goldman Sachs, 1997, p. 7.

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