Industry Canada Industrie Canada

Micro

Volume 9, Issue 2
Summer/Fall 2003

Micro-Economic Policy Analysis Branch Bulletin

Social and Labour Market Aspects of North American Linkages

Deeper linkages between the three North American economies are affecting the lives of Canadians in a variety of ways. The economic implications of the increasing trade and capital flows within North America have been examined in a number of Industry Canada studies and were the major focus of a 2001 Industry Canada conference entitled *North American Linkages: Opportunities and Challenges for Canada*. The papers presented at the conference were published as an Industry Canada research volume in 2003. This research documents the generally beneficial impacts of stronger linkages on Canadians' standard of living, but leaves gaps in our knowledge about the broader implications of economic integration. Important questions remain about the impacts on workers and Canadian labour markets. Some observers continue to voice concerns that economic integration is limiting Canadian policymakers' ability to pursue domestic objectives.

This issue of MICRO reports on a workshop jointly organized by Industry Canada and Human Resources Development Canada to address some of these issues. At the workshop, held in Montreal November 20-22, 2002, invited experts came together to discuss the topic, *Social and Labour Market Aspects of North American Linkages*. The presented papers and panel sessions attempted to shed light on four thematic questions: What is the degree of economic integration between Canada and the United States? How has integration affected the domestic labour market? Does integration affect Canada's ability to achieve selected social objectives? And what impacts would be likely to result from a further easing of the restrictions on labour mobility within North America?

The Extent of Economic Integration Between Canada and the United States

The Extent of Integration and the "Border Effect"

A main focus of discussion in the first session was on the size of the so-called "border effect" between Canada and the United States. Border effects are calculated by examining the relationship between internal and cross-border trade flows after adjustments have been made to remove the effects of distance and gross domestic product (GDP). The larger the ratio of adjusted internal to adjusted Canada-U.S. trade, the greater the border effect. Serge Coulombe of the University of Ottawa reviewed the literature on this topic, which generally shows that border effects are significant and hence, "borders still matter." A recent study by James Anderson and Eric van Wincoop, however, suggests that previous studies may have overstated the border effect for trade between Canada and the United States. They show that a given trade restriction has a much greater border effect for the small Canadian economy than for the large U.S. economy, a result which complicates the interpretation of border effect changes. Coulombe finds that the Canada-U.S. border effect for trade in goods followed a continuous downward trend over the entire 1981 to 2000 period. Coulombe believes that the remaining Canada-U.S. border effect in traded goods, correctly measured, is about half what the McCallum-Helliwell type of methodology would yield at the turn of the century.

All participants at the session agreed that further work is needed to develop more reliable estimates of the impact of trade barriers. This was a conclusion of Coulombe's presentation and it was echoed in comments made by Mark Brown of Statistics Canada, John Helliwell of the University of British Columbia and James Anderson of Boston College. John Helliwell, who authored some of the earlier papers showing relatively large border effects, acknowledged the theoretical contribution of recent U.S. research (Anderson and van Wincoop) while warning of its limitations. He demonstrated that when the much-discussed model by Anderson and van Wincoop is applied to the North American Free Trade Agreement (NAFTA), it leads to results that are at odds with the evidence. In response, James Anderson argued that policymakers are best served by a well-specified and theoretically consistent model of the type he and van Wincoop developed, although it must be expanded and refined to be instructive in particular real world situations.

In addition to developing better estimates of the border effect, further research is needed into what lies beneath the numbers. Is there scope for further reducing border effects or are the remaining effects due to factors that are not amenable to policy? To some participants, (including Coulombe and Anderson), the downward trend in the measured border effect was convincing evidence of the influential role of government policies. John Helliwell, however, believes that remaining differences are due to deeply entrenched institutional factors. In particular, networks and trust that facilitate trade tend to become much weaker as borders are crossed. Canada has higher average measures of subjective well-being than the United States, and, in Helliwell's view, these are due to institutional differences that could be threatened by closer harmonization.

"The core of my favourite explanation for border effects is that it's cheaper and easier to operate within networks of shared norms and trust, and that the density of such networks declines with distance, and especially as one crosses national borders."

— John Helliwell

The Extent of Canada-U.S. Economic Linkages and their Costs and Benefits

Glen Hodgson of Export Development Canada emphasized the significance of the changes brought about by the Canada-U.S. Free Trade Agreement (FTA) and NAFTA. The Canadian economy, which was characterized in the past by branch plants, inward foreign direct investment (FDI) and resource exports, is now also a significant source of outward FDI and a participant in the world of multinational activities and global supply chains. The tragic events of September 11, 2001 were “sand in the wheels of international trade”, leading to additional costs for governments and business. In Hodgson’s view, policies to further strengthen economic linkages could help to reduce the additional risks businesses face in the post September 11th environment.

Andrew Jackson of the Canadian Labour Congress is sceptical of the extent of the benefits from the FTA and NAFTA and believes the adjustment costs were substantial. The growth of Canadian exports, in his view, is attributable mainly to the weak Canadian dollar and the strong performance of the U.S. economy, rather than the trade agreements. Jackson argued that the NAFTA leaves significant room for Canadian governments to continue to support specific sectors or firms. Jackson also believes there is no evidence that increased North American linkages are exerting pressure to lower social protection in Canada. He pointed to the examples of Denmark and the Netherlands, two European Union (EU) members that have achieved strong productivity growth while pursuing progressive social policies. He stressed, however, that ongoing vigilance is required to ensure that North American integration does not hinder the ability of Canadian governments to use a variety of market and non-market mechanisms for the production and delivery of social services.

Jayson Myers of the Canadian Manufacturers and Exporters Association discussed the importance of Canadian policy to the location decisions of multinational enterprises. Since the market access benefits of locating in the small Canadian market are modest, Canadian policies must be more than competitive with those of larger countries. There must also be a recognition of the high degree of interdependence of Canadian and foreign operations. A shutdown or delay at a Canadian manufacturing facility can cause a costly interruption in global production. Myers believes that policy-makers need to be more aware of the North American context in the policy development process.

The Effects of Economic Integration on the Labour Market

Integration and the Canadian Labour Market

Have average wages for different classes of skilled workers in Canada and the United States converged over the last two decades? The answer Thomas Lemieux of the University of British Columbia reaches from an examination of average wages at the regional level, adjusted for education and age, is "no." Indeed, Lemieux finds that, between 1984 and 2001, Canadian average wages, corrected for human capital characteristics, fell by about 10 percent relative to U.S. wages. This latter result is likely due to the relatively poor performance of the Canadian economy over the 1990s. Lemieux also highlights the large and persistent differences in wages (adjusted for differences in characteristics) between Canadian regions — differences that are much larger than the gap in average wages between Canada and the United States.

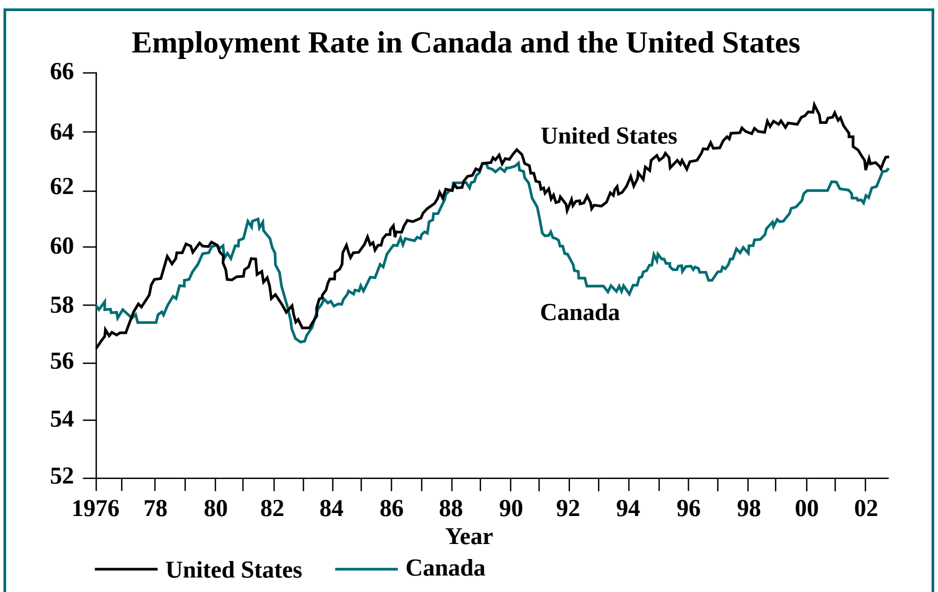
The main finding is that there has been, if anything, a divergence between the wage structures in Canada and the United States over the last 20 years. In many cases, however, Canada-U.S. differences …are not large relative to regional differences in the wage structure."

— Thomas Lemieux

In his comments, Craig Riddell of the University of British Columbia discussed the challenges researchers face in determining whether economic integration has led to a broad convergence in Canadian and U.S. wages. He noted that the years Lemieux examined were ones in which Canada and the United States were at different points on the economic cycle. Riddell also talked about the difficulties of controlling for various developments — e.g. minimum wage laws, unionization rates, the composition of immigration — that could have influenced wage distributions in Canada and the United States. Riddell's own research (with Murphy and Romer) suggests that an important factor was the more rapid increase in educated workers in Canada than the United States. In the United States, there was not the same downward pressure on returns to education and, hence, wage inequality increased.

In the second paper of the session, Eugene Beaulieu and Christopher Joy of the University of Calgary examine links between the politics and the economic consequences of economic integration. The authors find that there were significant differences in the position of skilled and unskilled workers towards free trade, but that

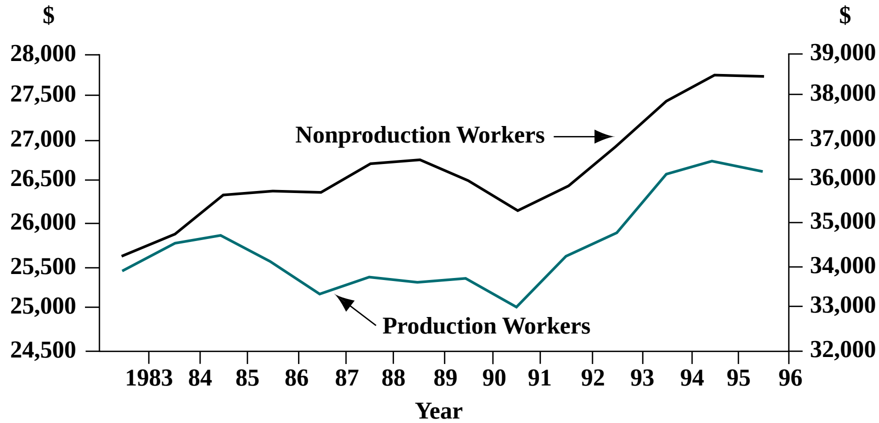
The decline in Canadian relative to U.S. wages may be linked to the poor performance of the Canadian labour market over the 1990s.



Source: Thomas Lemieux, *Trade Liberalization and the Labour Market* the differences among workers in different industries were not significant. Beaulieu and Joy's results indicate that unskilled workers in Canada, who were most opposed to the FTA, were indeed most affected by plant closings and layoffs in the post-FTA period. Their data provides less clear evidence that skilled workers, who were more likely to be supportive of economic integration, directly benefited in terms of labour market outcomes. While further research is needed into the impact of the FTA on skilled workers and the reasons for their support of liberalization, the authors see their results as confirming the general connection between trade policy preferences and labour market outcomes.

From 1992 to 1996, the real earnings of nonproduction workers increased faster than those of production workers.

Annual Earnings in Manufacturing: 1983-1996
Real Average Annual Earnings



Source: Eugene Beaulieu and Christopher D. Joy, *The Political Economy of North American Integration, Labour Market Adjustments and Plant Closures in Canada*

Note: The CPI (1987 = 100) was used to compute real earnings.

The discussant, Richard Harris of Simon Fraser University, observed that the results might have been quite different if Beaulieu and Joy tested their theory using a broad trade model (i.e. Hecksher-Olin) rather than a bilateral model that only took account of developments in Canada-U.S. trade. The finding that workers' positions towards free trade was independent of their industry of employment was especially interesting to Harris. He noted, however, that a number of factors might have contributed to workers' attitudes towards free trade in the 1988 election. There was concern, for example, that U.S. protectionism was on the rise and Canadians would be adversely affected without the FTA. The views of less skilled workers may have been influenced by significant skill upgrading underway at the time as Canadian firms adjusted to technological change. The next stage of Canada-U.S. trade liberalization is likely to involve skill-intensive service industries and, to Harris, it is not all clear that the skilled workers in these "protected" sectors will welcome foreign competition.

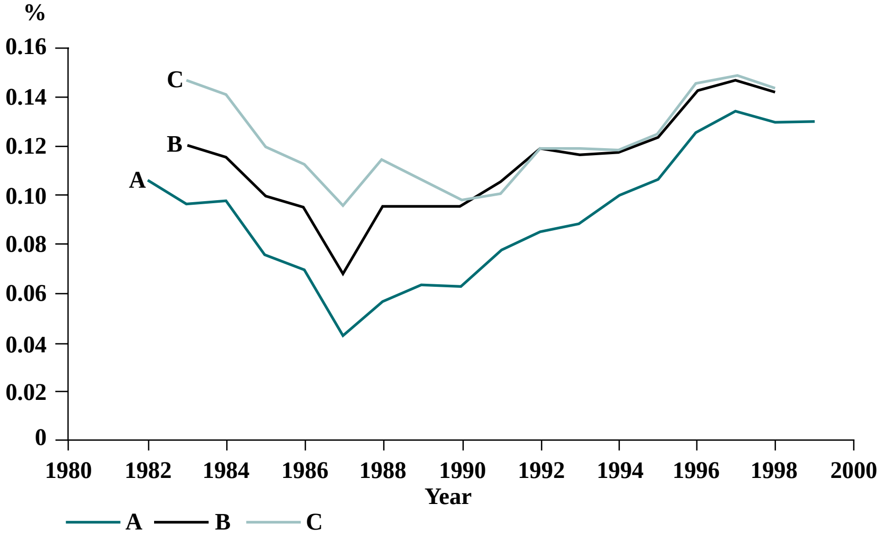
Integration and Adjustments by Workers and Firms

Ross Finnie of Queen's University uses Statistics Canada's *Longitudinal Administrative Database* to shed light on the extent and nature of the out-migration by Canadians and their patterns of return. Overall, only around 0.1 percent of the adult population leaves the country in a given year. Out-migration declined over most of the 1980s when the Canadian economy was growing strongly and rose in the early part of the 1990s when the economy was in a lingering recession. Finnie's analysis indicates that the likelihood of leaving declines with the age of the worker and is greater for those with families and high earnings. While few leavers return to Canada, the likelihood of return is greater for high earners. From his return model based on data for 1982–99, Finnie found that after 5 years, 15 percent of Canadians returned, with this rising to 20 percent after 10 years. Significantly, the model indicates that returns increased in the 1990s, especially among higher income earners, providing evidence of a more mobile population.

"In short, the data support the notion that Canada is in a global labour market …"
— Ross Finnie

Whatever definition is used, annual rates of leaving Canada are very low.

Annual Rates of Leaving Canada, Males*



Source: Ross Finnie, *Leaving and Coming Back to Canada: Evidence from Longitudinal Data*

* "A", "B" and "C" definitions are based on information provided on individuals' tax returns. "A" is defined as a "declared departure" from Canada; "B" is defined as a "declared departure" or becoming a non-resident of Canada; "C" is defined as either conditions of "A" and "B" or moving to a foreign address.

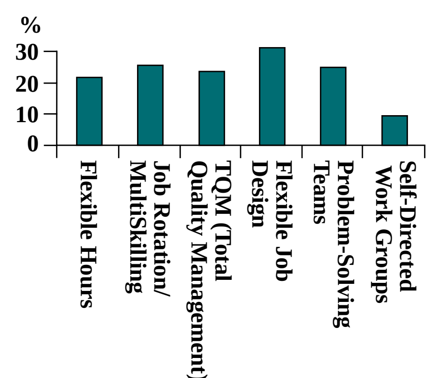
The discussant, Peter Kuhn of the University of California at Santa Barbara, thought that Chaykowski and Slotsve should spell out more explicitly the ways in which HPWP may augment factor productivity. Kuhn cautions that the positive association that is found between foreign competition and the adoption of HPWPs does not necessarily indicate competition is spurring the adoption of HPWP. It is possible that firms adopting HPWP are more productive and therefore better able to compete in foreign markets. More generally, Kuhn believes that there are strong pressures for trade liberalization with the shift towards the production of information products that can be transmitted at low cost but may be expensive to produce. Economic integration is attractive because it helps firms realize the very large economies of scale that are associated with information products.

Jennifer Hunt of the Université de Montréal observed that while Canada has been concerned about a brain drain, the United States, paradoxically, is worried about their ability to handle the influx of human capital. She questioned the role of the economic cycle as a determinant of emigration since the U.S. and Canadian economies are largely synchronous. Hunt noted that demographic research tells us that younger workers respond to the prospect of income gains while older workers emigrate in response to changes in economic conditions. She suggested that in future studies, consideration also be given to the influence of proximity to the U.S. border on workers' decisions to leave.

Richard Chaykowski of Queen's University and George Slotsve of Northern Illinois University look at why firms adopt high performance work practices (HPWP) and the influence of the increased competition resulting from the FTA and NAFTA on HPWP adoption rates. There is mounting evidence that HPWP, such as team problem-solving, self-directed work groups, quality circles and total quality management, are associated with higher productivity. The formal model Chaykowski and Slotsve develop suggests (among other things) that as the price of skilled labour rises, the demand for HPWP inputs that augment skilled labour will increase. Data from Statistics Canada's *Workplace and Employee Survey* indicates that Canadian establishments utilize a wide variety of innovative and high performance practices but there is considerable variation across industries and provinces. Of particular interest is the authors' finding that competition affects Canadian establishments' usage of innovative work practices and that greater competition with U.S. firms is associated with an increased incidence of training.

A sizeable proportion of Canadian establishments have adopted innovative work practices.

Percentage of Establishments with Innovative Work Organization Practices, 1999



Source: Richard P. Chaykowski and George A. Slotsve, *Innovation and Response in Industrial Relations and Workplace Practices under Increased Canada-U.S. Economic Integration*

The Effect of Economic Integration on the Pursuit of Social Objectives

Implications of Integration for Social Policy

> **"Our interpretation of the evidence is that the state does have fewer degrees of freedom in setting social policy initiatives, but this is generally a desirable constraining influence."**
> — Rafael Gomez and Morley Gunderson

Rafael Gomez of the London School of Economics and Morley Gunderson of the University of Toronto address the question, "Does economic integration lead to social policy convergence?" While there are theories predicting economic integration will lead to social policy convergence, there are also theoretical reasons for expecting that policy diversity may be sustained and even expanded with integration. Among the former theories, one that has received particular attention focuses on the pressure on governments to reduce regulatory and tax costs in order to appear "open for business." Gomez and Gunderson review the theories on both sides and then consider the evidence on convergence between Canada and the United States in 14 social policy areas. While considerable divergence exists in a number of areas (e.g. workers' compensation, occupational health and safety) in the majority of the policy areas examined (including unemployment insurance, minimum wages, welfare and family benefits for working families), there was some evidence of convergence. Gomez and Gunderson consider downward harmonization desirable to the extent it reflects the increased pressure on governments to pay attention to costs and to replace policies that lead to inefficiencies and rent-seeking behaviour. They see reason for concern, however, where the pressures for convergence result in the dismantling of equity-oriented policies that assist vulnerable disadvantaged groups.

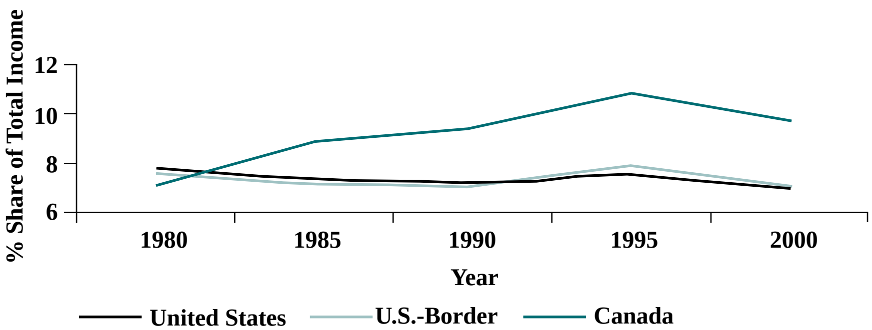
While Michael Smith of McGill University was impressed with the general thoroughness of the discussion, he noted that Gomez and Gunderson omitted two important social policy areas, health care and education. As well, Smith would like to have seen more discussion of tax policy, which differs from the other policy areas reviewed that all involve spending programs. With respect to the authors' conclusions, Smith notes that policy convergence may be the result of factors that are independent of North American integration. Recently, for example, there has been a general trend towards reduced spending in many areas as governments address debt issues. Another example of policy convergence that may be unrelated to North American integration is in the area of unemployment insurance. In this case, governments may be responding to evidence that liberal benefits do not promote efficient labour markets as economists had previously thought.

The second paper at this session by Gerard Boychuk of the University of Waterloo examines whether the integration of Canadian and U.S. labour markets is likely to limit Canada's capacity to use income redistribution to meet its social objectives. With integration, countries are under pressure to harmonize their policies to avoid both the "push effect", in which high-income individuals leave to avoid high taxes, and the "pull effect", in which low-income individuals come to take advantage of generous social programs. What is at issue is "the weight of convergent forces relative to forces favouring policy distinctiveness". Boychuk first examines policy diversity among American states, providing evidence of significant latitude for independent social policies among jurisdictions even within the most highly integrated markets, those within an economic union. Data on taxes and transfers provide no evidence of a convergent downward trend in redistribution and social protection among U.S. states. The same methodology is then applied to Canada and the United States and Boychuk finds that "the overall picture . . . is one of divergence." While policy differences were found to be less marked when Canadian provinces were compared with geographically contiguous states, still, no clear pattern of overall convergence emerged.

> **"… differences between states and provinces in levels of redistribution and social protection might be more feasibly maintained than is often thought to be the case."**
>
> — Gerard Boychuk

The contribution of taxes and transfers to helping lower-income groups was more similar in Canada and the United States in the early 1990s than in 2000.

Average Share Gain, Bottom Half
Canada and the United States



Source: Gerard W. Boychuk, *Redistribution, Social Protection and North American Linkages: The Prospects for Distinctive Canadian Social Policy under Increased North American Labour Mobility*

Alain Noël of the Université de Montréal commented on the disparity between Boychuk's findings and those of Gomez and Gunderson. This may be partly because Boychuk's redistribution measures do not capture the impact of many social policies, including those that offer protection against social risks and those involving in-kind benefits, such as health care and day care. Noël believes, however, that economic integration has had little influence on social policy debates in Canada. The debate on health care, for example, has proceeded without much consideration of the more integrated North American market. Therefore, even if convergence appears to have occurred, this may very well be due to factors other than economic integration.

Impacts of a Further Easing of the Restrictions on Labour Mobility

Modelling Labour Mobility Decisions and the Effects on the Economy

Are Canadian workers more mobile within Canada than between Canada and the United States? Don DeVoretz and Diane Coulombe of Simon Fraser University examine whether there is such a home country bias in mobility decisions by reviewing the relevant literature and assessing whether the movement of workers between the two countries would be very different if there was no border. From a survey of lawyers, the authors find that the NAFTA-based TN visa (temporary work authorization) has become the visa of choice. By reducing transaction costs for workers with a job offer to move within North America, the TN visa contributed to a sharp increase in the number of highly skilled Canadians residing in the United States over 1995 to 2000. The evidence from DeVoretz and Coulombe's counterfactual experiment suggests that there is no home country bias in the mobility decisions of skilled Canadian workers, who are as responsive to economic incentives in the United States as in other Canadian provinces. The authors recognize, however, that this conclusion may need to be revised in light of the security measures introduced by the United States since September 11, 2001. DeVoretz and Coulombe find that recent U.S. actions have raised the costs of cross-border movement for Canadian workers and particularly foreign-born Canadians, who are now subject to an added visa requirement prior to entering the United States with a TN visa.

"In short the United States border regulations circa 2002 have the potential to create a segmented labour market consisting of Canadian-born citizens and other Canadians. This will affect the theoretical limits of North American labour market integration…"

— Don DeVoretz and Diane Coulombe

Dwayne Benjamin of the University of Toronto commented on the difficulties of incorporating labour mobility effects within econometric models. He suggested that a better understanding of labour mobility within a country or region would help improve our knowledge about why workers migrate between countries. In Benjamin's view, the characteristics of particular cities (their amenities, tax structure, etc.) are very important in migration decisions. He suggests that detailed information on city characteristics is likely to be more useful in empirical studies of migration than average data pertaining to countries or regions.

Applied general equilibrium models have been of limited use to policymakers seeking to understand the costs and benefits of international labour mobility because they generally assume that skills are homogeneous and identical across countries. In their paper for the workshop, Jean Mercenier of the Université Cergy Pontoise and Nicolas Schmitt of the Université de Genève and Simon Fraser University take a "first step" in building a model in which labour movements are differentiated by skill. The simulations run by the authors use artificial data and are aimed at illustrating the general issues that arise when consideration is given to the important role of highly skilled individuals in the production of goods and services. Mercenier and Schmitt's static simulation model shows that trade between two countries introduces inequalities among the earnings of skilled workers and between skilled and unskilled workers. These inequalities create incentives for workers to migrate between countries. Labour mobility leads to changes in specialization across and within sectors, which lead, in turn, to changes in patterns of trade. An interesting feature of these results is that trade changes result not from trade liberalization per se but as a by-product of the increased labour migration.

Alan Deardorff of the University of Michigan found the paper thought-provoking. In Deardorff's view, however, the model does not clearly indicate the benefits from the immigration of skilled workers. While there is a perception that developed countries need skilled immigrants, using standard assumptions, the benefits from such immigration are modest. Countries may want to attract skilled workers to fill particular skill shortages or for other reasons, but these require examination. Deardorff questioned the use of applied general equilibrium analysis to address the questions raised by Mercenier and Schmitt. Since there is little or no way for the data to tell us whether a general equilibrium model is reliable or not, we must place our trust in the model's theoretical structure. In Deardorff's view, this argues against the use of an applied general equilibrium model. He thinks that Mercenier and Schmitt could concentrate instead on examining the implications of skilled worker migration through more conventional theorizing and testing.

Implications of Increased Labour Mobility for Human Capital Formation and Selected Canadian Policies

David Wildasin of the University of Kentucky considers the implications of greater economic integration for earnings, earnings inequality, labour mobility, and human capital investment and financing. Wildasin argues that trade and factor mobility are not substitutes in the real world, as is suggested by trade theory. The spatial reallocation of factors of production within countries that occurs with trade is generally neglected in trade models. Within Canada and the United States, high levels of gross internal migration "show convincingly that free internal trade has not eliminated internal migration." Such migration makes an important contribution to specialization and the efficient allocation of resources in Canada and the United States. The mobility of specialized labour also influences incentives to invest in the acquisition of skills. According to Wildasin, increased labour mobility between Canada and the United States can contribute to gains in allocative efficiency similar to those resulting from internal migration. Highly educated workers, who will face less earnings risk as members of a large, geographically dispersed market, should benefit particularly from labour market integration. Labour mobility also has implications for education financing. In Wildasin's view, economic integration may create pressures for greater private financing of higher education.

"Highly integrated markets…affect both the expected life-cycle return on investment in specialized human capital and its riskiness, and thus the demand for higher education and other opportunities for skill acquisition."

— David Wildasin

Mary Lovely of Syracuse University noted that, based on Wildasin's analysis, there a strong case for policymakers to ease the remaining restrictions on labour mobility between Canada and the United States. While she sees Wildasin's paper as an important contribution, Lovely believes that two issues require further examination. First, there is a need to better understand the welfare implications of increased mobility for different groups of individuals. While welfare may increase in both Canada and the United States, it is possible that these gains will be confined to particular groups. It is possible, for example, that mobile factors would win in Canada but lose in the United States, while fixed factors would lose in Canada but win in the United States. Second, Lovely questioned the realism of the competitive framework used by Wildasin. She thinks that the paper's conclusions need to be tested using alternative market frameworks and governance systems.

In the second presentation, Richard Harris examines a number of analytical perspectives that offer new insights into the impact of labour market integration. Traditional models of international trade, which suggest that labour mobility does not add significantly to the gains from free trade, are deficient because they do not take account of important productivity differences between countries. Four alternative analytical approaches show how the liberalization of labour movements within North America could indeed have significant productivity impacts. One promising approach is based on a model in which the out-migration of labour in lower income countries raises the return to human capital and thus incentives for human capital investment. This model implies that, for economic convergence, free trade must be accompanied by policies that facilitate the mobility of skilled workers — a finding of potential significance to the Canada-U.S. situation.

Promising results have also come from efforts to take account of the knowledge spillovers generated by labour mobility. Mobility provides benefits by allowing countries, especially small economies, to participate in networks through which knowledge is shared and transferred. A third perspective focuses on the complementarity between service market and labour market integration. A model that takes account of differences in country size shows that, with both service and labour market liberalization, most of the gains from the resulting increase in specialization go to the smaller economy. The fourth and final approach examined by Harris looks at labour market integration in the context of the changes brought about by new production technologies. A larger labour market is beneficial because it provides workers with greater occupational choice and allows firms to gain access to the specific skills they need without foregoing the benefits from the use of flexible manufacturing technologies.

"It is clear that the time is ripe for international economists' treatment of the labour market and labour market integration to catch up with both current reality and the theoretical innovations of the last two decades."

— Richard Harris

Assessing the Merits of Further Easing Restrictions on Workers' Movement Between Canada and the United States

Jean-Christophe Dumont of the Organisation for Economic Co-operation and Development (OECD) discussed the European Union's experience in the area of labour mobility. Despite significant differences among countries in social policies and labour market performance and notwithstanding efforts to promote mobility, intra-European mobility remains quite low. Dumont believes this is because of language and cultural differences, information problems, institutional barriers and structural labour market rigidities. Immigration from non-EU low-income countries, however, is still important. The free trade agreements the European Union signed with other Mediterranean regions suggests that such agreements are unlikely to reduce migration unless they also include income transfer mechanisms. In NAFTA, restrictions on the mobility of highly skilled workers were eased primarily to facilitate trade, not, as in Europe, to promote permanent migration. While a further easing of restrictions for highly skilled workers in North America is not likely to produce large flows of migrants, a removal of the barriers for intermediate and low skilled workers could have different effects and possibly give rise to pressures for the harmonization of fiscal and social policies.

Robert Lacroix of the Université de Montréal focused on the challenges facing Canadian universities in an environment of high labour mobility. While, in the not too distant past, there was concern that foreign professors were taking jobs away from Canadian academics, today the issue is how to attract needed foreign professors. More Canadian professors and researchers now go to U.S. universities than the reverse. Over the next 8 to 10 years, it is expected that Canadian universities will need to hire between 30,000 and 40,000 new professors. To fill that need, Canadian universities will have to compete more effectively against foreign universities. This requires that they look at salaries and working conditions and provide stimulating research environments. Areas of research concentration need to be identified and, within these areas, there is a need to fund major projects of an international caliber that will attract the interest of new graduates and foreign academics.

Marc Van Audenrode of Université Laval observed that, since the introduction of the TN visa, professionals and business people are relatively free to move between Canada and the United States. While lesser-skilled workers could conceivably benefit from similar mobility opportunities, Van Audenrode could not say definitely whether such an easing in restrictions would be in Canada's interest. He noted that overall economic conditions have an important influence on the decision to leave and that some specific outflows of Canadians to the United States can be directly related to poor economic conditions in Canada. The relative strength of labour demand in Canada and the United States is a major determinant of migration flows and should be taken into consideration in policy development. Mobility policies should also take account of the impact that diverging population trends in Canada and the U.S. may have on migration flows.

The Way Forward: Issues, Policy Gaps and Policy Priorities

In a closing panel session, Thomas Lemieux, Richard Harris and John Helliwell offered their thoughts on what had been learned and on the remaining challenges facing researchers and policymakers. Lemieux focused on labour market issues. He noted the difficulty of disentangling the role of NAFTA and the easing in migration restrictions from the other factors that contributed to the dismal performance of Canada's labour market in the 1990s relative to the 1980s. While skill-adjusted wages declined in Canada relative to the United States over the 1990s, it is not at all clear this was due to increased market integration. Lemieux believes further research is needed into migration decisions. He advocated the use of longitudinal data and suggested, in particular, that Finnie's research be extended to incorporate the results from tax records of Canadians working in the United States. Another suggestion, inspired by Mercenier and Schmitt's simulations and Chaykowski and Slotsve's empirical work, was to investigate the impact of market integration on the wage structure of firms that are facing increased U.S. competition. In addition, Lemieux thought it would be useful to extend Boychuk's interesting research on the divergence of social protection policies across U.S. states. Similar research could be undertaken into the degree of wage divergence among jurisdictions that have free trade and a common labour market.

Richard Harris believes that further progress on free trade is unlikely at this juncture and that research should be directed to understanding the effects of integration assuming little or no institutional change. Even without institutional change, trade between Canada and the United States is likely to grow due to industry restructuring, technological change and other factors. Another important development is the tremendous growth in world trade originating in India, China and other parts of Asia. This is likely to impact on goods prices and may influence the trade specialization of North American economies in coming years. Harris believes that a better understanding of the results and implications of the research on border effects would be helpful. He thinks research is also needed into NAFTA dispute resolution mechanisms, which may come under pressure with another spate of trade disputes between Canada and the United States. In the labour market area, it is important, as Van Audenrode pointed out, to examine the implications of different demographic trends and human capital policies in Canada and the United States. As well, there are medium-term issues associated with increased international labour mobility that require examination. While traditional general equilibrium models may be able to offer some help in understanding the implications of labour mobility, Harris believes that innovative approaches must be pursued if researchers are to develop realistic models that are useful for policy analysis.

John Helliwell focused on policy challenges, which he views in the context of the evidence that border effects still exist (although their size is a matter of dispute) and geography matters. He reiterated his understanding that there is limited scope for reducing remaining border effects between Canada and the United States. In his view, efforts to harmonize the institutional differences that underlie the remaining border effect could actually reduce welfare for Canadians. Helliwell believes the emphasis should be on policies that will make Canada a base for world trade rather than just North American trade. By developing worldwide trade networks, Canada can reduce its dependence on North America, where the asymmetry in size and power between the United States and other economies is a problem. Helliwell thinks the big challenge over the next 50 years will be to bring the 75 percent of the non-OECD world population into a system characterized by harmonious development through the adoption of rules of fair-trading and good governance. He sees an opportunity for Canada to play a major role in the development of the needed rules-based international institutions.

INDUSTRY CANADA RESEARCH AND PUBLICATIONS

RECENT RELEASES

Trade and Investment Monitor 2003

Discussion Paper No. 13:
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INDUSTRY CANADA RESEARCH SERIES

North American Linkages:
Opportunities and Challenges for Canada (Volume XI)
General Editor: Richard G. Harris

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RESEARCH MONOGRAPH

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General Editor: Dale W. Jorgenson, Harvard University

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by Wulong Gu and Jianmin Tang

Working Paper No. 39:
Competition Perceptions and Innovation Activities: An Empirical Study of Canadian Manufacturing Firms
by Jianmin Tang

Working Paper No. 40:
International Trade, Interprovincial Trade, and Canadian Provincial Growth
by Serge Coulombe

DISCUSSION PAPERS

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Making Canada the Destination of Choice for Internationally Mobile Resources
by Keith Head and John Ries

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8 March 2004	**Philippe Aghion** Harvard University Topic to be determined
19 March 2004	**Daniel Hamermesh** University of Texas at Austin *Time Use, Time Crunch and Work Time in America*
16 April 2004	**Ralph Winter** University of British Columbia Topic to be determined
18 June 2004	**Michael Greenwood** University of Colorado *Age and Skill Composition of Immigrants in the United States and Canada*
Spring or Summer 2004	**James Poterba** Massachusetts Institute of Technology Topic to be determined

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