INTRODUCTION TO ECONOMIC AND URBAN ISSUES IN CANADIAN IMMIGRATION POLICY

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Abstract

This introduction highlights five important aspects of the research literature on the economics of Canadian immigration with a particular focus on cities, and introduces the collection of papers that follows in this special issue. Explaining the significant decline in the economic circumstances of recent immigrants has been, and will continue to be, a central focus of research and policy attention. We address this issue in light of the timing of immigrant flows relative to the business cycle, the increasing concentration of immigrants in urban regions and the changes in the immigrant selection process that have a bearing on the rate of economic integration of new arrivals. We then document the decline in labour market outcomes and, finally, consider selected broad implications of immigration for the Canadian economy.

Keywords: Immigrants, Canada, Economic Integration, Earnings, Cities

Canada is changing and nowhere is this more apparent than in the composition of its population. According to the 2001 Census, the 5.4 million foreign-born in Canada comprise 18.4% of the total population, which is the highest proportion since 1931 (Statistics Canada, 2003). This current high-water mark follows a period with historically high immigration rates, similar to that in 1931. Moreover, the absolute number of immigrants arriving in Canada is higher than it has ever been. Like the first few decades of the 20th century, immigration is currently increasing Canada's cultural diversity and its population base. This has important economic implications which are the focus here.

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Three aspects of recent immigration are particularly striking. The first is its urban character. Unlike the immigration in earlier decades, immigrants today are primarily settling in larger cities rather than populating the rural West. Of the 2.2 million immigrants (those not born in Canada) who arrived during the 1990s, 94% chose to settle in one of Canada's Census Metropolitan Areas (CMAs). In comparison, only 64% of the total population, which includes the same recent immigrants, live in a CMA. Further, 73% of those who arrived in the 1990s live in Toronto, Vancouver or Montreal, and within these three urban areas immigrants are also heavily concentrated.

A second issue is that the demographic characteristics of immigrants has changed, in many cases directly in response to shifts in policy priorities. The relative emphasis placed on different entry categories (such as economically-assessed, family and refugee class), and variations in the points system for selecting skilled workers, have had an important bearing upon this demographic change and the likelihood of economic success among new immigrants. On the one hand, the changing composition of immigrants by country of source has resulted in a greater proportion reporting neither official language as mother tongue and self-identifying as "visible minorities" with the related possibility that new immigrants face greater discrimination in the labour market; on the other hand, increases in such factors as educational attainment have increased aspects of recent immigrants' human capital endowment.

Third, and quite crucially, over the last two decades there has been a substantial deterioration in immigrant labour market outcomes. Whereas the mean earnings of previous cohorts fairly quickly converged to, or exceeded, that of their Canadian-born counterparts, there is clear evidence that this is not the case for recent arrivals. This has implications not only for the immigrant's own well being but also for the Canadian economy as a whole. For instance, recent immigrants are experiencing lower labour force participation rates, higher rates of unemployment and lower earnings, and this may impose a greater burden on social programs. For policymakers this raises questions about the role of immigration in prompting economic growth, and the implications for government transfer programs and tax revenues.

Determining the interrelationships between these three aspects of recent immigration poses an important challenge for researchers and policymakers alike. Not very long ago, Canadian policy discussions were all too frequently informed by American, rather than Canadian, research, despite clear differences in the "stylized facts" on either side of the border. There has, however, been a substantial increase in research activity related to immigration in Canada. This research is particularly valuable since good policy requires an understanding of the current environment, as well as feedback regarding

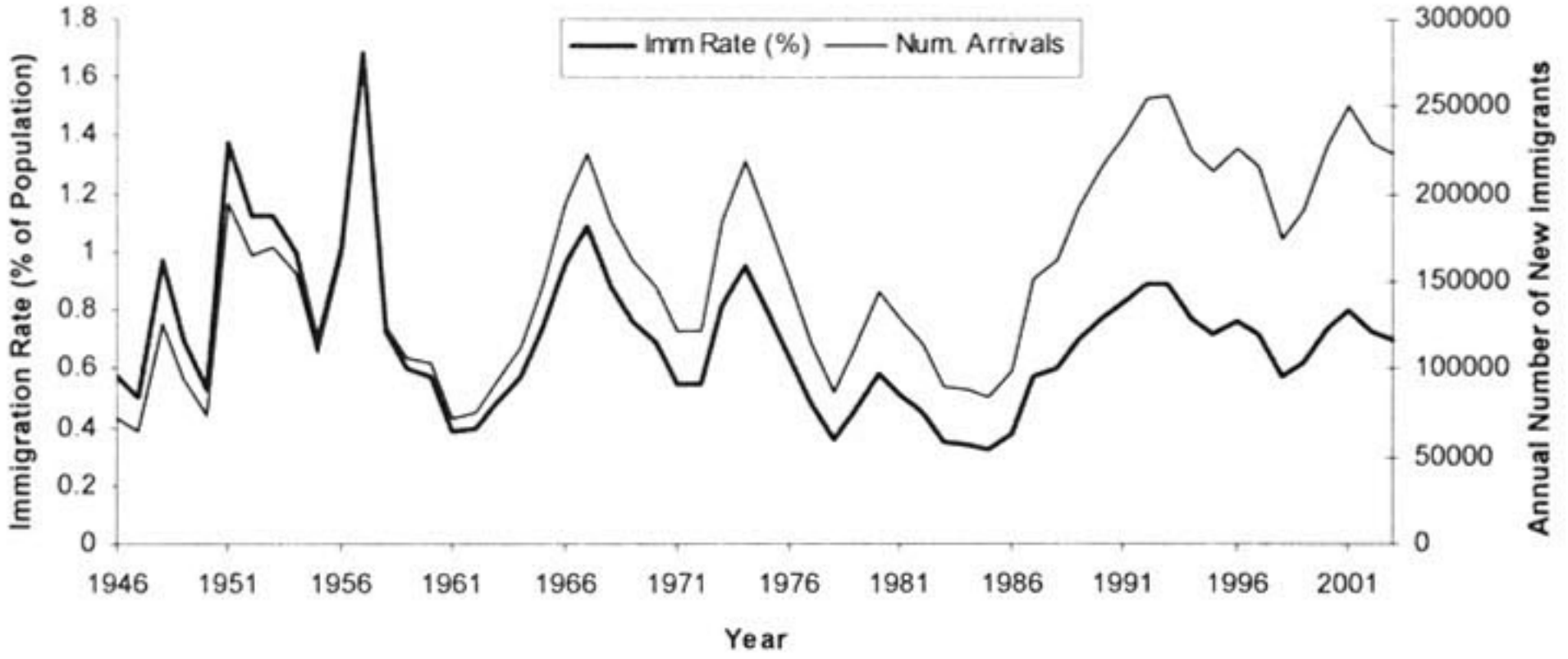
the results of past and ongoing initiatives. While not all of the research findings on the economic front are as positive as we might like, it is important to have a clear picture of what is happening in this country. We highlight five important aspects of the literature on the economics of Canadian immigration: i) the level of immigration and the "absorptive capacity" of the labour market; ii) the increasing concentration of immigrants in urban regions; iii) the impact of the immigrant selection process on the demographic characteristics of new arrivals that may influence their rate of economic integration; iv) the labour market performance of recent immigrant cohorts; and v) the broader implications for the Canadian economy.

1. Immigration Rates and Absorptive Capacity

Despite political rhetoric concerning the move to an annual rate of immigration of 1% in the 1990s, Canada's actual rate consistently fell well below this target during the decade (Figure 1). The rhetoric has, however, not been without cause for there was a clear and marked change in immigration policy in the years following 1990: the immigration rate was higher than in the immediately previous decades, though not as high as that in the post-World War II era or at spikes in 1967 and 1974. The absolute number of individuals immigrating was also at historically high levels. Overall, immigration has increased even if it has not achieved the rhetorically significant 1% annual rate. The bottom row of Table 1 adds some perspective to the issue: according to the 2001 Census, slightly over one third of immigrants living in Canada arrived in the 1990s.

At least as important as the increased immigration level is the change in the timing of immigration flows. Green and Green (2004) provide a brief history of Canadian immigration legislation and an analysis of unannounced policy changes. Prior to 1990 Canada adjusted immigrant flows according to the nation's perceived "absorptive capacity."[1] This is sometimes referred to as managing the immigration system with short-run goals in mind: absorptive capacity implied increasing the immigration rate when jobs were plentiful, but reducing it when they were scarce. In contrast, in the 1990s there was a move to long-run immigration rate "targeting" to promote longer-term growth while ignoring the current state of the economy. While the dichotomy between the long and short run is arguably more apparent than real, one primary effect of the policy change is evident in Figure 1. Prior to 1990, there are large cycles in the immigration rate that match the business cycle (e.g., the unemployment rate) relatively closely. Afterwards, however, there was a marked departure from this approach. During the major recession of the early 1990s, there was an increase, not a decrease, in the immigration rate.

Figure 1 - Immigration Rate and Level



(Source: CANSIM II Series V1 and V11875.
Immigration in 2003 is estimated based on data for first three-quarters of the year.)

As might be expected (and will be discussed in subsequent sections), immigrants who arrive in the midst of a recession have poor economic outcomes. Aydemir (2003), and Aydemir and Skuterud (2004), however, show that these immigrant cohorts appear to suffer permanent "economic scarring" that affects their rate of economic integration. Scarring implies that the short run cannot be sufficiently isolated from the "longer" run (say two decades), and that ignoring short-run economic issues has a long-run cost. Further, it is not clear that the demographic concerns that motivate a focus on the long run are any better served by a relatively stable immigration rate compared to one that fluctuates, as long as the total number of immigrants admitted over some longer period, say a decade or the duration of a business cycle, is the same.[2] Of course, there are differences between the two alternatives in terms of the administrative operation of the system, but we suspect that the administrative costs and related difficulties are trivial compared to the larger economic issues. Research and policy discussions on issues related to absorptive capacity are active, ongoing and particularly important.[3]

2. Immigration and Canada's Cities

Equally important as understanding immigration rates and levels, is the need to understand the geographic distribution of individuals. Findings from the

Table 1: Population by Immigration Status and Metropolitan Area (CMA), 2001 Census

		All Immigrants		Recent Immigrants		Canadian Born	
	Total Population (thousands)	% Foreign Born in CMA	% of All Foreign Born In Canada	% of Recent Foreign Born in CMA	% of All Recent Foreign Born In Canada	% Canadian Born in CMA	% of All Canadian Born
Large" Cities							
Toronto	4,907	41.4	37.3	16.2	43.3	58.6	11.7
Montréal	3,549	17.5	11.4	6.1	11.8	82.5	11.9
Vancouver	2,099	35.2	13.6	15.4	17.7	64.8	5.5
Sub-Total	10,555	32.1	62.3	10.8	62.3	67.9	29.2
"Medium-Size" Cities							
Ottawa-Hull	1,109	16.7	3.4	6.4	3.9	83.3	3.8
Calgary	993	20.4	3.6	6.3	3.8	82.2	3.7
Edmonton	967	17.1	3.0	4.7	2.5	82.9	3.3
Québec	694	2.8	0.4	1.3	0.5	97.2	2.7
Winnipeg	684	16.0	2.0	3.7	1.4	84.0	2.3
Hamilton	680	22.7	2.8	5.1	1.9	77.2	2.1
Sub-Total	5,243	16.3	15.3	5.3	15.3	84.1	18.0
Other CMAs							
Kitchener	431	21.0	1.7	5.9	1.4	79.0	1.4
London	425	18.9	1.5	4.7	1.1	81.1	1.4
St. Cath.-Niagara	392	16.9	1.2	2.3	0.5	83.1	1.3
Halifax	359	6.8	0.4	2.0	0.4	93.2	1.4
Victoria	319	18.0	1.1	2.9	0.5	82.0	1.1
Windsor	314	21.6	1.2	7.6	1.3	78.4	1.0
Oshawa	305	15.2	0.8	2.4	0.4	84.8	1.1
Saskatoon	232	7.3	0.3	2.4	0.3	92.7	0.9
Regina	198	7.1	0.3	1.8	0.2	92.9	0.8
St. John's	176	2.8	0.1	1.0	0.1	97.2	0.7
Chicoutimi-Jonq.	159	0.8	0.0	0.6	0.1	99.2	0.6
Sudbury	157	6.9	0.2	1.2	0.1	93.1	0.6
Sherbrooke	155	4.4	0.1	2.4	0.2	95.5	0.6
Trois-Rivières	141	1.5	0.0	0.6	0.1	98.5	0.6
Saint John	127	3.6	0.1	0.6	0.0	96.4	0.5
Thunder Bay	126	10.6	0.2	1.5	0.1	89.4	0.5
Sub-Total	4,016	12.6	9.3	4.2	9.3	87.4	14.3
non -CMAs	10,193	7.0	13.1	2.4	13.1	93.0	38.6
Canada	29,639[1]	18.4	100.0	6.1	100.0	81.6	100.0

Note: The population figure used in the source, Statistics Canada (2003), has since been revised upwards (see www.statcan.ca); this would slightly lower the estimated proportion of foreign-born in Canada.

2001 Census of Canada document the growing concentration of immigrants in CMAs, and especially in the three major receiving cities of Toronto, Vancouver and Montreal. The first two columns of Table 1 answer two related, but distinct, questions for the population of all immigrants. First, "What fraction of the population in each CMA are immigrants?" And second, "What fraction of Canada's total immigrant population lives in each CMA?"

The centre and rightmost set of columns answer the same questions for recent immigrants (those who arrived in the 1990s), and the Canadian born, respectively. As can be seen at the bottom of the first column, overall, 18.4% of Canada's population are immigrants. However, the percentage of immigrants in the "Large Cities," at the top of the column, is massively greater with 41.4% of Toronto's and 35.2% of Vancouver's population being immigrants. Montreal is closer to the national average at 17.5%. Column 2 indicates that 37.3% of all immigrants live in Toronto, and Vancouver, though smaller and having a slightly lower immigrant density, is still home to 13.6% of the immigrants in Canada.

It is also clear that many smaller and mid-sized cities also have appreciable immigrant concentrations with several having at least as great a density as Montreal, although, being smaller, they contain a smaller fraction of the country's immigrants. While many immigrant-related policies are driven primarily by sheer numbers, immigrant concentration is more relevant in other situations. In this regard, many medium and smaller cities cannot be neglected. Notice that a relatively small proportion of immigrants live outside of CMAs (13.8%), whereas almost a third of the Canadian-born reside in these areas.

Even more striking than the overall immigrant concentration is that of recent arrivals. Fully 16.2% of Toronto's population is made up of immigrants who arrived in the 1990s. Further, of all the immigrants who arrived in the 1990s, 43.3% live in Toronto, and 72.8% live in one of the three major CMAs. It is almost to the point where the Federal Government's immigration policy is really a three-city policy.

MacDonald (2004) looks at one aspect of new immigrant's urban concentration and documents the role that existing ethnic and immigrant enclaves, or clusters, have in influencing location decisions.[4] He finds that the existence of such clusters serves to magnify the attraction of cities, and tends to augment ethnic and source country segregation by city. There are two aspects of this phenomenon that are still not well understood. First, are these effects temporary? That is: will these cities serve as "gateways" to the rest of Canada, or immigration "magnets" that hold the new arrivals in the long term? Second, are there policy levers that provincial governments may use in an effort to develop the "critical mass" of immigrants that may, in turn, foster further immigration inflows into particular regions?

The answer to these questions is important to cities whose populations are not only increasing rapidly, but also changing in composition, since it affects the delivery of services that are appropriate to the new residents. Heisz and Schellenberg (2004) find that immigrants are more likely to use public transit than the Canadian born. Some of this follows from differences in income, but

not all. Further, although the public transit use gap declines as immigrants spend more time in Canada, use does not converge completely.

3. The Selection Process and Changing Immigrant Demographics

One of the policy emphases associated with moving towards long run "targeting" is the desire to select immigrants with appropriate demographic characteristics that foster long-term economic growth. Tables 2 to 4 quantify selected aspects of the changing demographics of immigrants. Tables 3 and 4, like Tables 5 and 6 that follow, include only those who are 25-45 unless otherwise specified, and all statistics are drawn from the 2001 Census of Canada. Note that the presentation of results by cohort induces a type of selection across the table in that those who immigrated at an early date must have landed at a young age, and those who immigrated recently at an older one. Accordingly, results by cohort should be interpreted with this in mind.[5]

One key change, apparent in Table 2, is the opening up of the range of source countries from which Canada's immigrants originate. This is part of an ongoing phenomenon. About 90% of those immigrants still in Canada in 2001 and who arrived prior to 1961 originated in Europe and, although the table does not show the detail, about 24% of the total were from the United Kingdom. There was also substantial representation from what have become the core European Union countries in this period. With the advent of legislative changes in the 1960s, especially the introduction of the points system to assess economic class immigrants, the mix changed. Of course, changing attitudes and operational details of the immigration program, such as the location and staffing of foreign application centres, and "push" factors in various countries, were also crucial. Overall, the change is dramatic. For example, Asian immigration rose from about 3% of the flow prior to 1961, to 58% in the 1990s.

Table 2: Source Region Distribution by Immigrant Arrival Cohort, 2001 Census (percentage)

Region	Total	< 1961	1961 - 70	1971 - 80	1981 - 90	1991 - 2001
United States	4.37	3.9	6.3	6.7	4.0	2.8
Europe	41.99	90.5	69.2	36.2	25.6	19.5
Asia	36.51	3.2	12.1	33.3	47.2	58.2
Africa	5.19	0.5	3.2	5.8	5.7	7.6
Caribbean, Central & South America	10.99	1.4	8.0	16.5	16.5	10.9
Oceania and other countries	0.96	0.4	1.2	1.5	1.0	0.8

Source: Statistics Canada (2003).

Some implications of this shift in source countries are evident in the Census measures of language and visible minority status, described in Table 3. The first two columns point to dramatic differences between the Canadian-born and immigrant populations, and to notable differences across cities. Only just

Table 3: Language and Visible Minority Distributions, 2001 Census (Both Sexes)

	Non-Immigrants	Immigrant population					
		Total	< 1961	1961-70	1971-80	1981-90	1991-2001
% Visible Minority							
Canada	2.2	62.8	3.7	17.5	53.5	67.4	72.3
Toronto	6.9	70.6	4.6	23.3	63.5	74.3	77.7
Montréal	1.6	62.1	2.0	12.9	56.2	67.7	67.8
Vancouver	8.4	77.2	14.0	33.8	70.0	80.8	82.8
% with Knowledge of Neither Official Language							
Canada	0.0	3.3	0.1	0.1	0.8	2.8	5.1
Toronto	0.0	3.3	0.0	0.2	0.9	3.0	4.8
Montréal	0.0	2.4	0.0	0.1	1.0	1.9	3.5
Vancouver	0.0	6.3	0.0	0.1	1.3	5.3	9.1
% who Speak Neither Official Language At Home							
Canada	1.2	44.5	4.6	5.9	20.8	44.3	60.9
Toronto	2.1	48.7	6.5	7.5	22.3	46.7	64.3
Montréal	1.6	43.3	13.5	13.0	28.6	44.2	51.6
Vancouver	1.0	55.5	4.1	7.2	27.6	54.8	70.0
% who Speak French and/or English and Other At Home							
Canada	0.4	5.8	1.2	1.8	4.4	6.8	6.6
Toronto	0.9	5.5	1.8	2.3	4.1	6.2	6.0
Montréal	0.6	9.4	3.7	3.7	7.1	10.5	10.4
Vancouver	0.4	5.4	1.2	1.8	5.3	6.5	5.3

Source: Statistics Canada - Cat. No. 97F0009XCB01040

Table 4: Education and Visible Minority Distributions, 2001 Census (Both Sexes)

	Non-Immigrants	Immigrants					
		Total	< 1961	1961-70	1971-80	1981-90	1991-2001
% Less than High School Graduation Certificate							
Canada	17.9	16.9	15.8	14.4	17.1	21.0	14.9
Toronto	10.9	16.7	17.1	14.1	16.6	20.1	15.1
Montréal	15.0	17.8	15.5	14.6	17.7	22.2	15.9
Vancouver	12.0	16.0	10.5	11.3	14.8	21.5	14.4
% High School Graduation Certificate Only							
Canada	14.3	12.0	16.2	14.6	12.0	12.6	11.1
Toronto	12.0	12.5	16.8	16.0	12.1	13.1	11.8
Montréal	14.6	12.0	25.3	15.6	11.5	13.0	11.0
Vancouver	11.1	11.1	8.8	11.1	10.9	12.2	10.7
% Some Postsecondary Education							
Canada	11.1	10.6	10.5	11.3	12.0	11.4	9.5
Toronto	12.4	10.5	10.6	11.3	11.7	11.5	9.4
Montréal	9.1	9.3	9.0	9.4	9.2	10.0	9.0
Vancouver	14.7	10.4	9.9	11.4	13.1	11.4	9.0
% Trades, College, or University Below Bachelor's Degree							
Canada	37.3	30.4	37.2	35.8	34.7	32.5	26.5
Toronto	31.8	28.5	32.0	33.1	33.3	31.8	24.5
Montréal	37.2	30.6	32.7	31.9	35.0	31.9	28.3
Vancouver	37.2	30.4	40.4	38.9	36.3	30.8	27.3
% Bachelor's Degree or University Bachelor's Degree							
Canada	16.5	22.6	16.4	18.7	20.5	17.9	26.8
Toronto	27.6	24.3	18.6	20.5	22.5	19.0	28.3
Montréal	19.8	22.1	14.7	21.5	21.7	18.0	24.6
Vancouver	21.0	25.0	25.2	21.2	21.7	19.8	28.8
% Master's Degree or Earned Doctorate							
Canada	3.0	7.6	3.8	5.2	3.7	4.7	11.2
Toronto	5.3	7.6	4.9	5.1	3.8	4.5	10.9
Montréal	4.3	8.3	2.9	6.9	5.0	4.9	11.3
Vancouver	4.0	7.2	5.3	6.1	3.2	4.4	9.9

Source: Statistics Canada - Cat. No. 97F0009XCB01041

over 2% of the Canadian born self-report themselves as being a member of a visible minority, although the percentage in Toronto and Vancouver is 3 to 4 times the national average; Montreal, in contrast, is actually somewhat below the national average. However, over 60% of immigrants report themselves as being members of visible minorities, with, again, the concentration in Vancouver and Toronto being higher. The fraction visible minority clearly increases dramatically starting in the 1960s.

Official language knowledge, the second variable, is remarkably high among the Canadian born.[6] Immigrants who have resided in Canada longer are much more likely to speak one or both official languages, though there is a low but appreciable number who have resided in Canada more than a decade and speak neither French nor English. If speaking an official language at home is an indication of fluency, then fluency is declining and the pattern is similar to that for visible minority status, though it is not quite as pronounced. It cannot be discerned, in this or any single year cross-section, how much of the trend across cohorts results from increasing official language use as more time is spent in Canada, and how much is derived from permanent differences between cohorts (see Borjas, 1985). This is an "identification problem" that plagues much immigration research and is discussed in the review paper by Hum and Simpson (2004).

A summary of immigrant and Canadian born education credentials can be found in Table 4.[7] While not a new observation, it is worth noting that immigrants have higher levels of credentials in every cohort and, moreover, that immigrants who arrived in the 1990s had a marked increase in the level of credentials held. A very high fraction of recent immigrants hold university degrees (over 14% of males hold an advanced degree). This followed directly from changes to the points system that occurred in the period; Shi (2004) discusses some of the associated implications. We suggest that these policy changes, together with increasing the fraction of the flow in the economic category, were undertaken in an effort to increasingly select immigrants who will have high earnings since, as will be discussed in the next section, immigrant labour market outcomes declined substantially in the last two decades or so.

4. Labour Market Outcomes

If one goal of the immigrant selection process is to enhance the likelihood of rapid economic integration, the deteriorating labour market performance of recent arrivals is a sobering result. Declining earnings and labour force participation rates are of particular concern since they are occurring despite higher educational attainment. The severity of the decline in the early 1990s prompted the policy response of increasing the relative size of the economic

immigrant class (chiefly at the expense of the family class), and a further increase in the emphasis on higher education in the points assessment process for potential economic class immigrants. Unfortunately, the Census and most survey data do not have the information to identify each immigrant's entry class. However, some work using the administrative Immigrant DataBase (IMDB) does pursue this issue (see Abbott 2003).

This phenomenon has been the subject of discussion among policymakers and the focus of a number of research efforts. It is surveyed in its current state by Hum and Simpson (2004) and Picot (2004). As Warman and Worswick (2004) document, however, there are important differences in the trends in immigrants' earnings when disaggregated by metropolitan area. This highlights the need to distinguish national trends from those specific to particular cities with a heavy concentration of immigrants.

Labour market outcomes for those aged 25-44 are presented in Table 5 (for men) and Table 6 (for women). The first three sets of rows in each table document labour force participation. For both sexes, on average, immigrants are less likely to participate in the labour force (defined as employed or searching for work, with the remainder of the relevant population out of the labour force), and this difference is driven entirely by the lower labour force attachment of more recent immigrants. The gap is larger in Vancouver and Montreal than in both Toronto and the country as a whole. Immigrant women in Montreal have a particularly low participation rate. Montreal also has a lower employment, and substantially higher unemployment, rate for immigrants of both sexes, which is in marked contrast to the Canadian born. For the Canadian born the unemployment rate in Montreal is equal to that in Vancouver, and below the national average.

The unemployment rate of recent immigrants is much higher than that of the Canadian born, which is in turn higher than that of long resident immigrants. This measure alone only depicts part of the story since many recent immigrants have dropped out of the labour market. On both dimensions, immigrants in Toronto have better than average outcomes, and those in Montreal have ones that are worse.

The centre two sets of statistics in Tables 5 and 6 describe income. First is earnings (or employment income) for a relatively homogeneous group of individuals with high labour force attachment: those who worked full-time (>30 hours/week), full-year (52 weeks including holidays), in 2000. The earnings of women are, on average, clearly much lower than those of men even among this sample (though there are differences in hours worked). Immigrants in Canada for more than 20 years have, on average, earnings that are at least as high as those for the Canadian born and sometimes quite a bit higher. (Recall that everybody in this sample is aged 25-44.) Recent immigrants

Table 5: Male Labour Force Distributions, 2001 Census

	Non-Immigrants	Immigrants					
		Total	< 1961	1961-70	1971-80	1981-90	1991-2001
Labour Force Participation Rate							
Canada	92.4	89.8	92.2	93.4	92.1	91.3	87.4
Toronto	93.4	90.7	92.8	92.9	92.4	91.9	89.1
Montréal	92.8	86.9	90.9	92.7	90.3	88.9	83.9
Vancouver	91.7	86.8	91.5	92.3	91.7	88.9	83.4
Employment Rate							
Canada	86.3	83.6	88.1	89.4	87.7	86.1	79.3
Toronto	90.3	85.5	88.6	90	88.8	87.9	82.4
Montréal	87.7	75.9	86.4	86.8	84	79.9	69.6
Vancouver	86.5	80.1	88.3	88.3	86.4	83.1	75.3
Unemployment Rate							
Canada	6.6	6.9	4.5	4.2	4.8	5.6	9.2
Toronto	3.4	5.7	4.6	3.1	3.9	4.4	7.5
Montréal	5.6	12.7	5	6.3	7	10.2	17
Vancouver	5.6	7.8	3.5	4.4	5.7	6.6	9.8
Full-time Full Year Average Employment Income ($)							
Canada	48063	45231	55914	57790	48972	43264	40839
Toronto	61513	47094	61657	65932	52987	45122	41678
Montréal	46729	37708	47659	49569	42115	36157	33920
Vancouver	52771	43608	58504	55112	47654	42738	39631
All Source Income ($)							
Canada	41489	36617	50428	52207	42616	36648	30737
Toronto	55096	38448	58501	59556	46212	38900	32094
Montréal	40632	28801	44034	46877	34992	29108	23889
Vancouver	44303	33425	52343	49496	40344	33949	28319
% Below Low Income Cutoff (Ages 25-44)							
Canada	11.1	22.2	9.9	8.9	11	17.3	32.4
Toronto	7.4	20.6	7.2	7.7	9.5	14.9	29.5
Montréal	14	35	11.8	13.5	19.1	28.5	46.5
Vancouver	13	26	8.5	10.8	11.9	20.4	35.8
% Below Low Income Cutoff (All ages)							
Canada	13.1	20.4	10.3	10.5	11.9	18.4	35.2
Toronto	11.2	20.3	11.5	10.3	10.9	16.2	32.3
Montréal	17.4	30.9	17.3	16	20.3	30.7	47.8
Vancouver	14.8	26.9	14.3	12.7	13.2	21.2	41.1

Source: Statistics Canada - Cat. No. 97F0009XCB01042 and Cat. No. 97F0009XCB01043

earn somewhat less than the Canadian born. Notice that there is a clear ranking in earnings across cities that holds for the Canadian born and immigrants alike. They are highest in Toronto, lower in Vancouver and lowest in Montreal. Montreal is the only major CMA whose average is below that for the nation. These earnings differences reflect some combination of the standard of living and cost of living in each city. The second set of statistics is income from all sources. This differs from employment income on two dimensions. First, it includes all individuals regardless of employment status, and second, the

Table 6: Female Labour Force Distributions, 2001 Census

	Non-Immigrants	Immigrant population					
		Total	< 1961	1961-70	1971-80	1981-90	1991-01
Labour Force Participation Rate							
Canada	82.4	75	84.6	84.1	82.9	79	68.3
Toronto	85.1	76.6	84	84.6	84.6	80.7	70.9
Montréal	83.9	69.9	80	84.6	79.9	73.4	63
Vancouver	84.2	72.8	93.5	83.8	83.1	79.2	65.9
Employment Rate							
Canada	77.4	68.4	81.8	80.3	78.3	73 3	59.9
Toronto	81.6	70.2	82.8	81.1	80.5	75.7	62.5
Montréal	79.5	59.9	76.3	79.7	73.3	64.1	50.9
Vancouver	79.8	66.4	89.6	80.5	78.8	73.4	58.3
Unemployment Rate							
Canada	6.1	8.9	3.5	4.6	5.5	7.2	12.3
Toronto	4.1	8.4	1.7	4.2	4.8	6.2	11.8
Montréal	5.2	14.3	3.7	5.8	8.3	12.6	19.2
Vancouver	5.2	8.8	4.2	3.9	5.2	7.3	11.4
Full-time Full Year Average Employment Income ($)							
Canada	35,372	33,613	42,991	41,557	36,791	33,123	29,548
Toronto	45,600	35,302	51,665	45,679	39,817	35,014	30,639
Montréal	35,644	30,166	43,647	38,449	33,560	29,253	26,247
Vancouver	40,764	33,225	55,934	44,317	37,659	32,707	29,170
All Source Income ($)							
Canada	27,043	23,816	35,633	32,677	29,367	25,417	18,945
Toronto	37,084	25,553	40,822	37,099	32,934	27,661	20,117
Montréal	28,634	20,504	32,365	30,043	26,696	21,505	16,342
Vancouver	31,467	22,876	46,616	34,685	29,606	25,301	18,339
% Below Low Income Cutoff (Ages 25-44)							
Canada	13.7	24.8	9.3	10.4	13.9	20	33.9
Toronto	8.9	23.4	8.5	8.6	12.7	18.1	31.6
Montréal	16.1	38.2	16.3	16.5	23.6	33.7	48.1
Vancouver	13.8	28.6	7.8	10.9	14.6	21	37.7
% Below Low Income Cutoff (All ages)							
Canada	16.1	23.2	17.4	13.8	15.1	21	35.1
Toronto	12.8	22.8	17.8	13.5	14.5	19.1	32.6
Montréal	21.2	34.5	26	21	24.9	34.8	47.9
Vancouver	16.5	28.6	22.5	14.7	16.2	22.4	40.4

Source: Statistics Canada - Cat. No. 97F0009XCB01042 and Cat. No. 97F0009XCB01043

measure encompasses not only earnings, but government transfers, rental income and all other sources of income. Although the averages are lower than those for employment income, they have a very similar pattern. Early immigrant cohorts have higher total income than the Canadian born, although as mentioned earlier it is not possible to determine from these cross-sectional estimates the degree to which this follows from increases that have occurred with increasing time in Canada, or whether those cohorts have always had high earnings. Picot

(2004) shows that it is a mixture of the two, and Warman and Worswick (2004) graphically present the earnings profiles for each entry cohort over time.

While labour market outcomes are of concern, poverty and standards of living are crucial. The bottom two items in the table address this issue. Low-income rates for the prime age groups are presented next.[8] For the immigrant population the percentage living below the low-income cut-off (LICO) is substantially higher than that for the Canadian born. Montreal has a particularly high rate of immigrants living below the LICO, although that for the Canadian born is very similar. Recent immigrants have deplorably high rates of low income, with the national average around 32%, and in Montreal as high as 46%. Those with greater time in Canada have much lower rates, frequently lower than those for the Canadian born. Toronto has the lowest rates of low income, although it is still quite high for recent immigrants.

Of course, prime age individuals are not the only ones of interest, so, unlike every other statistic in Tables 3 through 6, the last set in each of Tables 5 and 6 are the LICO rates for those of all ages. For the Canadian born this implies a slight increase in the low-income rate, but for immigrants there is a slight reduction overall. However, the rate for the most recent cohort of immigrants is seen to be higher for this group than for the 25-44 age one. What seems to be driving this difference is, first, that compared to the Canadian born, there are relatively few very young immigrants, but a larger number of elderly ones, and second, the existing social safety net for seniors is relatively more likely to keep them out of poverty than is the safety net for children. The difference in the population profiles, combined with differences in social support programs thus explains the differential movement in the rates between the two groups. For the same reason, the older immigrant cohorts move in the same direction as the Canadian born. Nevertheless, while the immigrant-Canadian born LICO gap is reduced, it is very far from closed and a much higher fraction of immigrants live below the LICO than do the Canadian born.

Picot (2004) surveys immigrant and Canadian born low-income trends taking care to account for business cycle effects and other technical issues. He observes that immigrant poverty rates are increasing in Canada, while those for the Canadian born are declining. He also surveys the literature for explanations for the declining outcomes of more recent immigrants and finds that, while there is no single source of the problem, poor labour market outcomes, some of which are discussed later in this section, are at the heart of the problem. Social transfers (primarily in the form of social assistance and EI benefits) did contribute to lowering the rate of low income among immigrants, but were not sufficient to offset the deteriorating labour market conditions.

Tables 1 through 6 are simple cross-tabulations, but they tell a powerful story of changing immigrant demographics, and of declining labour market

and related outcomes. In contrast, the research literature employs much more sophisticated techniques that allow a fuller understanding of the relevant social phenomena. It is worth noting four points in interpreting results from both.[9]

1. Various studies come to slightly different conclusions in part because they employ different measures of income and different population samples. For instance, Schaafsma and Sweetman (2001) look at employment and self-employment earnings, while Pendakur and Pendakur (1998) use only employment earnings; Aydemir and Skuterud (2004) restrict the sample to full-time, full-year workers, whereas others, such as Baker and Benjamin (1994), employ a larger sample.

2. Simple descriptive statistics such as those in this paper are "unconditional" (except for the sample selection), whereas some researchers and policymakers focus on results from regression models that condition on characteristics such as age and education. Focusing on these two variables, immigrants are on average older than the Canadian born and more highly educated. Hence, although immigrants may have high earnings unconditionally, once one conditions on age and education they usually appear to have lower earnings. Why is this? Because, given their age and education, one would expect them to have even higher earnings than they do. Thus a negative coefficient on an immigrant variable in a regression measures the difference relative to what would be expected, given the observed characteristics, and not an absolute level. (Of course, the prediction from the regression gives the absolute level). All too often conditional relationships are discussed as if they are unconditional, which can sometimes lead to serious misunderstandings.

3. It is not possible in a simple cross-section, such as a survey or census that takes a snap shot at a point in time, to identify separately the contribution of two alternative effects. The first effect is economic integration, or "economic assimilation" as it is designated in the US literature, whereby immigrants experience faster rates of earnings growth than the Canadian born. (This is sometimes known as a "years since migration," earnings growth, or slope effect). The second effect follows from enduring differences, on average, between immigrants who arrived in different time periods, termed entry cohorts (and referred to as an intercept or cohort entry effect). These effects can be disentangled by following individuals over time, or more commonly, by following different immigrant entry cohorts over time across

censuses or surveys. For instance, Warman and Worswick (2004) follow cohort earning averages graphically over time and illustrate the issues very clearly. They use five Canadian censuses to follow the earnings of different entry cohorts over 20 years. Note, however, that they do not do so in a regression framework and, therefore, present unconditional results.

4. Most of the research compares averages for large sub-groups of the population, for example, female immigrants who landed in the 1970s. Needless to say, there is enormous heterogeneity within these groups. While the observed averages and trends are real, they must be balanced against the diversity of individual experience in interpreting them for policy purposes.

Having made these interpretative comments, the research literature is remarkably consistent in its findings. While subtle interpretations of the empirical results may vary, both integration and cohort effects are universally found to be large. Relative to the Canadian born, immigrants have a substantial entry penalty, but their average earnings move towards, and beyond for early cohorts, those of the Canadian born over time. Unfortunately, the entry penalty has become increasingly large for more recent immigrant cohorts. There is some evidence that cohorts with larger entry effects, particularly the cohort from the late 1990s, which had particularly low entry earnings, have faster rates of post-immigration earnings growth. However, it is not clear that this growth will continue to be so rapid, and even if it is, it will be decades before the average approaches that of the Canadian born or the immigrant cohorts of a few decades ago. Overall, there is no "one explanation" for the earnings decline. Rather, several factors are operating simultaneously, some in different directions. Picot (2004) discusses these at length and surveys a broad literature.

Aydemir and Skuterud (2004) provide the most up-to-date, comprehensive, and unified technical treatment of the declining earnings of recent immigrants (although they tell only part of the story, since they focus exclusively on the earnings of full-time, full-year male workers). They find that one-third of the drop in entry earnings appears to result from labour market experience obtained in non-traditional source countries being increasingly not valued in the Canadian labour market. Another third of the decline is associated with the changing demographics of immigrants. The demographics in Aydemir and Skuterud's analysis include, especially, language skills, but also hard to interpret measures of "region of birth", which are highly correlated with ethnicity. Some of this "third" likely encompasses aspects of discrimination.

Perhaps surprisingly, education does not appear to contribute to the decline in entry earnings. The authors observe that immigrants educated outside of Canada have lower returns to both years of school and educational credentials compared to otherwise similar Canadian born workers, and immigrants workers educated in Canada, but this gap has not changed appreciably in the past two decades. If anything, the return to foreign education increased slightly for immigrants who arrived in the late 1990s. Interestingly, Canadian educated immigrants have quite high economic returns to their credentials. Overall, foreign educated immigrants from non-traditional source countries obtain a lower return to their schooling and credentials, which reduces earnings, but this has not changed over time and has not obviously contributed to the decline in immigrant earnings.

These findings are consistent with earlier work. Schaafsma and Sweetman (2001) also find that the return to foreign experience is virtually zero in the Canadian labour market, and that education obtained outside of Canada has a lower return than that obtained domestically. Further, they observe that this interacts with age at immigration. Immigrants who arrive at a young age have economic outcomes similar to, or better, than the Canadian born, but the older an immigrant arrives the lower the economic returns to, for example, foreign experience. Interestingly, they also observe an age at immigration effect that is additive to that previously mentioned for visible minority status and mother tongue. This is consistent with the idea that linguistic and perhaps cultural "integration" is easier for those who arrive at a young age and that this matters in the labour market. See also Li (2001, 2002) and Waslander (2002) for a discussion of the role of immigrant credentials and earnings, and Reitz (2001) for an argument that immigrant skills are underutilized.

Another important issue is the effect of the decline in general labour conditions for new labour market entrants. Beaudry and Green (2000) document the declining labour market earnings (in inflation adjusted dollars) for Canadian born new labour market entrants, which points to the growing earnings gap between the young and old that has evolved in Canada since the early 1970s. If immigrants, regardless of age, are new entrants to the Canadian labour market, then they likely receive the same declining entry earnings as young Canadian-born workers, but the types of analyses normally conducted compare their earnings to workers of the same age, thereby confounding "new immigrant" and "new entrant" earnings penalties. Green and Worswick (2003) find support for the hypothesis that new immigrants are, in part, suffering the same decline as Canadian born new entrants, and it is confirmed by Frenette and Morissette (2003). This can account for a substantial portion of the growing gap. Table 7 presents earnings growth rates between 1980 and 2000, by sex, for three age groups and immigrant status. An age difference in growth rates is especially

obvious for males. Young men, particularly those with low education are, like recent immigrants, experiencing a significant earnings decline.

Table 7: Percentage change in mean earnings of recent immigrant and Canadian-born workers, 1980-2000, by sex, age, and education [1,2]

	All education levels	High school or less	College	University
Men				
Canadian-born				
age 16 to 64	7	-4	3	10
age 25 to 29	-10	-16	-11	-3
age 30 to 54	3	-5	-1	6
Recent immigrants[3]				
age 16 to 64	-7	-17	-16	-13
age 25 to 29	-7	-14	-21	3
age 30 to 54	-11	-21	-19	-15
Women				
Canadian-born				
age 16 to 64	19	11	9	11
age 25 to 29	-1	-9	-10	-4
age 30 to 54	17	12	6	6
Recent immigrants[3]				
age 16 to 64	13	-2	1	6
age 25 to 29	3	-8	-3	4
age 30 to 54	13	1	-1	3

Source Morissette and Frenette (2003)

1 Percentage change based on constant dollars

2 In any given year, the sample consists of individuals who worked at least 40 weeks (mainly full-time, or 30 hours or more per week) and with positive earnings

3 Recent immigrants are those who arrived in the last five years.

An astute reader will have noticed that more than 100% of the immigrant-Canadian born earnings gap has been explained by these different factors. Some of the factors are not independent, that is, they overlap, and looking at each independently overvalues its contribution. More importantly, immigrant education levels have been increasing over the period and, holding all other factors constant, immigrant earnings should be increasing over time as a result. Put another way, the decline would likely be larger were it not for the fact that recent immigrants are increasingly better educated and there is a reward for that in the labour market.

5. The Impact of New Immigrants on Society at Large

An important question, that has not received sufficient attention in the Canadian literature, concerns the relationship between new immigrants and the economic well being of society at large including the pre-existing population. (These are sometimes termed the general equilibrium effects of immigration.) A fundamental tenet of economics is that if the supply of a homogeneous good is increased, the price of that good will be bid down; hence, immigration is expected to reduce wages. More subtly, if capital is insufficiently mobile or there are other rigidities it may change the capital-labour ratio and alter the relative price of inputs; immigration may increase the return to capital and decrease the return to labour. Of course, if new and existing labour are complements, not substitutes (i.e., they are not homogeneous) then productivity and output may increase. Other issues, such as returns to scale, also play a role. (See Sweetman (2003) for a non-technical introduction.)

This is a technically challenging and controversial topic. Borjas (1999) presents an overview of the empirical US literature and a survey of simulation results. In simple simulations, immigration has a small positive impact on the pre-existing population. New immigrants produce more output, but they also reap the benefits of that production such that there are few net spillovers to the general population. Using a different approach, Green and Green (1999) survey the Canadian landscape, and come to a broadly similar conclusion about the current situation. They contrast this to an earlier era when economies of scale provided large benefits from immigration for the entire population. Akbari and DeVoretz (1992), looking in 1980 at pre-1980 immigrants, find similarly small effects, although they do find some evidence of immigrants displacing the Canadian born in a portion of the economy.

In a well-known paper in this area of study, Card (1990) looks at the impact of the massive influx of Cuban refugees, most of whom settled in Miami. Despite a rapid and substantial increase in Miami's population, especially the number of low-skilled workers, he shows that there was little impact on the pre-existing population's wages and employment. In subsequent work, Angrist and Krueger (1999) find an unexpected response to Miami's immigration shock in the short to medium-term. The pre-existing population moved geographically in response to the influx, and the inflow of Americans from elsewhere in the US to Miami reduced. This rapid response suggests that the effect of immigration is not local, except perhaps in the extremely short run, but dissipates across the entire nation fairly quickly. Estimating national effects is much harder (see Card, 2001 for an effort in the US context). This is an area about which there is little Canadian evidence and much more research is required.

Although immigrants may have little impact on the per capita output of the national economy, they may have important effects on the distribution of income through the tax system. DeVoretz and Pivnenko (2004) take a preliminary look at this topic using data from 1989 to 1997 (roughly one full business cycle). Looking at a selected set of measures, they find that immigrants, on average, contribute less in taxes and receive slightly greater public transfers than the Canadian born. This is consistent with much broader work conducted in the US by Smith and Edmondson (1997). They also find important differences in the relative contributions of the Canadian born and immigrants across cities. Immigrants not living in CMAs have a net effect on public finances much closer to those of the Canadian born. Consistent with the research by Warman and Worswick (2004), immigrants in major cities, especially Toronto, do not appear to obtain the same locational wage premium as the Canadian born and this has implications for their taxes paid and income transfers received. While there are many data limitations and caveats to DeVoretz and Pivnenko's research (for example, although mentioning the issue, it does not calculate the savings to the treasury from the education paid for in the immigrants' source countries, nor does it include the increasing cost of English as a second language instruction in Canada), it opens the door on a controversial area not often studied in Canada.[11]

Conclusion

One issue will continue to dominate research on the economics of immigration in the near future. The significant decline in the economic circumstances of recent immigrants has occurred despite the improved labour market conditions in the late 1990s, and despite policy changes designed to select immigrants with greater chances of economic success. We are beginning to understand the relative importance of the various sources of the decline, including the valuing of foreign education credentials and work experience, problems in entering the labour force during times of difficult macroeconomic conditions, and the interaction of factors such as education attainment and language skills; however, the translation of these research findings to policy remains controversial.

Ongoing analysis of newly available data is required to provide further insight. This will aid our interpretation of the results to date, and provide feedback on policy initiatives aimed at addressing the deterioration in labour market outcomes. Questions remain about whether the economic outcomes of new entrants will continue to decline and whether the rate of economic integration will remain high for those recent cohorts with particularly poor labour market outcomes at entry. Longitudinal research is also required to

determine the full magnitude of the "economic scarring" experienced, on average, by these recent immigrant cohorts. Some of the policy proposals addressing these and related issues will be controversial, and much debate will undoubtedly ensue. We hope that this debate is well informed.

Future research and policy must also address the increasing concentration of immigrants in Toronto, Vancouver and, to a lesser extent, Montreal, if national trends are to be evaluated properly. We still know little about the dynamic adjustments that occur within a national economy. While some of the effects of increased immigration may be observed in the local labour market, others are not isolated to the immediate city or region where the inflow occurs. For instance, if immigration to one city results in lower wage rates, higher housing costs or greater congestion, it may prompt some residents to leave, or discourage residents of other cities from moving there. Alternatively, if immigration creates spillover benefits for a city, some of these may be captured by an inflow of residents from elsewhere in Canada. Secondary population movements and the associated adjustments that occur in regional labour markets have yet to receive significant attention from researchers in Canada, for these "general equilibrium" effects are not only difficult to conceptualize—since an economy may respond in a fashion that was not anticipated—but also difficult to measure. There are also, however, broad areas—for example those relating to both local and national public finances—where very little immigration research has been done and where much could be learned with relative ease.

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Notes

[1] On the relative effectiveness of the Canadian and US selection of skilled workers see Borjas (1993) and Green and Green (1995).

[2] There is also substantial doubt about whether immigration can actually do much to affect demographic issues such as population aging; see Beaujot (2003) for a discussion of the issues.

[3] An interesting policy discussion is recorded in the Metropolis Conversation Series, Conversation 5 (http://canada.metropolis.net/research-policy/conversation/conversation_5.html).

[4] Other interesting research looking at the geographic movement of immigrants and ethnic communities within cities is by Myles and Hou (2004), and Hou and Picot (2003).

[5] See Schaafsma and Sweetman (2001) for a technical discussion of the implications of this approach in the context of an analysis of earnings.

[6] In fact, the number of Canadian-born, non-official language speakers is quite close to the level of measurement error in the census. This calls into question the possibility of empirically identifying separate "immigrant" and "language" effects on outcomes of interest, such as earnings.

[7] While both sexes are merged in this table, it is worth noting that, unlike the previous tables, there are some systematic differences between the sexes that are not presented (to save space). Among the Canadian born population, males are more likely than females to have less than a high school graduation certificate, and less likely to have a university degree. Interestingly, males are only very slightly more likely to hold a graduate degree. Among immigrants, however, males are about 50% more likely to have a graduate degree, equally likely to have less than a high school certificate and a bachelor's degree, and slightly less likely to be in the three remaining categories.

[8] Although those who live below Statistics Canada's low-income cut-off (LICO) are sometimes said to be living in poverty, the cut-off is not an absolute measure of poverty. Nevertheless, all (or at least almost all) observers agree that the cut-off represents a very low, and very undesirable, standard of living.

[9] See Borjas (1999) for a technical discussion of these and related issues in the US context.

[10] Sweetman (2004) uses data on test scores to explore differences in the quality of source country educational outcomes. Green and Riddell (2002) point out the importance of these measures of skills in the Canadian labour market.

[11] Moral issues concerning the possibility of reimbursing source countries for their educational contributions to Canada through immigration are also of rising importance since immigration is increasingly from countries with lower standards of living than Canada.

References

Abbott, Michael G. 2003. The IMDB: A User's Overview of the Immigration Database. In *Canadian Immigration Policy for the 21st Century*, eds. Charles Beach, Alan Green and Jeffrey Reitz. Kingston, Ontario: McGill-Queen's University Press, 315-21.

Angrist, Joshua D. and Alan B. Krueger. 1999. Empirical Strategies in Labor Economics. In *Handbook of Labor Economics*, Vol. 3a, eds. O. Ashenfelter and D. Card. Amsterdam: North-Holland, 1278-1366.

Akbari, Ather H. and Don J. Devoretz . 1992. The Substitutability of Foreign-Born Labour in Canadian-Production: Circa 1980. *Canadian Journal of Economics* 25: 604-614.

Aydemir, Abdurrahman. 2003. Effects of Business Cycles on the Labour Market Participation and Employment Rate Assimilation of Immigrants. In *Canadian Immigration Policy for the 21st Century*, eds. Charles Beach, Alan Green and Jeffrey Reitz. Kingston, Ontario: McGill-Queen's U. Press, 373-412.

Aydemir, Abdurrhman and Mikal Skuterud. 2004. Explaining the Deteriorating Entry Earnings of Canada's Immigrant Cohorts: 1966-2000. Working Paper, Statistics Canada.

Baker, Michael, and Dwayne Benjamin. 1994. The Performance of Immigrants in the Canadian Labor Market. *Journal of Labor Economics* 12: 369-405.

Beaudry, Paul and David Green. 2000. Cohort patterns in Canadian Earnings: Assessing the role of skill premia in equality trends. *Canadian Journal of Economics*, 33(4), 907-36.

Beaujot, Roderic. 2003. Effect of Immigration on Demographic Structure. In *Canadian Immigration Policy for the 21st Century*, eds. Charles Beach, Alan Green and Jeffrey Reitz. Kingston, Ontario: McGill-Queen's U. Press, 49-91.

Borjas, G.J. 1999. The Economic Impact of Immigration. In *Handbook of Labor Economics*, Vol. 3A, eds. O. Ashenfelter and D. Card. Amsterdam: North-Holland, 1697-1760.

Borjas, G.J. 1993. Immigration Policy, National Origin and Immigrant Skills: A Comparison of Canada and the United States. In *Small Differences that Matter: Labor Markets and Income Maintenance in Canada and the United States*, ed. by D. Card and R. Freeman. Chicago: University of Chicago Press.

Borjas, G.J. 1985. Assimilation, Change in Cohort Quality, and the Earnings of Immigrants. *Journal of Labor Economics* 3: 463-89.

Card, David. 1990. The Impact of the Mariel Boatlift on the Miami Labor Market. *Industrial and Labor Relations Review* 43: 245-257.

Card, David. 2001. Immigrant Inflows, Native Outflows, and the Local Labor Market Impacts of Higher Immigration. *Journal of Labor Economics* 19: 22-64.

DeVoretz, Don and Sergiy Pivnenko. 2004. Immigrant Public Finance Transfers: A Comparative Analysis by City. *Canadian Journal of Urban Research* 13:155-169.

Frenette, Marc, and Rene Morissette. 2003. Will they ever converge? Earnings of immigrant and Canadian-born workers over the last two decades. Statistics Canada, Analytical Studies Branch Research Paper No. 215.

Green, Alan G. and David E. Green. 1995. Canadian Immigration Policy: the Effectiveness of the Point system and Other Instruments. *Canadian Journal of Economics* 38: 1006-41.

Green, Alan G. and David E. Green. 1999. The Economic Goals of Canadian Immigration Policy: Past and Present. *Canadian Public Policy* 25: 425-51.

Green, Alan G. and David Green. 2004. The Economic Goals of Canada's Immigration Policy, Past and Present. *Canadian Journal of Urban Research* 13:102-139.

Green, David and W. Craig Riddell. 2002. Literacy Skills, Non-Cognitive Skills and Earnings: An Economist's Perspective. In *Towards Evidence-based Policy for Canadian Education/Vers des politiques canadiennes d'éducation fondées sur la recherché*, eds. Patrice de Broucker and Arthur Sweetman. Kingston, Ontario: McGill-Queen's U. Press.

Heisz, Andrew and Grant Schellenberg. 2004. Public Transit Use Among Immigrants. *Canadian Journal of Urban Research* 13:170-191.

Hou, Feng and Garnett Picot. 2003. Visible-Minority Neighbourhood Enclaves and Labour Market Outcomes of Immigrants. In *Canadian Immigration Policy for the 21st Century*, eds. Charles M. Beach, Alan G. Green and Jeffrey G. Reitz, McGill-Queen's University Press, pp. 537-72.

Hum, Derek and Wayne Simpson. 2004. Economic Integration of Immigrants to Canada: A Short Survey. *Canadian Journal of Urban Research* 13:46-61.

Li, Peter S. 2001. The Market Worth of Immigrants' Educational Credentials. *Canadian Public Policy* 27: 23-38.

Li, Peter S. 2002. Immigrants' Educational Worth and Years in Canada: A Reply. *Canadian Public Policy* 28: 321-25.

McDonald, James Ted. 2004. Ethnic Clustering and the Location Choice of Immigrants to Canada. *Canadian Journal of Urban Research* 13:85-101.

Myles, John and Feng Hou. 2004. Neighbourhood Attainment and Residential Segregation Among Toronto's Visible Minorities. Statistics Canada, Analytical Studies Branch Research Paper No. 206.

Pendakur, Krishna and Ravi Pendakur. 1998. The Colour of Money: Earnings Differentials among Ethnic Groups in Canada. *Canadian Journal of Economics* 31: 518-48.

Picot, Garnett. 2004. The Deteriorating Economic Welfare of Canadian Immigrants. *Canadian Journal of Urban Research* 13:25-45.

Reitz, Jeffrey G. 2001. Immigrant Skill Utilization in the Canadian Labour Market: Implications of Human Capital Research. *Journal of International Migration and Integration* 2: 347-378.

Schaafsma, Joseph, and Arthur Sweetman. 2001. Immigrant Earnings: Age at Immigration Matters. *Canadian Journal of Economics* 34: 1066-99.

Shi, Yan. 2004. The Impact of Canada's New Immigration Act on Chinese Independent Immigrants. *Canadian Journal of Urban Research* 13:140-154.

Smith, James P. and Barry Edmonston, eds. 1997. *The New Americans: Economic, Demographic, and Fiscal Effects of Immigration.* Washington: National Academy Press.

Sweetman, Arthur. 2004. Source Country School Quality and Immigrant Educational Outcomes. Mimeo, Queen's University School of Policy Studies.

Sweetman, Arthur. 2003. Immigration and the 'New Economy.' *Canadian Issues / Thèmes Canadiens*, April: 21-2.

Statistics Canada. 2003. *Canada's Ethnocultural Portrait: The Changing Mosaic*. 2001 Census Analytical Series. Cat. No. 96F0030XIE2001008. Ottawa.

Warman, Casey and Christopher Worswick. 2004. Immigrant Earnings Performance in Canadian Cities: 1981 through 2001. *Canadian Journal of Urban Research* 13:62-84.

Waslander, Bert. 2002. The Market Worth of Immigrants' Educational Credentials: A Comment. *Canadian Public Policy 28:* 315-19.