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Canadian Immigration Policy and Immigrant Economic Outcomes: Why the Differences in Outcomes between Sweden and Canada?*

Immigrants to Canada enjoy labour market outcomes that are more favourable than those for their counterparts in Sweden. In an effort to understand these gaps, Canada's immigration policy and outcomes are contrasted to the Swedish immigration experience. The nature of immigration and structural differences involving the domestic labour markets are hypothesized to provide plausible explanations for at least some of the gap. Additionally, there are dynamic issues related to, for instance, the timing of immigrant entry with respect to the business cycle, and changes in the rates of immigration flows, that may have some impact on labour market outcomes and explain some short- to medium-term aspects of the gap in outcomes. On the other hand, common trends are also observed; both unemployment and earnings outcomes among entering immigrants have deteriorated significantly in Canada since the 1980s, as they have in many western countries including Sweden.

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Introduction

Much can be learned regarding immigration policy by studying cross-country differences in immigrant economic outcomes and their causes. Employment outcomes among immigrants to Canada tend to be superior to those of their counterparts in Sweden. However, the nature of immigration to the two countries differs and other structural differences involving the domestic labour market provide plausible explanations for at least some of the gap. Additionally, there are dynamic issues related to, for instance, the timing of immigrant entry with respect to the business cycle, and changes in the rates of immigration flows, that may have some impact on labour market outcomes and explain some short- to medium-term aspects of the gap in outcomes across countries. On the other hand, both unemployment and earnings outcomes among entering immigrants have deteriorated significantly in Canada since the 1980s, as they have in many western countries including Sweden.

This paper describes the context of Canadian immigration and immigrants' labour market outcomes, and explores trends in both over time. Fortunately, there is a wealth of research regarding the question of why earnings have declined among immigrants to Canada. Employment outcomes of immigrants to Canada have been much less studied. In this latter case we are restricted to providing basic facts, and hypotheses regarding the causes of the Swedish-Canadian differences mentioned above. This paper outlines potential causes of the observed gap in outcomes, to the extent that they are known, and asks what the implications might be for the Swedish experience. Of course, Canadian outcomes are in part a function of the institutional setting. As will be seen, it is likely that much of the difference in economic outcomes between the two countries is related to differences in immigration programs and policies. The paper ends with a discussion and summary of the range of possible drivers of Sweden's current immigration outcomes.

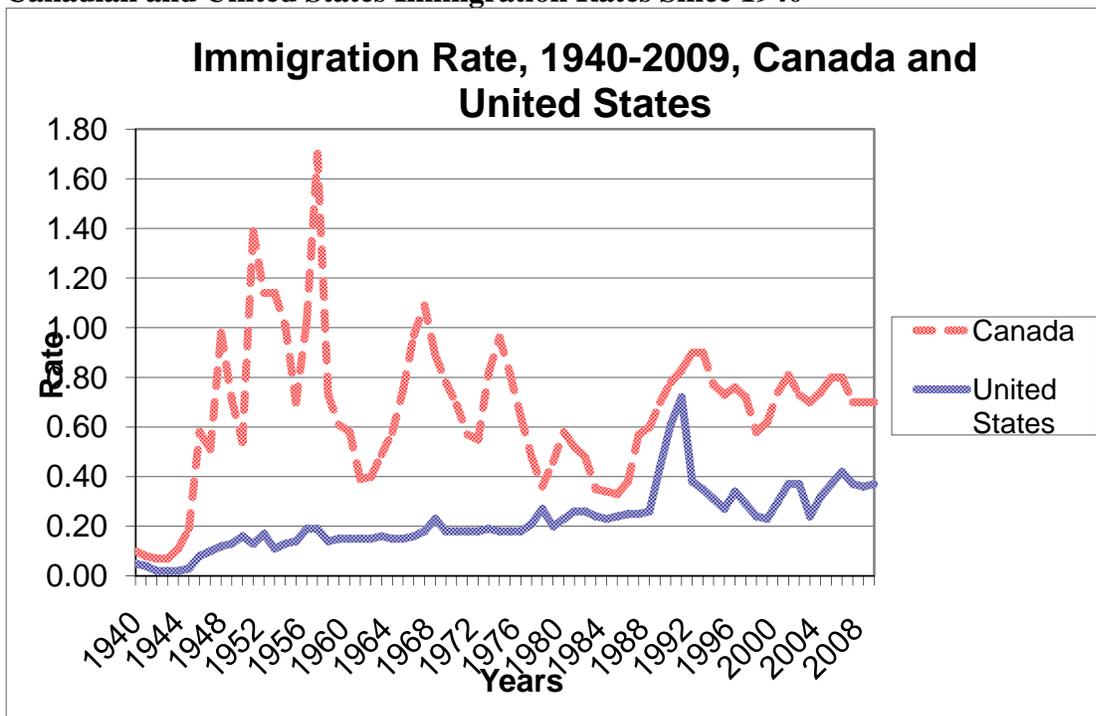
Institutional Background

Canada's immigration system is quite complex, and is becoming increasingly so. With a federal governance structure – a federal government and provinces - there is substantial heterogeneity in the opinions and goals of the various actors involved in national discussions. This implies that the nation's aggregate set of policies and programs are not always internally consistent. Indeed, there are many stresses between the sometimes complementary, but frequently competing, humanitarian, social, cultural, and economic goals of immigration policy. And there is frequently a lack of coordination, and sometimes disagreement, across levels of government and various actors within civil society regarding such issues as settlement services. With respect to highly skilled immigrants, for example, the federal government is responsible for the admission of health professionals, but provincial governments operate the healthcare systems and are responsible for the certification of those same professionals.

Potentially useful for Sweden is a comparison of the alternative routes taken by Canada and the United States. Of particular interest are the differences in immigration levels, and the associated need to manage the immigration system, along with the active measures that may be beneficial for a smaller nation seeking economic benefit from immigration. Modern immigration policies

and practices in North America date from the 1960s. Both Canada and the U.S. moved away from selection based mainly on source region, with most immigrants coming from Europe, to a more modern approach that resulted in large scale immigration from the developing world. But Canada took a very different path than the United States. As seen in figure 1, it consciously chose a significantly higher immigration rate, and it also developed a much more highly managed system. The U.S. receives a greater number of immigrants because it is a much larger nation, but on a per-capita basis, immigration is much higher in Canada. We believe these two features almost always go together in developed economies: the higher the rate of immigration, the greater is the need for structured government management. Canada's approach espoused immigrant selection with an emphasis on high skills, achieved through the introduction of a “points” system, and ethnic diversity, or at least race-neutrality. Federal multiculturalism policy was clearly articulated starting in the 1970s, and it follows naturally from the major revision to the immigration system in 1967 that introduced the points system.

Figure 1
Canadian and United States Immigration Rates Since 1940

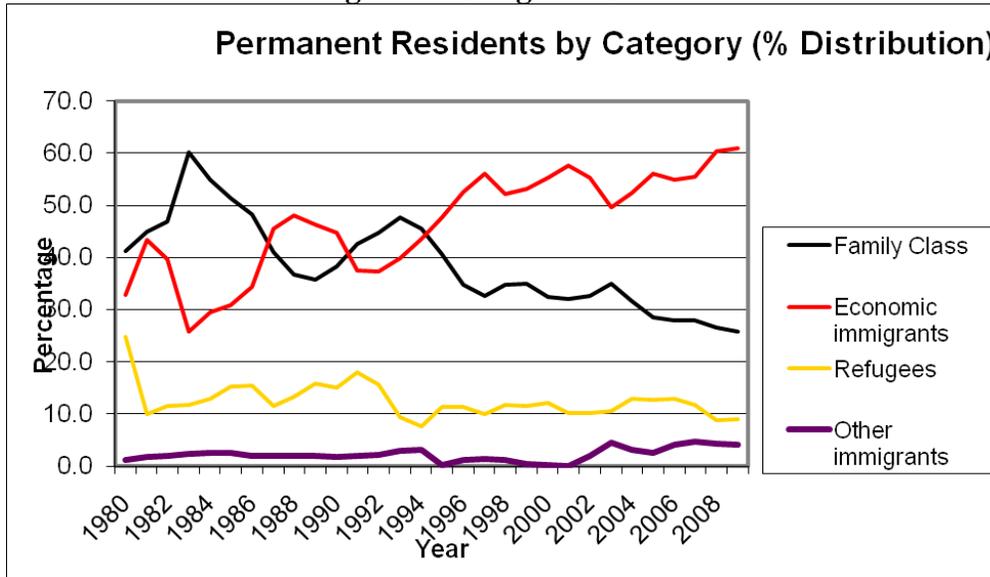


Source: Citizenship and Immigration Canada, Facts and Figures (2009) and US Citizenship and Immigration Services (<http://www.uscis.gov/portal/site/uscis>)

Canada's immigration system has three main streams: economic, family reunification and refugee. Each major stream has subcategories (see appendix table 1) which have varied over the decades. In 2009, the majority of immigrants were in the economic class (63%). Along with others, this includes the “skilled worker” subcategory, the “principal applicants” of which are selected via the well known points system. Spouses and children of skilled worker principal applicants enter under the same subcategory, but are not subject to the points system. The family

class (family reunification) constituted 27% of all immigrants and refugees 9%. The distribution of immigrants by class has shifted over time, with the economic class dominating since the mid-1990s (figure 2). The increase in the relative size of the economic class is an effort to boost immigrant labour market outcomes to counteract the decline discussed below.

Figure 2
The Distribution of Immigration Categories Since 1980



Source: Citizenship and Immigration Canada, Facts and Figures, 2009

Although Canada's immigration system is known for its points system, in 2009 only around 16% (see appendix table 1) of all immigrants, the principal applicants in the skilled worker class, were assessed by it. However, another approximately 22% of immigrants were the spouses and dependents of the skilled worker principal applicants, and there is a positive correlation between the educational attainment of the principal applicants and their spouses (Sweetman and Warman, 2010a). This tends to keep educational attainment of immigrants high.

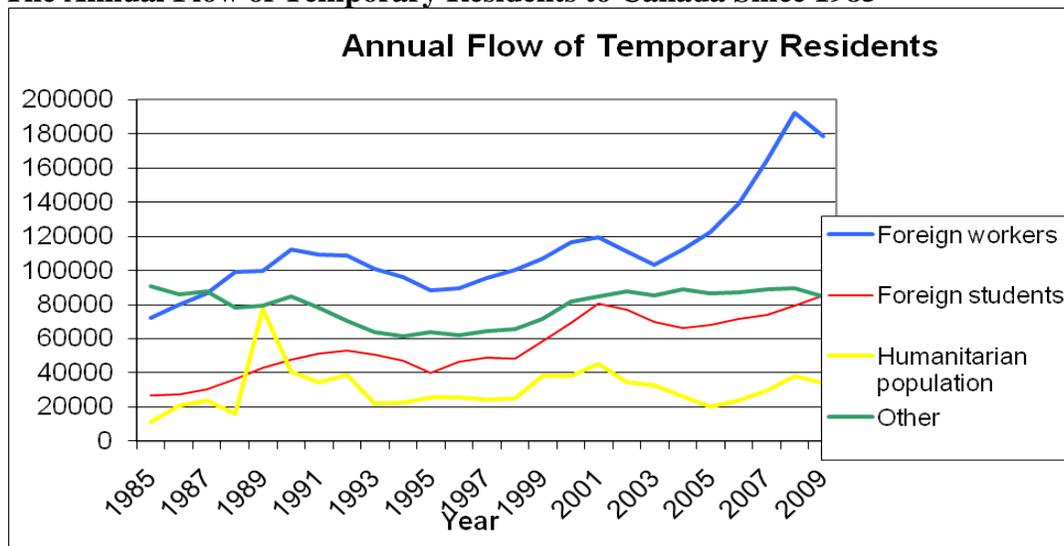
There are also a variety of temporary resident/temporary foreign worker categories (for an introduction see Sweetman and Warman, 2010). Some temporary categories, such as the live-in-caregiver and high skilled programs, are intended to allow transitions to permanent immigration, while others such as the seasonal agricultural worker program have very strict regulation with only a trivially low percentage of workers ever transiting to permanent status.

The immigration system is currently undergoing significant change that appears to be driven by a number of goals including: (1) a desire to improve the economic outcomes of entering immigrants, given the deterioration since the 1980s, (2) an attempt to better respond to short-term regional labour market shortages often associated with commodity booms, and (3) a desire to shift immigration away from the three largest cities to other regions of the country that are seeking more economic immigrants.

The temporary skilled worker program, whereby labour is brought into the country on a short-term basis to help overcome regional labour shortages, has been used more in the 2000s than

during previous periods (figure 3). The number of temporary foreign workers may well increase yet again once the recession is over and labour demand increases. In combination with this move, a new program, the “Canadian Experience Class”, has recently been initiated whereby the temporary foreign worker program (for high skilled workers) can explicitly bridge to permanent status. This approach is in contrast to the use of a point system that effectively converts observable characteristics into a prediction regarding labour market success and admits individuals on that basis. The new approach gives employers (by extending job offers and arranging temporary work permits) and postsecondary institutions (by screening and admitting students) a greater role in the selection process. However, it avoids the type of prediction associated with the point system by requiring some potential immigrants who enter as temporary foreign workers to successfully secure employment in a high skilled occupation within a certain window of time. This new program also has a language requirement that is structured differently from that for the Skilled Worker program¹.

Figure 3
The Annual Flow of Temporary Residents to Canada Since 1985



Source: Citizenship and Immigration Canada, Facts and Figures, 2009

Due to another policy shift, decisions regarding the selection of economic immigrants are increasingly being made in the provinces, rather than by the federal government. The “Provincial Nominee Program (PNP)” essentially allows provinces to select many of the immigrants- both in terms of number and characteristics- for their region, based on the needs as they see them. Employers often play a major role in this selection process, as pre-arranged jobs are in some cases required.

The new “Canadian Experience Class”, the expanded “Provincial Nominee Program”, and the traditional points system operate side-by-side in selecting economic immigrants. This mixture is likely to continue, and the Canadian Experience Class and the PNP will likely grow, with a commensurate decline in the traditional points-based Skilled Worker program. There is some

¹ first, it assesses English or French, as opposed to English and French in the Skilled worker program, and second, it is pass/fail and not an element of the points system that is combined with other factors in the assessment.

debate regarding the likely effectiveness and longer term implications of these changes to the immigration program.

Very recently, important legislative changes were put in place both to permit publically posted “Ministerial Instructions” from the Minister of the Department of Citizenship and Integration Canada to set priorities for processing and to allow officials to return applications to applicants without assessing the full application if certain basic criteria are not met. This is intended to enable better management of the intake of applications and the flow of immigrants.

Does Immigrant Labour Market Adjustment Occur via Earnings or Employment?

The pattern of immigrant economic assimilation observed in many immigrant-receiving countries is well-known; new immigrants' labour market outcomes are initially below those of observationally comparable domestic born workers, but over time their outcomes improve at a rate faster than those of the domestic born so that they "catch up" and even surpass their comparators. However, whether this improvement in outcomes is observed in terms of improved employment or wage outcomes is in part determined by the nature of domestic labour market institutions, as noted by Antecol, Kuhn and Trejo (2006). They compared immigrant outcomes in Australia, Canada and the United States. Among these countries, Australia has the greatest degree of labour market regulation (mostly in terms of wage rates) so that immigrant economic integration occurred mainly along the employment dimension in that country. In contrast, the United States has relatively little regulation of wage rates and a very modest social safety net (especially for undocumented immigrants) so that employment is relatively more important for subsistence; employment among new immigrants is consequently very high from the time of immigration, and integration occurs primarily along the earnings dimension. Canada is somewhere in between.

Not surprisingly given these results, most economic analyses of immigrant labour market integration in Canada and the United States tends to focus on earnings, while the focus in Australia is on employment. It may be that Sweden more closely resembles Australia in terms of labour market regulation, contributing in part to the lower levels of employment among entering immigrants. The OECD has developed indicators of employment protection and labour market inflexibility. The index values for the US, Canada, Australia, and Sweden are, respectively: 0.85, 1.02, 1.38, and 2.06.² Following are some data that suggest that these differences may be part of the explanation for the Swedish-Canada employment gap among immigrants. However, time does not permit us to seriously address this issue in this paper, so that it remains a question for future research. In this paper we focus on the assimilation of immigrants across both the employment and earnings dimensions.

Economic Outcomes: A Focus on Employment

The immigration system outlined above has resulted in Canadian immigrant flows since the early 1990s that are characterized by very high levels of education, and very diverse source countries,

² See http://www.oecd.org/document/34/0,3746,en_2649_37457_40917154_1_1_1_37457,00.html#epl.

mainly developing nations. Just how well are these immigrants doing economically? Given that the policy debate in Sweden appears to be primarily focused on employment, we first turn to this measure. As noted earlier, most Canadian research has focused on immigrant earnings outcomes, rather than employment or unemployment. Hence, there is relatively little research to draw on for Canada. Some new data are provided by the authors.

i) Employment Outcomes in an International Context

Placed in an international context, Canada appears to be doing very well regarding the employment outcomes of immigrants, and Sweden less so. A recent OECD international comparison of employment and unemployment rates among the native and foreign born in thirteen OECD countries (Liebig, 2009) found that *relative* outcomes (the foreign born relative to the native born) were among the worst in Sweden, and among the best in Canada (table 1). Focusing on men, only in Canada, the U.K. and the U.S. were aggregate employment rates in 2007/2008 among the foreign born equal to or better than those of the native born, and unemployment rates similar among the two populations. Sweden displayed some of the poorer aggregate outcomes, along with Belgium, Denmark, Norway and Switzerland. In Sweden, the employment rate among the foreign born was 8.6 percentage points below that of the native born, and the unemployment rate was 2.5 times higher.

These are aggregate data, and do not account for differences in age, educational attainment, language skills, years in the country, type of immigrant (economic or humanitarian refugee) and other important differences between immigrants and the native born, or between immigrants in different countries. As we will see, these factors significantly affect employment outcomes. One OECD study (OECD, Lemaitre and Liebig, 2007) did adjust the data for differences in age, educational attainment and marital status between immigrants and the native born in four countries, Germany, the Netherlands, Sweden and the U.K.. Outcomes in Sweden, followed closely by the Netherlands, were the worst of this four country comparison. Using 2002 data for men, the adjusted results suggested that overall, the foreign born were only 0.36 times as likely to be employed as the native born, compared to 0.55 times as likely in Germany and the UK. And among the foreign born in the country for a year or less, they were only 0.13 times as likely to be employed in Sweden, compared to 0.24 times as likely in Germany, and 0.35 times as likely in the U.K.

Why do aggregate employment and unemployment outcomes appear to be so much better in Canada (and other nations) than in Sweden? Given the dearth of research in Canada regarding employment and unemployment outcomes of immigrants, we cannot definitively answer this question here. However, a more careful description of immigrant employment outcomes in Canada, and to a lesser extent Sweden, will point us in the direction of potential explanations.

ii) Immigrant flows and outcomes, and economic conditions

Economic conditions combined with the magnitude of the immigrant inflows obviously influence economic outcomes. Immigrants suffer a greater decline in outcomes during an

economic downturn than do the native born (Aydemir 2003, Aydemir and Skuterud 2005). If inflows are large, and the economy suppressed, then immigrant outcomes will suffer. An OECD study of the labour market adjustment of Swedish immigrants points to this issue as at least part of the explanations of relatively poor immigrant economic outcomes in Sweden (OECD, 2007). Large scale immigration is a fairly recent phenomenon in Sweden. In 2002, over 35% of the foreign-born working age population had entered during the previous ten years. In Canada, the number was about one quarter. And in Sweden a trivial share of these comprised “economic” immigrants; 60% to 80% were humanitarian immigrants and their families (OECD 2007). As noted above, the opposite is true in Canada, with economic immigrants dominating the inflow since the 1990s. Humanitarian immigrants have a much more difficult time obtaining a job, whether in Canada or Sweden.

Table 1
Labour force characteristics of the native- and foreign-born populations, 15-64 years old, selected OECD countries, 2007/2008 average

	% of the population which is foreign-born	Participation rate		Employment rate			Unemployment rate		
		Foreign-Born (FB)	Native-born (NB)	Foreign-Born (FB)	Native-born (NB)	(NB-FB) % points	Foreign-Born (FB)	Native-born (NB)	Ratio FB/NB
Men									
Austria	16.7	82.0	82.8	76.1	80.3	4.2	7.2	3.0	2.4
Australia	27.7	79.5	84.2	76.1	81	4.9	4.3	3.8	1.1
Belgium	10.8	72.4	74	60.5	69.7	9.2	16.5	5.8	2.8
Canada	21.2	82.7	81.9	77.6	76.5	-1.1	6.1	6.7	0.9
Denmark	8.6	78.3	85.3	72.1	82.9	10.8	7.8	2.9	2.7
France	11.4	77.8	75.2	68.8	70.4	1.6	11.6	6.4	1.8
Germany	14.0	81.6	81.6	69.4	75.4	6.0	14.9	7.7	1.9
Netherlands	12.3	79.5	86.0	76.1	84.1	8.0	4.4	2.1	2.1
Norway	8.9	81.0	82.9	76.0	81.1	5.1	6.2	2.2	2.8
Sweden	14.0	79.6	83.0	70.8	79.4	8.6	11.0	4.4	2.5
Switzerland	26.0	88.3	88.2	83.2	86.4	3.2	5.8	2	2.9
United Kingdom	13.0	83.3	82.6	77.8	77.6	-0.2	6.5	6.1	1.1
United States	16.8	86.4	77.8	81.8	73.4	-8.4	5.4	5.7	0.9
OECD above-mentioned countries¹	15.5	81.0	82.0	74.3	78.3	4.0	8.3	4.5	1.8
Women									
Austria	18.4	62.0	70.7	56.7	67.8	11.1	8.5	4.0	2.1
Australia	27.6	62.2	72	58.9	68.7	9.8	5.2	4.5	1.2
Belgium	11.9	50.3	62.5	42.4	57.8	15.4	15.7	7.5	2.1
Canada	22.1	69.3	74.3	63.9	69.7	5.8	7.9	6.2	1.3
Denmark	10.1	63.5	78.7	59.8	75.5	15.7	5.8	4.0	1.5
France	12.0	58.3	67.1	50.2	62.2	12.0	13.9	7.3	1.9
Germany	15.1	61.4	72.1	53.1	66.3	13.2	13.5	8.0	1.7
Netherlands	13.6	61.9	74.7	58.1	72.8	14.7	6.1	2.6	2.3
Norway	9.4	72.7	77.3	69.3	75.6	6.3	4.6	2.2	2.1
Sweden	16.2	67.8	80	59.6	76	16.4	12	4.9	2.4
Switzerland	26.6	70.5	76.7	64.3	74.2	9.9	8.8	3.2	2.8
United Kingdom	13.4	62.6	70.5	57.8	66.9	9.1	7.7	5.1	1.5
United States	15.6	62.1	69	59.1	65.8	6.7	4.8	4.6	1.0
OECD above-mentioned countries¹	16.3	63.4	72.7	57.9	69.2	11.2	8.8	4.9	1.8

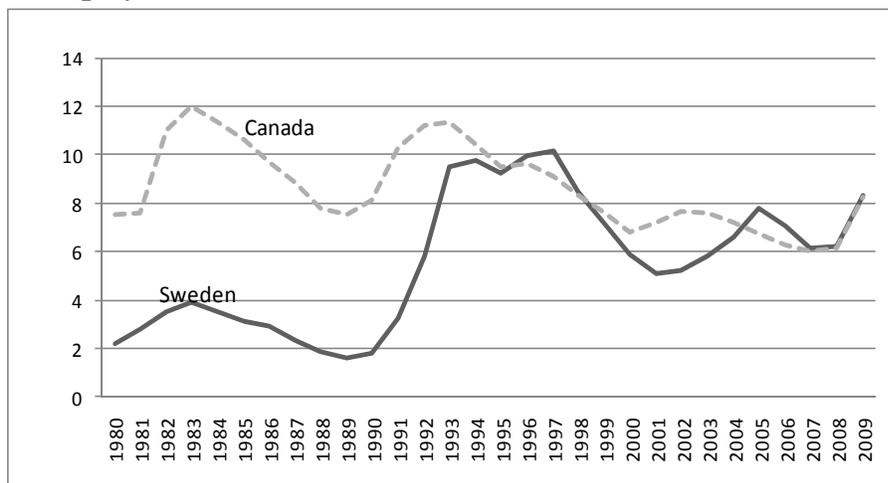
Note: Data for European countries refer to third quarter (Q3) except for Germany and Switzerland where they refer to 2007 annual data. Source: European Union Labour Force Survey, except for the United States (Current Population Survey March Supplement), Canada 2006 Census, Australia 2006 Labour Force Survey Data. Register data: Statistics Norway (Labour Market Statistics). Data refer to the unweighted average Source: Liebig, 2009

The large inflow of humanitarian immigrants in Sweden was accompanied by a prolonged economic slump. The unemployment rate rose from around 2% in 1990, to around 10% through the 1993 to 1997 level, before falling to 5% to 8% during the 2000s, still high by historical

standards in Sweden. Even more striking was the drop in the Swedish employment rate in the mid-1990s. Male employment rates of both the native and foreign born were affected, but the latter much more so. For example, data up to 2003 show that among the foreign born residing in Sweden for four years or less, employment rates fell from around 60% in 1990 to 30% by the mid 1990s, and recovered, but only to around 50% in the early 2000s. Similar declines are observed among all other immigrant groups, including those in the country for 20 years or more. Over the 1990s the employment rates for this latter group fell from over 80% before the economic downturn to 70%, even after the recovery in the early 2000s. Similar patterns were observed for women. A prolonged economic downturn, combined with a large increase in immigration, can affect outcomes, not only during the downturn, but for years following.

An increase in immigration, associated with an economic downturn, appears to have occurred again in the late 2000s in Sweden. Annual immigrant inflows to Sweden were at their highest level between 2006 and 2009 at about 0.9% of the population. Similar numbers were seen only during the early 1990s, at around 0.85% of the population. These intake levels are higher than those typically registered in Canada, which has one of the highest immigration rates in the western world. The Swedish unemployment rate was between 6% and 7% between 2006 and 2008, but then rose to over 8% in the recession of 2008 and 2009. These periods of high humanitarian immigrant inflows, combined with a labour market that is registering relatively high unemployment by Swedish historical standards, may be part of the explanation of the relatively poor employment outcomes among immigrants, as suggested by the OECD (2007).

Figure 4
Unemployment rates in Sweden and Canada

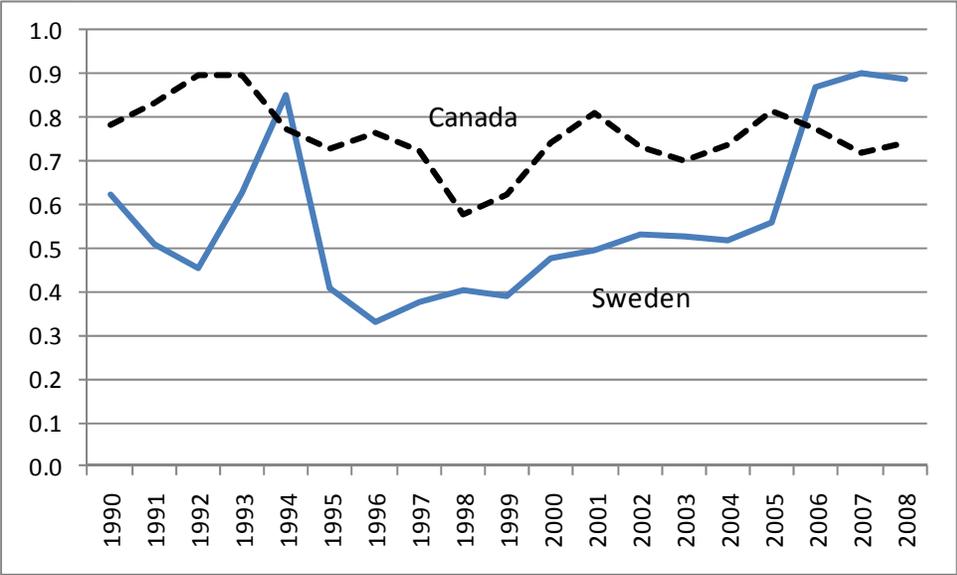


But what about Canada? How does it fair in the same kind of analysis? Canada's labour market has traditionally functioned in a somewhat different manner than that of Sweden. The labour market was one of traditionally higher unemployment, but with more and shorter spells of unemployment. That is, it was seen, along with the U.S. labour market, as being more flexible than that of many European nations. Jobs are both more easily found and lost. Over the 1980s, unemployment in Sweden was in the 2% to 4% range, and in Canada, between 8% and 12%. But Canada's unemployment fell over the 1990s and 2000s, while in Sweden it rose (figure 4). The result is that unemployment in the two economies looked very similar over the 1990s and 2000s.

But what we do not know is whether labour market flexibility increased in Sweden over this period to the point where it matched that of North American labour markets. A more flexible labour market makes it easier for unemployed immigrants (and others) to break into employment, even if they experience some short spells of unemployment.

Regarding immigrant inflows, in general they were higher in Canada than Sweden, at 0.6% to 0.8% of the population in Canada, and 0.4% to 0.9% in Sweden (figure 5). Inflows are more variable in Sweden; this variability may be an issue if the provision of settlement services and language training does not adjust sufficiently quickly, and especially if refugees require additional public services compared to economic immigrants. On the surface it would appear that Canada more successfully absorbed higher inflows of immigrants over the 1990s and 2000s than Sweden, with a labour market that registered about the same level of unemployment as observed in Sweden. However, very high intake during periods of weak economic conditions in Sweden may have played an important role. Also, as noted, this is a superficial analysis, since the unemployment rate alone does not provide much information on many important aspects of the labour market, including its degree of labour mobility and flexibility. There may be significant differences between the two countries in this regard that play an important role in immigrant economic assimilation. Although Sweden does not have as inflexible a labour market as some European nations, and Sweden invests significantly in active labour market programs, it appears that the labour market is not as flexible as the Canadian one.

Figure 5
Immigration rates in Canada and Sweden



Perhaps the answer lies with the types of immigrants that are entering the two countries. Among immigrants, employment outcomes vary across a number of dimensions, including immigrant class (e.g. economic, family reunification, or refugee), length of time in the country, and educational attainment. The immigrants to the two countries differ dramatically across these dimensions. As noted earlier, the Canadian system is much more “managed”, with higher levels of economic immigrants (and their spouses) who are selected in part to maximize economic

outcomes. The following sections outline the differences in employment rates across these characteristics.

ii) *Employment Outcomes by Immigrant Class*

Xue (2010) used the Canadian Longitudinal Survey of Immigrants³ to explore the employment outcomes of immigrants during their first four years in Canada. This survey tracked a sample of immigrants for four years. Surveys were conducted at 6 months, two years and four years after landing in 2000. The employment data refer to the males and females aged 15 and older.

The employment to population ratio (i.e. the employment rate) increased appreciably with time spent in Canada. Four years after arrival 68% of immigrants were employed (appendix table 2). But there is significant variation by immigrant class. Refugees and family class immigrants had the lowest employment rates. Six months after arrival, only 22% of refugees and 41% of the family class were employed, compared to 62% of the skilled economic class immigrants (principal applicants). After four years employment levels improved, but the rate remained much lower among refugees and the family class at around 55%, than among the skilled economic class at 84%, and their spouses at 65%. As noted above, immigration to Canada is dominated by the economic class, while Swedish Immigration more closely resembles the refugee and family classes, which register lower employment rates.

Knowing only whether an immigrant is employed provides limited information. Xue (2010) decomposed employment into full and part-time work (appendix table 2).⁴ Among those employed, skilled workers assessed by the point system were more likely to work full-time (at 87% employed), with the family class next (at 77%). There is relatively little difference among the three remaining classes (at around 70%). These data indicate that refugees register the most rapid improvement in outcomes following the initial period in Canada, and the fact that their employment rates are equal to those of the family class after four years is encouraging.

If immigration to Canada was restricted to refugees and the family class, which more closely resemble the majority of Swedish immigration, then the differential in employment outcomes

³ At the first interview the response rate was just over 60 percent (this follows from the need to both locate individuals and have them agree to be surveyed), and of those who responded at the first interview, about 65 percent continued through to the third wave. In addition to the usual reasons for non-response, both return and/or onward migration are issues for the sample in question since the survey is restricted to those residing in Canada. Although there is a small debate about the magnitude of these estimates, with some people believing them to be slightly high, Aydemir and Robinson (2008) suggest that almost 25 percent of all new immigrants leave the country within five years, with over 80 percent of those departing doing so in the first year after landing. Moreover, given that all respondents in the LSIC landed from abroad (as opposed to landing within Canada), the national return and onward migration rate is likely to underestimate departures in the survey's sample since the Economic Class had to apply through a mission abroad at the time of the survey and are also more likely to depart, whereas refugee claimants may land within the country and are more likely to stay. Aydemir and Robinson find that around 25 percent of immigrants who arrived under the skilled worker class left within the first year after arrival, and that four years after landing (which would correspond to wave 3 in our data), around 33 percent had left. Xue employs the weights provided by Statistics Canada throughout in an effort to make the sample representative.

⁴ Full-time work was defined as 30 hours per week or greater.

between the two countries would be significantly less. This fact can be demonstrated by focusing on the outcomes of refugees in comparison to that of immigrants (foreign born) as a whole. In Sweden, among persons aged 20 to 64 in 2008, the employment rate among refugees was 53.7%, and among other immigrants, 57.1%. Since refugees and family reunification classes dominated immigration, there was little difference between the employment rates of all immigrants, and those of refugees. In Canada, however, using the data just reported, we see that among those aged 15 plus, four years after entering the employment rate is 56% for refugees compared to 68% for all immigrants. The latter number is raised by the inclusion of a large number of economic migrants and their spouses.

iii) Employment Rates Among the Less and More Highly Educated Immigrants

Immigrants to Canada are very highly educated by any standard. Since economic class skilled principal applicants are selected in part based on education, it is not too surprising that educational attainment is high among this group. But the educational attainment of many of the other groups is also high. Unfortunately, available data on education by class refers to the population aged 15 plus. Since a significant share of this group (the very young) has not completed their education, these numbers underestimate the educational attainment of the adult population. Nonetheless, they provide an idea of the relative levels.

Among skilled principal applicants aged 15 plus, that is the immigrants who are selected based on the points system, 78% of those admitted between 2000 and 2007 had a university degree. If anything, the educational attainment of immigrants has risen since then, due to changes in the points system. A large share of these immigrants had master's degrees or PhDs. Among the spouses of skilled principal applicants, about one half had degrees, as did 27% of spouses among the family reunification class. Thirteen percent of refugees had university degrees. Overall, these data suggest 45% of all immigrants to Canada held a university degree. If one includes only the population aged 25 to 54, the share is around 60% for men, and 51% for women.

This fact significantly affects employment rates. Among long-term immigrants (in Canada for 20 years or more), employment rates among the male population aged 25 to 64 were 65% among those with less than high school graduation, 77% among high school graduates, and 84% among university graduates (table 2). Similar differences are observed among immigrants with fewer years in Canada. The variation among women was much greater, ranging from 47% among those with less than high school graduation to 78% among university graduates. Clearly if immigration to Canada consisted largely of the less educated, the employment population ratios would be much bleaker.

Table 2**Employment rates by education and immigration status, individuals aged 25 to 64**

		Immigrants					Canadian born
		<= 5 years	6-10 years	11 -15 year	16-20 years	> 20 years	
All		%					
	University	68.5	79.2	81.4	84.8	81.0	85.5
	Other pose-secondary	67.8	73.8	78.6	80.5	77.0	80.2
	High school graduation	58.4	66.9	69.4	71.4	71.5	75.3
	Less than high school	46.8	50.9	58.3	60.7	55.5	56.6
	Total	65.2	73.3	75.3	77.3	73.8	77.2
Men							
	University	77.3	86.1	85.1	88.5	84.2	87.0
	Other pose-secondary	79.0	81.8	83.6	84.4	80.3	82.7
	High school graduation	73.1	80.8	80.0	80.2	77.6	79.9
	Less than high school	69.9	74.4	74.5	70.1	65.3	64.0
	Total	76.7	83.4	82.6	82.9	78.9	80.2
Women							
	University	59.7	71.5	77.4	80.9	77.6	84.2
	Other pose-secondary	58.2	67.5	74.3	76.9	73.7	77.7
	High school graduation	47.9	56.3	60.7	63.4	66.3	70.7
	Less than high school	32.1	36.1	47.8	51.6	47.3	46.9
	Total	55.0	64.1	68.8	71.9	69.0	74.2
Sources: Combined March and September data of the Labour force survey 2006 to 2010							

(iv) Language differences may play a role

Language is one of the most important determinants of the speed and quality of labour market adjustment among entering immigrants to any culture (e.g., Ferrer, Green and Riddell, 2006). But the pool of potential migrants around the work who speak Swedish is extremely limited, at least outside the Nordic countries. Thus, special effort is needed to instruct new immigrants in the Swedish language, and this effort may take time, delaying labour market integration.

Canada is in a much more favourable position. There is a very large pool of potential migrants who have some prior knowledge of, or experience with, at least one of the two official languages of Canada, English or French. Even though immigration to Canada has moved away from Europe towards Asia and Africa, there remain a large number of immigrants who have acquired some knowledge of English or French before entry. During the 2000s, over half of entering immigrants had some knowledge of English or French (Citizenship and Immigration Canada, 2010). This result is in part because language is one of the selection criteria for economic immigrants. A deterioration in the knowledge of English or French among immigrants associated with the movement away from Canada's traditional source countries towards Asia and Africa is one of the major explanations of the deterioration in economic outcomes, as we will see in the

next section. To counter this movement, a more stringent language test was introduced in the mid 2000s, one that economic migrants must now pass before being admitted to Canada.

(v) *But Relative Unemployment Outcomes Deteriorated in Canada Since the 1980s*

Although recent employment outcomes among immigrants to Canada appear to be quite good by international standards, relative unemployment outcomes have deteriorated since the 1980s.⁵ This deterioration occurred in spite of the dramatic increase in the educational attainment of immigrants. In 1980s about 10% of entering immigrants aged 15 plus had a degree, and by 2008 it was 45%. Much of this increase occurred in the 1990s.

Table 3
Unemployment rates by entering cohort and years in Canada, immigrants aged 25-64

<u>Unemployment rates</u>						<u>Relative to the Canadian born</u>					
cohort	Years in Canada					cohort	Years in Canada				
	<= 5	6-10	11-15	16-20	>20		<= 5	6-10	11-15	16-20	>20
Women											
1976-80	0.083	0.104	0.098	0.086	0.046	1976-80	1.15	1.05	1.10	1.08	0.82
1981-85	0.138	0.126	0.103	0.061	0.044	1981-85	1.40	1.40	1.30	1.08	0.90
1986-90	0.168	0.133	0.070	0.058		1986-90	1.87	1.68	1.24	1.17	
1991-95	0.188	0.087	0.071			1991-95	2.37	1.54	1.45		
1996-2000	0.136	0.082				1996-2000	2.42	1.66			
2001-2005	0.129					2001-2006	2.62				
Men											
1976-80	0.043	0.070	0.081	0.071	0.043	1976-80	0.84	0.85	0.92	0.82	0.67
1981-85	0.104	0.101	0.083	0.049	0.039	1981-85	1.27	1.14	0.96	0.77	0.75
1986-90	0.153	0.104	0.057	0.046		1986-90	1.73	1.20	0.89	0.88	
1991-95	0.145	0.068	0.049			1991-95	1.68	1.06	0.95		
1996-2000	0.099	0.055				1996-2000	1.55	1.05			
2001-2006	0.084					2001-2006	1.60				

Source: Canadian Census

Among men, the unemployment rate among immigrants entering during the late 1970s was lower during their first five years in Canada (i.e., “recent” immigrants) than the rate among the Canadian born (table 3 – lower panel). But this *relative* (to the Canadian-born) unemployment rate rose with successive cohorts of entering immigrants. During their first five years in Canada, the relative rate among the late 1970s entering cohort was 0.84, but had reached 1.60 among the early 2000s entering cohort⁶ (i.e., the unemployment rate among “recent” immigrants was 1.6 times that of the Canadian born).

⁵ The unemployment rate of immigrants relative to the Canadian born is a more useful measure than the unemployment rate itself, since the former implicitly controls for business cycle fluctuations by using the native-born unemployment rate as the benchmark, although immigrants may be somewhat more sensitive to the business cycle. It also controls for any policy changes that may influence unemployment in the same way.

⁶ There was some improvement in the late 1990s which was likely associated with the rapid rise in educational attainment and the increasing share in the skilled economic class during that period (Picot and Hou, 2009).

Among women (table 3 – upper panel), the deterioration was more significant. The relative unemployment rate rose continuously between the late 1970s entering cohort, and the early 2000s cohort. During the first five years in Canada, the unemployment rate of women entering during the late 1970s was 1.15 times that of the Canadian born, and among the early 2000s cohort, it was 2.62.

Outcomes measured by the employment population ratio (i.e., the employment rate) demonstrate less of a decline. Among men, the *relative* employment rate fell between the late 1970s entering cohort and the early 1990s cohort from 1.03 to .87, but since then has recovered to .97 (table 4). Thus, among the early 2000s entering cohort the aggregate employment rate was roughly equal to that of the Canadian born. As with the unemployment rate, the story among women was less positive. Employment rates among women in the early 2000s immigrant cohort during their first five years in Canada were only 79 percent of the rate among Canadian born women: notably, this was a decline from 103 percent among the late 1970s entering cohort.

Table 4
Employment rates by entering cohort and years in Canada, immigrants aged 25-64

Employment rates						Relative to the Canadian born					
cohort	Years in Canada					cohort	Years in Canada				
	<= 5	6-10	11-15	16-20	>20		<= 5	6-10	11-15	16-20	>20
Women											
1976-80	0.569	0.638	0.698	0.700	0.660	1976-80	1.09	1.11	1.08	1.05	0.94
1981-85	0.551	0.640	0.656	0.725	0.674	1981-85	0.96	0.99	0.98	1.03	0.93
1986-90	0.568	0.603	0.700	0.729		1986-90	0.88	0.90	0.99	1.01	
1991-95	0.488	0.635	0.691			1991-95	0.73	0.90	0.95		
1996-2000	0.544	0.658				1996-2000	0.77	0.91			
2001-2005	0.574					2001-2005	0.79				
Men											
1976-80	0.886	0.877	0.864	0.833	0.806	1976-80	1.03	1.06	1.06	1.05	0.99
1981-85	0.803	0.832	0.818	0.855	0.805	1981-85	0.97	1.02	1.03	1.05	0.99
1986-90	0.740	0.781	0.844	0.858		1986-90	0.91	0.98	1.04	1.05	
1991-95	0.688	0.809	0.841			1991-95	0.87	1.00	1.03		
1996-2000	0.756	0.839				1996-2000	0.93	1.03			
2001-2005	0.795					2001-2005	0.97				

Source: Canadian Census

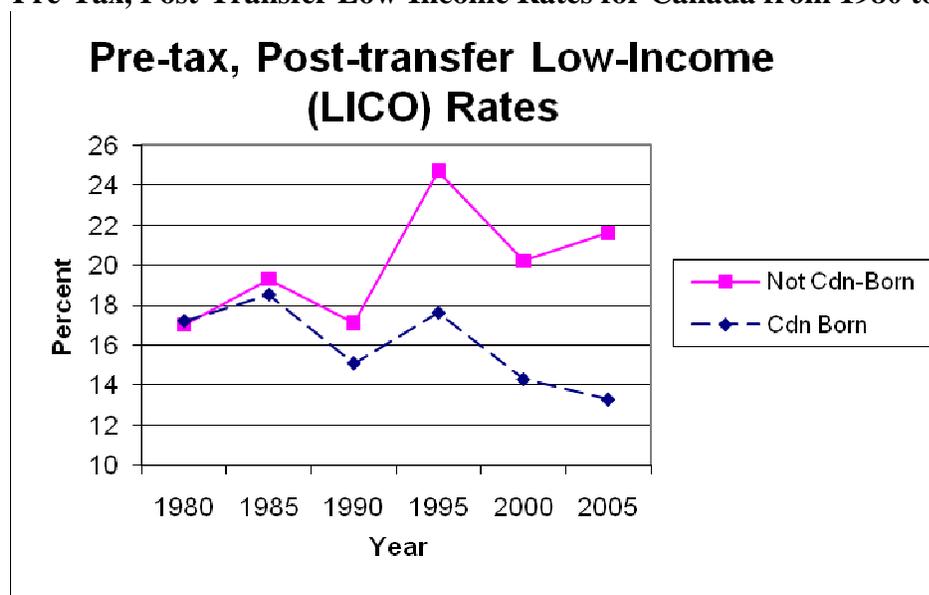
Canada has not escaped the general decline in the economic outcome among immigrants observed in most western nations. More recent entering cohorts of immigrants to Canada are having greater relative unemployment difficulties than their earlier entering counterparts, despite their higher educational levels and the fact that more of them are in the skilled economic class. The decline is much less evident when measured by employment rates, but as we will see in the next section, it is particularly evident in the earnings of employed immigrants. Immigrants to Canada are finding employment, but their jobs are paying less than previously. The reasons for the deterioration in the relative unemployment rates are not known since virtually no serious

research has been done in Canada on this specific issue. However, a significant body of research has developed around the decline in entry earnings of immigrants, and its causes.

The Deterioration in Entry Earnings among Immigrants to Canada

In many immigrant receiving countries, the labour market outcomes of new immigrants have declined very appreciably across entry cohorts (e.g., for Canada see, Aydemir and Skuterude, 2005; Frenette and Morissette, 2005; Green and Worswick, 2010; Picot, 2008; Sweetman, 2010; Sweetman and Warman, 2008). This is probably one of Canada's major social policy conundrums. There has been a concurrent increase in poverty rates among immigrants as depicted in figure 6. In 1980 the percentage of immigrants and the Canadian born with annual incomes below Canada's "Low-Income Cut-off" (LICO) were comparable. Abstracting from the short-term fluctuations associated with the business cycle, it is clear that the trends for the Canadian born and immigrants are going in opposite directions, with poverty rising among immigrants, and falling among the Canadian born. These poverty trends are driven primarily by changes in annual labour market earnings among immigrants and the Canadian born (Picot, Hou and Coulombe, 2009; Picot, Lu and Hou, 2009). It is also worth noting that the magnitude of the "sawtooth" is greater for immigrants than the Canadian born, with the former being more sensitive to the business cycle.

Figure 6
Pre-Tax, Post-Transfer Low-Income Rates for Canada from 1980 to 2005



Source: Based on data from Picot, Lu and Hou, 2009

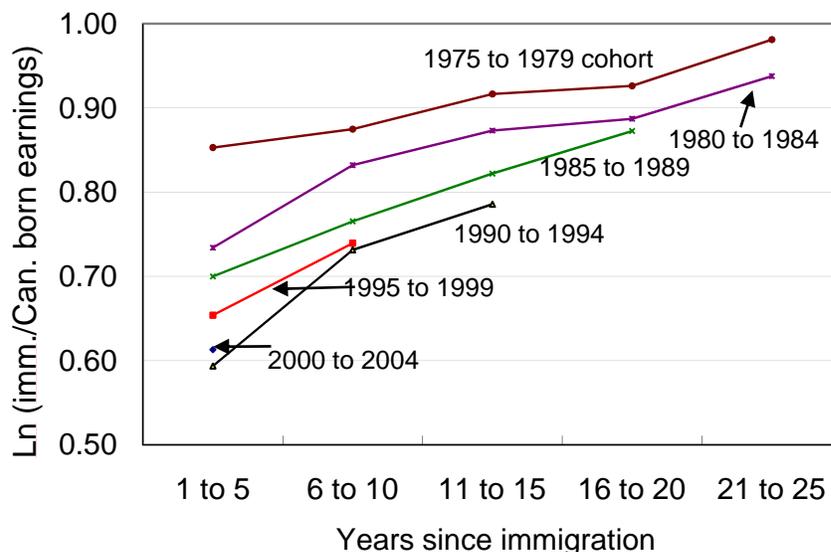
Among immigrants with jobs, those who arrived during the late 1970s had good earnings outcomes relatively quickly after landing. However, subsequent arrival cohorts have had increasingly lower earnings at entry, with the cumulative effect being dramatic. When *male* immigrants are compared to the Canadian-born with similar characteristics (i.e. education, age, marital status, etc.), the cohort entering during the late 1970s had annual earnings during their

first five years in Canada that were roughly 85% of that of their Canadian born counterparts (more specifically, the log of the ratio of immigrant to Canadian-born earnings was 0.85). After 11 to 15 years in Canada, this cohort earned around 92% of that of comparable Canadian-born.

Among the early 1990s entering *male* cohort, entry earnings fell to about 60% of that of comparable Canadian-born (i.e., log earnings ratio of 0.60) during the first five years in Canada, rising to only about 78% after 11 to 15 years in Canada (figure 7). There was some improvement during the late 1990s entering cohort, but this was followed by deterioration again in the early 2000s. And while there is some indication that the growth rate of earnings immediately post-immigration has increased among more recent entering cohorts, they may not catch up to their domestically born counterparts during their working lifetime (figure 7). Similar trends are observed for women.

Several reasons for the decline have been observed (see Picot and Sweetman 2005, Reitz, 2007 and Picot 2008 for reviews of the decline and its causes). During the early stages of the decline in the 1970s and 80s, changing source countries played a major role. There was a movement in immigration away from the traditional source regions such as Western Europe, the U.S and Australia towards Asian, African and Caribbean countries. A bundle of characteristics that are difficult to disentangle follow from this: notably issues with language skills, educational quality, cultural differences, possibly ethnical/racial discrimination, etc.

Figure 7
Earnings* of Immigrants Compared to those of Comparable Canadian-Born,
Full-Time Full-Year Workers aged 16 to 64, Males



Source: Census of Population. * Predicted values based on a model

The second reason for the decline is related to a significant fall in the economic rate of return to pre-immigration labour market experience. This occurred mainly during the 1980s and 1990s. In the 1970s individuals who immigrated with, say, 20 years of labour market experience were treated, in terms of earnings, like Canadians with a similar amount of labour market experience. However, the labour market now treats new immigrants, particularly those from developing

countries, like new labour market entrants, no matter how much foreign work experience they have. The labour market does not financially reward their pre-immigration labour market experience.

Third, and related to the second phenomenon, all new labour market entrants, both Canadian and foreign born, have seen a decline in their entry earnings, with most of this change happening in the 1980s. In this case, the decline had nothing to do with their immigration status. Rather, all new labour market entrants (particularly males), including immigrants, experienced a decline in labour market entry earnings in Canada, for reasons that remain largely unknown.

Fourth, post-2000 there was a very substantial "IT-bust" in North America and parts of Europe. A historically high number of entering immigrants were concentrated in computer science and engineering disciplines during the late 1990s and early 2000s, as immigration responded to the need for more "high-tech" workers during the high tech boom of the late 1990s. During the bust of the early 2000s, these immigrants were particularly hard hit. Moreover, immigrants tend to have lower employer seniority and therefore experienced more negative consequences in sector-specific downturns such as this from which there appears to be little rebound.

Interestingly, there is much popular discussion, and many government programs, addressing the issue of academic credential recognition among new immigrants. However, the empirical data suggests that there has been only a modest change in the rate of return to foreign credentials in Canada (e.g., Ferrer and Riddell, 2008) – although there may have been a recent decline associated with the IT collapse in the early 2000s when the rate of return to higher education fell for many immigrants (Picot and Hou, 2009). In general, immigrants do receive a somewhat lower rate of return to pre-immigration education, but this has always been the case and is not a significant source of the *decline* in labour market outcomes. Furthermore, credential recognition issues are usually associated with professional occupations such as medicine, accounting, engineering and so on. These occupations account for such a relatively small share of all immigrants to Canada that even if credentialism issues disappeared, concerns with low earnings among immigrants would remain. Nevertheless, credential recognition is a real issue for particular groups of immigrants, and is an appropriate policy lever to pull to improve outcomes.

Perhaps most importantly, language skills appear to mediate the rate of return to formal education. Immigrants with good language skills in English or French can much more easily convert their education to earnings than those with poor skills. A recent paper (Bonikowska, Green and Riddell, 2009) has shown that the rate of return to English and French language skills is very similar for immigrants and the Canadian born. That is, when literacy skills in English or French are accounted for, immigrants earn about what one would expect, and have earnings similar to their comparable Canadian born counterparts. The allocation of language skills explains a considerable portion of the immigrant-native born earnings gap. Overall, language skills appear to have a significant direct and indirect influence on labour market outcomes, and are key to positive outcomes.

Given the body of research that identifies the magnitude of, and explains the various reasons for, the decline in immigrant labour market outcomes, Canadian policymakers and others have focussed some of their attention on this issue. This has included changes to the immigrant selection rules, the strengthening of language tests, the introduction of new programs as

mentioned earlier, increasing the share of immigrants in the economic class, and beefing up immigrant settlement programs. These changes have resulted in some successes, although space does not allow a full review here. It seems likely that aggregate outcomes would be poorer without some of these changes.

Discussion and Conclusions

Immigrants to Canada enjoy economic outcomes that are more favourable than those for their counterparts in Sweden. But Canada has not escaped the deterioration in outcomes that is observed since the 1980s in most western immigrant receiving countries, including Sweden.

Although more research would be required to confirm the following hypotheses, the Canada-Sweden comparison identifies several plausible factors that may be influencing the outcomes observed in Sweden.

- 1) Differences in the types of immigrants entering the two countries are important. Canada's immigrants possess characteristics that are much more amenable to positive labour market outcomes than do those who arrive at Sweden's border. They are for the most part highly educated and much more likely to be "economic" immigrants. Sweden's immigrants are more likely to be humanitarian/refugees with much less education. These differences are at least in part the result of Canada's more managed immigration system, which, as described above, has taken a decidedly "high skills" route. Since the late 1960s, the emphasis in Canada has been on ensuring that a significant share of immigrants possess characteristics that would assist them in labour market assimilation. And this emphasis has increased since the early 1990s, when research started to demonstrate that economic outcomes were deteriorating.
- 2) Large scale immigration is a more recent phenomenon in Sweden than Canada, resulting in many more recent immigrants who have had less time to adjust. If comparisons are made without allowing for differences in "years since migration" and the associated economic integration, Canada will appear to have superior outcomes simply because it has a higher percentage of immigrants who have had a longer period of time in which to integrate economically.
- 3) The empirical evidence for Canada suggests that some skill in the host country language is a crucial factor in successful economic integration. While language skills accumulate with time in the country, so that the aforementioned "years since migration" is relevant, it also seems plausible that a higher percentage of Canadian immigrants have some familiarity with English/French prior to immigration than is the case with respect to Swedish for immigrants to Sweden. Canada's points system also puts an emphasis on English and French language ability at the time of immigration.
- 4) Labour market rigidity may also be an issue. Over the 1990s and 2000s Canada and Sweden displayed a similar unemployment rate, but Canada appears to have been able to absorb a higher per capita number of immigrants with superior employment outcomes.

Whether this result is entirely due to the differences in immigrant characteristics noted above is not known. But there is some reason to believe that a more flexible Canadian labour market had an effect. Relative employment rates among immigrants to America appear to be higher than among their Canadian counterparts, and Canadian rates are higher than their Swedish counterparts. Potential labour market rigidities associated with hiring and firing, wage settlement, the availability of social security, minimum wage laws, and other institutional features may favour the United States, and to a lesser extent Canada, regarding the ability of immigrants to at least locate a job. Whether the job is a “good” one, and in any way matches the skills and abilities of the immigrant, is another issue.

It seems plausible that in more rigid labour markets, the economic integration of new immigrants occurs more on the employment than the earnings dimension, whereas, in a more flexible labour market employment is more rapid following immigration and economic integration occurs along the earnings dimension. Although no formal studies comparing Canada and Sweden have been undertaken on this topic, this hypothesis is consistent with evidence across the United States, Canada and Australia -- three countries spanning a wide range of labour market rigidities. According to the OECD's index, Sweden is more rigid than Australia, which is the most rigid of these three.

- 5) Related to the previous point, it may well be that the generosity of the Swedish social safety net does not "push" individuals into the labour market for subsistence purposes in the same way as might the American social safety net, and even the Canadian one to a lesser degree.
- 6) There is some Canadian evidence that immigrants are more sensitive to the business cycle than are the Canadian born, and immigrants who arrived in the early 1990s appear to have been scarred by their mid-recession arrival. It is plausible that this type of phenomenon is also occurring in Sweden, which had a substantial and prolonged recession in the 1990s as seen in figure 4, after which the unemployment rate did not return to its previously low level. In contrast, before the 2008 recession the Canadian unemployment rate was at lows not seen in the previous 30 or 40 years – and the data being analyzed are pre-recession.
- 7) The Swedish immigration rate increased dramatically around 2005 and stayed quite high subsequently. Beyond the labour market's ability to integrate new immigrants, a sudden increase in numbers may affect the provision, and the quality, of settlement services, including language training. It might not be the long-term immigration level that is relevant for this issue, but the rapid increase in the number of individuals requiring services may strain resources.

Having itemized these potential sources of the observed immigrant labour market outcomes in Sweden, it is worth recognizing that Canada's immigration policy is far from static. Canada's immigration system is in the midst of significant change, in part because of some unhappiness with the economic outcomes among recent immigrants. The ability of the “points” system to deliver the type of immigrant who can easily adapt in the labour market is being questioned in

Canada, as it has been in Australia. This criticism is still being made despite the apparent considerable improvement in outcomes among more recent “economic” migrants following the changes made to the points system in the early 2000s.

There are multiple approaches to understanding the definition of "high skills". Defining/evaluating such skills in the context of an administrative immigration system – such as a points system – in a way that is transparent and equitable is not straightforward. Related to this, not all skills are easily transferable from one context to another. Host country language ability appears to be an extremely important moderator of educational and labour market skills. Moreover, international educational credentials have extremely imprecise predictive power regarding labour market success. These issues are often discussed within the context of the points system. The move to involve employers and the provinces more in the selection process through the “Canadian Experience Class” and the “Provincial Nominee Program” are in part responses to these concerns.

Nonetheless, in spite of these concerns, Canada’s managed immigration system has allowed a very large number of immigrants – among the highest rate in the world – to integrate in a relatively successful manner, both socially and economically. Canada has so far escaped the social unrest associated with first and second generation immigration in most other western nations, at least in part because of the types of immigrants entering the country. There are of course non-economic reasons for this outcome as well. And, when evaluating the success of immigration policy in the very long run by focusing on the outcomes of the one-and-a-half (i.e., very young immigrants) and second generation immigrants, Canada appears to shine (e.g., Aydemir and Sweetman 2008, Picot and Hou 2010, Schaafsma and Sweetman 2001). Again at least in part because of the types of immigrants entering the country, educational and labour market outcomes among the children of immigrants are very positive, often much better than that of their counterparts with Canadian born parents. The managed immigration system has been, overall, very helpful to Canada.

Any country thinking of reforming its immigration system would do well to undertake a large-scale detailed international comparative study of relevant comparator countries’ processes and policies. Some of the relevant issues are well captured by the academic literature, but many are not. The academic literature in Canada is only starting to look at the details of the operation of the immigration selection and settlement system(s) and their ramifications for labour market outcomes and social integration. And one dimension of immigration that has not been discussed here, the effect on the labour market outcomes of domestically born workers, has been almost completely ignored in Canada in both academic and policy circles. While constituting a central question in most western nations, it is rarely discussed in Canada, and has received very little research attention.

References

- Antecol Heather, Peter Kuhn and Stephen Trejo (2006) "Assimilation via Prices or Quantities? Labour Market Institutions and Immigrant Earnings Growth in Australia, Canada, and the United States," *Journal of Human Resources*, 41(4): 821–840.
- Aydemir, Abdurrahman (2003) "Effects of Business Cycles on the Labour Market Participation and Employment Rate Assimilation of Immigrants." *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, Abdurrahman and Christopher Robinson (2008) "Global Labour Markets, Return and Onward Migration." *Canadian Journal of Economics* 41:4, 1285-1311.
- Aydemir, Abdurrahman and Mikal Skuterud (2005) "Explaining the Deteriorating Entry Earnings of Canada's Immigrant Cohorts: 1966-2000." *Canadian Journal of Economics* 38:2, 641-671.
- Aydemir, Abdurrahman and Arthur Sweetman (2008) "First and Second Generation Immigrant Educational Attainment and Labour Market Outcomes: A Comparison of the United States and Canada." *Research in Labour Economics*, 27: 215-70.
- Bonikowska, A., D. Green and C. Riddell (2009), Cognitive Skills and Immigrant Earnings, Statistics Canada catalogue # 89-552-M no. 020, Ottawa
- Citizenship and Immigration Canada (2010) *Facts and figures 2009: Immigration overview*, Minister of Public Works and Government Services Canada, Cat. no. Ci1-8/2009E-PDF.
- Ferrer, Ana, David A. Green, and W. Craig Riddell (2006) "The Effect of Literacy on Immigrant Earnings" *Journal of Human Resources*, pp. 380-410.
- Ferrer, Ana and Craig Riddell (2008) "Education, Credentials and Immigrant Earnings." *Canadian Journal of Economics* 41:1, 186-216.
- Frenette, Marc and Rene Morissette (2005) "Will They Ever Converge? Earnings of Immigrant and Canadian-Born Workers over the Last Two Decades." *International Migration Review* 39(1): 228-257.
- Green, David and Christopher Worswick (2010) "Entry earnings of immigrant men in Canada: the roles of labour market entry effects and returns to foreign experience" in *Canadian Immigration: Economic Evidence for a Dynamic Policy Environment*, eds. Ted McDonald, Elizabeth Ruddick, Arthur Sweetman, and Christopher Worswick (Montreal and Kingston: McGill Queen's University Press, Queen's Policy Studies Series), pp. 77-110.
- Liebig, Thomas (2009) "Jobs for Immigrants: Labour Market Integration in Norway", OECD Social Employment and Migration Working Paper #94, OECD publishing, doi: 10.1787/221336486778
- OECD, Lemaitre, George and Thomas Liebig (2007) "Jobs for Immigrants: Vol 1: Labour Market Integration in Australia, Denmark, Germany and Sweden, Organization for Economic Co-operation and Development, Paris
- Picot, Garnett (2008) "Immigrant Economic and Social Outcomes in Canada: Research and Data Development at Statistics Canada" Statistics Canada, Analytical Studies Branch Research Paper Number 319.
- Picot, Garnett, Feng Hou and Simon Coulombe (2009) "Chronic Poverty and Poverty Dynamics Among Recent Immigrants." Statistics Canada, *International Migration Review*

- Picot, Garnett, Yuqian Lu and Feng Hou (2009) "Immigrant low-income rates: The role of market income and government transfers" *Perspectives*, Statistics Canada — Catalogue no. 75-001-X, pp 13-27
- Picot, Garnett and Arthur Sweetman (2005) "The Deteriorating Economic Welfare of Immigrants and Possible Causes: Update 2005", Statistics Canada Analytical Studies Branch research paper series No. 262.
- Picot, Garnett and F. Hou (2009) "Immigrant Characteristics, the IT Bust and and their Effect on Entry Earnings of Immigrants, Analytical Studies Branch research paper #315, Statistics Canada
- Picot, Garnett and F. Hou (2010) "Seeking Success in Canada and the United States: Labour Market Outcomes among the Children of Immigrants", in *Equal Opportunities? The Labour Market Integration of the Children of Immigrants*, The OECD, Paris
- Reitz, J. (2007) "Immigrant Employment Success in Canada, Part II, Understanding the Decline", *Journal of International Migration and Integration*, Vol 8, no 1
- Schaafsma, Joseph and Arthur Sweetman (2001) "Immigrant Earnings: Age at Immigration Matters" *Canadian Journal of Economics*, 34(4): 1066-99.
- Sweetman, Arthur (2010) "Spotlight on the economic effects of immigration — A North American perspective" in *The Internationalization of Labour Markets*, ed. Christiane Kuptsch (Geneva: International Labour Organization), 15-40.
- Sweetman, Arthur and Casey Warman (2010a) "How Far Does the Points System Stretch? The Spouses of Skilled Worker Principal Applicants" in *Canadian Immigration: Economic Evidence for a Dynamic Policy Environment*, eds. Ted McDonald, Elizabeth Ruddick, Arthur Sweetman, and Christopher Worswick (Montreal and Kingston: McGill-Queen's University Press), 183-207.
- Sweetman, Arthur and Casey Warman (2010) "Canada's Temporary Foreign Workers Programs", *Canadian Issues / Thèmes Canadiens*, Spring, pp. 19-24.
- Sweetman, Arthur and Casey Warman (2008) "Integration, Impact, and Responsibility: An Economic Perspective on Canadian Immigration Policy" in *Immigration and Integration in Canada in the Twenty first Century*, eds. J. Biles, M. Burstein, and J. Frideres (Montreal and Kingston: McGill Queen's University Press), 19-44.
- Xue, Li (2010) "A Comprehensive Look at the Employment Experience of Recent Immigrants during Their First Four Years in Canada" in *Canadian Immigration: Economic Evidence for a Dynamic Policy Environment*, eds. Ted McDonald, Elizabeth Ruddick, Arthur Sweetman, and Christopher Worswick (Montreal and Kingston: McGill Queen's University Press), pp. 11-40.

Appendix table 1

Table A1 - Immigration to Canada by Class in 2009				
CATEGORY		Count	Percentage of Perm. Residents	Percentage of Class
Economic Class immigrants				
Canadian Experience Class	- principal applicants	1,775	0.7	1.2
	- spouses & dependants	770	0.3	0.5
Skilled workers (PAs-points system)	- principal applicants	40,735	16.2	26.5
	- spouses & dependants	55,227	21.9	36.0
Entrepreneurs	- principal applicants	372	0.1	0.2
	- spouses & dependants	943	0.4	0.6
Self-employed	- principal applicants	179	0.1	0.1
	- spouses & dependants	358	0.1	0.2
Investors	- principal applicants	2,872	1.1	1.9
	- spouses & dependants	7,435	2.9	4.8
Provincial/territorial nominees	- principal applicants	11,801	4.7	7.7
	- spouses & dependants	18,577	7.4	12.1
Live-in caregivers	- principal applicants	6,273	2.5	4.1
	- spouses & dependants	6,181	2.5	4.0
Sub-total		153,498	60.9	100.0
Family Class				
Spouses and partners		43,894	17.4	67.3
Sons and daughters		3,027	1.2	4.6
Parents and grandparents		17,179	6.8	26.3
Others		1,100	0.4	1.7
Sub-total		65,200	25.8	100.0
Refugees				
Government-assisted refugees		7,425	2.9	32.5
Privately sponsored refugees		5,036	2.0	22.0
Refugees landed in Canada		7,204	2.8	31.5
Refugee dependants		3,181	1.3	13.9
Sub-total		22,846	9.0	100.0
Total		241,544	na	na
Source: Citizenship and Immigration Canada, <i>Facts and Figures, 2009</i> .				
NOTE: At April 1, 2009, Statistics Canada estimated Canada's population to be 33,988,000, which implies a 0.71 immigration rate.				

Appendix table 2

Table A2 - Employment Outcomes for Oct 2000 to Sept 2001 Arrivals						
	Family (%)	Skilled Workers (PA) (%)	Skilled Worker (S&D) (%)	Other Economic (%)	Refugees (%)	All Immigrants (%)
Panel 1 - Employment to Population Ratio						
Wave 1 - 6 months after arrival	41	62	36	29	22	45
Wave 2 - 2 years after arrival	50	74	53	51	45	59
Wave 3 - 4 years after arrival	55	84	65	62	56	68
Panel 2 - Full and Part-Time Employment Among the Employed						
Wave 1: Six months after landing						
Immigrants currently employed	17,373	34,072	14,444	2,829	2,155	71,693
Full time	77	87	70	74	69	80
Part time	23	13	30	26	31	20
Wave 2: Two years after landing						
Full time	79	88	68	69	63	80
Part time	20	11	31	30	36	20
Wave 3: Four Years after landing						
Full time	81	91	73	69	71	82
Part time	19	8	26	30	28	17
Panel 3 - Self-Assessed Employment Situation at 4 Years compared to 2 Years						
Better	55	41	43	39	60	45
The Same	25	27	24	35	19	26
Worse	20	32	33	25	20	29
Panel 4 - Retrospective/Cumulative Employment 4 Years After Arrival						
Had a job or business at some point since arrival						
	72	96	85	77	75	84
Number of Jobs Held Since Arrival Among Those Who Held a Job at Some Point						
1	34	30	35	54	42	34
2	32	33	31	27	30	32
3	19	21	19	10	17	19
4 or more	15	16	14	9	11	15
Source: From Xue (2010) using the Longitudinal Survey of Immigrants to Canada						