

Labor Market Performance of Immigrants in Smaller Regions of Western Countries: Some Evidence from Atlantic Canada

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Abstract Despite recent interest in regionalization of immigration in host nations, most studies have analyzed immigrants' economic performance by largely focusing on their overall *national* performance. A regional analysis is necessary because changing geographic distribution of immigrants can affect their economic performance positively or negatively. The present paper focuses on Atlantic Canada whose share in annual Canadian immigrant inflows has been traditionally low, but where recent policy initiatives have resulted in greater attraction and retention of immigrants. Immigrants are found performing better than non-immigrants in regional labor market. The importance of regional analysis of immigrants' economic performance and contribution in host nations is highlighted.

Résumé Malgré l'intérêt récent pour la régionalisation de l'immigration dans les pays hôtes, la plupart des études ont analysé la performance économique des immigrants en grande partie en se concentrant sur leur performance *nationale*. Une analyse régionale est nécessaire parce qu'un changement dans la répartition géographique des immigrants peut influencer sur leur performance économique de façon positive ou négative. Cet article se concentre sur le Canada atlantique, dont la part dans les entrées d'immigrants annuelle canadienne a toujours été faible, mais où les récentes initiatives politiques ont abouti à une plus grande attraction et rétention des immigrants. Dans le marché du travail régional, il s'avère que le rendement des immigrants est meilleur que celui des non-immigrants. L'importance d'une analyse régionale de la performance économique des immigrants et de leur contribution dans les pays hôtes est soulignée.

Keywords Economics of immigration · Integration · Policy · Regionalization · Retention

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Introduction

Recent policies of immigrant regionalization in host countries are resulting in a more even regional distribution of new arrivals within their borders. For example, in Canada alone where the province of Ontario receives the highest number of immigrants each year among all provinces (42% in 2009), recent attempts by smaller provinces to attract and retain immigrants have resulted in a shift of new arrivals away from Ontario and toward other provinces.¹ A similar phenomenon has been observed in Australia where there has been a marked shift in the distribution of new arrivals away from New South Wales (NSW) to other states (Hugo 2008).² While no statistics are yet available for New Zealand, regions in that country have also developed schemes to attract and retain immigrant labor to meet local labor demand and to promote their local economic development (Spoonley and Bedford 2008). Indeed, the impetus for immigrant regionalization in all host countries has been the increasing regional imbalances in population distribution and in the distribution of working age population aged 15–54 years resulting from population outmigration from smaller to larger regions and from declining fertility rates. As a result of this demographic shifts, smaller regions, provinces and states are experiencing labor shortages and declines in economic activities which rely heavily on demands for goods and services that in turn rely on the population size of a region.³

Despite the growing interest in immigrant regionalization, very few studies are found in the literature analyzing the economic performance of immigrants in new destinations of host countries. Such analysis is important because on the basis of economic theory, one would expect the overall economic performance of immigrants in a host nation to change as a result of their redistribution. Immigrants' national economic performance may deteriorate if their initial distribution within the country was optimal, i.e., immigrants successfully chose their destinations in a host nation according to where their marginal product would be the highest. However, immigrant performance may improve as a result of their redistribution if their initial location choice was not directed by their marginal product partly due to their lack of information about local labor markets.

An analysis of regional economic performance of immigrants is also important for Canada where some studies, such as Picot (2004), have shown that immigrants'

¹ While Ontario was home to about 11 new immigrants per thousand residents in 1996, which rose to 13 in 2001, it received only about eight new immigrants per thousand residents in 2009. Most other provinces experienced increases in new arrivals on a per capita basis since 1996. Provinces in the Atlantic and Prairie regions received the most immigrants on a per capita basis since 2001.

² It may be argued that the case of Australia was somewhat different from others (such as Canada's) where the shift from NSW was initiated by NSW itself as it was felt it had become heavily immigrant-intensive. Other states, such as Queensland and Victoria, simply picked up the slack.

³ It is well known that in Canada labor shortages are felt throughout the country due to population aging and declining birth rates. However, labor shortages are felt more in smaller regions and provinces which face the added challenge of the out-migration of population.

economic performance has deteriorated over time. Some commentators, such as Grubel et al. (2009), have argued that the economic performance of immigrants who have arrived in Canada over the past decade has been poor and has caused the standard of living of Canadians to decline. However, such studies and comments are based on aggregate national data and do not analyze immigrants' performance in the regions where they settle within Canada.

The present study is aimed at presenting some evidence on labor market performance of immigrants who have settled in Atlantic Canada. This region of Canada has historically received fewer immigrants on a per capita basis than other Canadian regions, but has recently begun to attract, and retain, more immigrants. The four Atlantic provinces share many demographic characteristics: for example, all have low fertility and international immigration and are generally below the break-even point in their migration exchanges with the rest of Canada.

The analysis conducted in this paper is based on descriptive statistics which are calculated using data for the period between 1981 and 2009. The labor market performance data analyzed in this study are based on the last six Canadian population censuses conducted since 1981 by Statistics Canada. Annual immigrant inflow data, available from Citizenship and Immigration Canada (CIC), are also analyzed. At the time of writing this paper, some of these inflow data were available until 2008 while some were available until 2009.

“[Current Demographic Trends in Atlantic Canada and Public Policy Response](#)” provides a brief overview of some current demographic trends in the population of Atlantic Canada. This information is necessary as context for recent policy initiatives adopted in the region to attract and retain immigrants. These policy responses are also discussed briefly in the same section. “[Immigration Trends in Atlantic Canada](#)” summarizes annual immigration trends in the region. “[Immigrants in Labor Markets of Atlantic Canada](#)” provides a detailed analysis of labor market performance of immigrants in Atlantic Canada. “[Summary, Concluding Remarks, and Policy Implications](#)” summarizes the study and discusses some policy implications of the main results.

Current Demographic Trends in Atlantic Canada and Public Policy Response

Since World War II, population growth rates in Atlantic Canada have declined continuously, becoming negative with population decline occurring toward the end of the last century. Declining fertility rates and net out-migration are two main reasons the Atlantic region has the highest percentage of seniors in Canada. In 2008, the population of Newfoundland and Labrador had the lowest percentage of youth in the country, while Nova Scotia had the highest percentage of seniors (15.4%), followed by New Brunswick (15.2%) and Prince Edward Island (15.1%).

In responding to declining population growth rates which could have adverse economic and political impacts on the region, governments in each Atlantic province have developed a population growth strategy, with international immigration an important component. Immigration strategies have been launched under the auspices of their newly established immigration departments or population growth secretariats. The Council of Atlantic Premiers has established a unified goal to increase

international immigration in the Atlantic region.⁴ The ACOA, a federal government agency with a regional economic development mandate, also recognizes the importance of immigration in the economic development of the region. ACOA has established an Atlantic Population Table with representations from CIC, Human Resources and Social Development, and the four provincial governments. The Rural Secretariat, another federal body, has also examined ways to repopulate rural areas as an important component of community economic development. Immigration is an important tool of its rural repopulation strategy. Nova Scotia Department of Agriculture has also partnered with the Nova Scotia Office of Immigration to attract immigrant farmers in rural areas of the province. Municipal governments and private sector across the region also realize the importance of immigration in meeting local labor market demands and the necessity of building welcoming neighborhoods to retain immigrants. Hence, immigrant attraction and retention is listed as a key priority in the economic strategy document of Halifax Regional Municipality (HRM).⁵ The HRM, in collaboration with Greater Halifax Partnership (GHP), has launched an Immigration Action Plan (IAP) to promote economic and cultural development in HRM.⁶ The IAP is an example of public–private sector collaboration to meet local shortages of labor in the region. Settlement organizations—such as the Immigrant Settlement and Integration Services in Nova Scotia, PEI Association of New Comers in Prince Edward Island, and Association for New Canadians in Newfoundland and Labrador—and community organizations—such as the Colchester Regional Development Authority in Nova Scotia and Multicultural Association of Carleton County in New Brunswick—are also on board to design innovative strategies to attract immigrants and facilitate their integration.

Immigration Trends in Atlantic Canada

Immigrants comprise only 3.75% of the Atlantic population, much below the national average of 18%. While it is home to 7.2% of all Canadians, the region received only 2.6% of immigrants coming to Canada in 2009, with most of these settling in Nova Scotia. Public policy and community initiatives to attract and retain immigrants in the region are showing results. During 2003–2009, regional immigrant inflows rose in the region by about 60%.⁷ Each Atlantic province welcomed more immigrants over this period. The immigrant retention rate has also gone up, from under 50% in the mid-1990s to about 80% during 2000–2006, according to the latest available data.⁸ Retention rates increased in all provinces over

⁴ The Atlantic provinces have adopted unified policies on many fronts and cooperate in providing many public services. For example, the sales tax is harmonized across all provinces, and there is also cooperation in selected health care and education services. Businesses have also developed linkages across the region, especially in professional services. Proposals for creating a single economy in the region have also been tabled (Atlantic Provinces Economic Council 2007).

⁵ This document can be found at <http://www.halifax.ca/economicstrategy/EconomicStrategy.html>.

⁶ The GHP is a public–private sector coalition aimed at attracting new investments in Halifax.

⁷ During this period, immigrant inflows rose in the region from 4,142 to 6,663.

⁸ These rates are based on CIC's annual immigrant inflow data and resident immigrant data obtained from the population censuses and the Longitudinal Immigrant Database (IMDB). Immigrants who landed outside of Atlantic Canada and then moved to the region are also included in these calculations. Details of calculations can be found in Akbari (2009a, b).

the period 2000–2006. Part of the increase in immigrant retention is the result of slowing down of the onward movement of immigrants to other regions in Canada. There has also been an increase in the movement of new immigrants *from* those other regions. In fact, between 2000 and 2004, the region attracted 200 more skilled immigrants who had entered Canada as principal applicants from other Canadian regions than it lost to them (Akbari 2009a, b).

About half of the immigrants arriving in 2009 came as provincial nominees, while only one quarter had come in 2005 as provincial nominees. New Brunswick and Prince Edward Island receive most of their immigrants as provincial nominees. Under the provincial nominee program, businesses and communities can nominate immigrants for specific positions in their organizations. Hence, the increase in provincial nominees reflects deliberate government, private business sector, and community attempts to attract immigrants to meet labor market shortages.

In the mid-decade, regional population began to rise again, with lower net out-migration and increased international immigration being the main causes.

Table 1 shows the changing source country composition of immigrants in Atlantic Canada. Since the early 1970s, Canada has experienced a shift in the source country mix of its immigrants from the countries of western Europe to those of Asia, Africa, and South and Central America. This shift is attributed to the 1961 abolishment of “preferred country” clause of the 1910 Immigration Act; the introduction of the “point system”; improvement of economic conditions in Europe since the 1960s; and formation of European Union and re-unification of Germany, both of which caused greater mobility of workers within Europe, greater worker mobility in a globalized world, and continued political discourse in third-world countries.

Change in the source countries of immigrants became more prominent in Atlantic Canada only since the 1990s when China and some countries of the Middle East entered the list of top five immigrant source countries (Table 1). The entry of Middle Eastern countries in the 1990s can be attributed to the first Gulf War, which adversely affected some groups and prompted them to leave their countries of residence. Some private immigrant consultant activities in the region directed some of their national inflows toward Atlantic Canada (Akbari 2009a, b). These countries became more prominent in the list of top five source countries in the 1990s when both principal applicants and dependents were considered, likely due to the larger family sizes of immigrants originating from there.

In recent years, the prominence of Middle Eastern immigrants among the top five source countries has diminished; instead, China has consistently been on the top of the list. The USA and the UK (despite the general fall in immigrant inflows from western Europe to Canada since the 1970s) are permanent members of this list, which is probably due to their traditional ties to Canadian society, shared history, common language, and nearness. The presence of the large immigrant population that came from those countries in the past may be another factor attracting them to the region. The inclusion of Korea and Iran on the list of top five source countries of immigrants is also worth noting.

Finally, it is also noteworthy that the top five source countries of immigrants have formed less than half of the total immigrant inflows to the region for most of the

Table 1 Top five source countries of immigrants destined for Atlantic Canada, by year, 1981–2008

Rank	1981–1985		1986–1990		1991–1995		1996–2001		2002–2006		2007		2008	
	Country	Count	Country	Count	Country	Count	Country	Count	Country	Count	Country	Count	Country	Count
Principal applicants and dependents														
1	USA	3,284	USA	2,620	Egypt	1,519	China	1,948	China	1,919	China	924	China	1,342
2	UK	1,931	UK	1,606	USA	1,510	Kuwait	1,629	USA	1,488	Korea	621	Korea	726
3	Vietnam	748	Poland	693	Kuwait	1,247	Jordan	828	UK	1,184	UK	537	UK	551
4	Poland	331	Vietnam	617	Hong Kong	1,224	Korea	783	Korea	1,091	US	394	US	534
5	Germany	321	Lebanon	444	Saudi Arabia	887	Saudi Arabia	677	Iran	246	Iran	261	Iran	282
Total for 5 countries		6,615		5,980		6,387		5,865		5,928		2,737		3,435
Total arrivals		11,398		13,340		21,495		20,841		17,886		5,704		6,593

From 1981 to 2004, Permanent Resident Data System micro-data as provided to AMC under contract with CIC. Principal applicant is based on variable “f_stat2”, and source country is based on variable “f_clpr.” For 2004–2008, Facts and Figures 2008 (CIC, special tabulations and digital library data). Detailed immigrant source country data for 2009 were not available at the time of writing this paper. Broader data released by CIC on its web site show that in 2009, roughly 45% of immigrants arrived in the region from Asia and the Pacific, followed by Africa and the Middle East (25%), Europe and the UK (19%), the USA (6%) and other regions

period under study. This means that immigrants to the region also arrive in small numbers from diverse source countries.

Immigrants in Labor Markets of Atlantic Canada

Latest available data on the region's labor force are available from the 2006 census. These data indicate that immigrants comprised only about 4% of the total regional labor force of 1.2 million in 2006 as compared to about 20% nationally. The percentage of annual immigrant arrivals destined to Atlantic Canada's labor force rose from 18% in 2000 to 30% in 2008, reflecting the deliberate attempts of policy makers and other stakeholders to attract and retain immigrants with a view to meet labor market shortages.

Before analyzing the labor market performance of immigrants, predictors of their labor market performance are analyzed as they form an important component of immigrant selection in Canada.

Predictors of Labor Market Performance

Under the current "point system" applied in the evaluation of the application of an individual intending to immigrate to Canada, six factors are considered and points assigned to each in order of their importance to Canadian labor markets. These factors are age (10 points), education (25 points), knowledge of Canada's official languages (24 points), work experience (21 points), arranged employment (10 points), and adaptability (10 points). A total of 67 points are required of an individual to qualify to immigrate to Canada. All of these factors are viewed as important predictors of economic performance in Canada. Immigrant arrival data are available on the first three factors and will be analyzed in the present section. These three factors together can help an individual earn a maximum of 59 points.

Age at Arrival of Immigrants

In economics literature, the migration decision of an individual is viewed as a human capital investment decision. The theory of human capital investment predicts that it is usually the young who migrate because young individuals can reap the benefits of their migration investment for a longer time at their destination than can the old. The young are also usually healthier and more energetic. Hence, age is an important criterion for selection of an immigrant in Canada. Under the Canadian system, points assigned to an individual's application on the basis of age peak at 10 if the individual is aged between 21 and 49 at the time of arrival.

Figure 1 compares the age distributions of annual arrivals in Atlantic Canada by 5-year intervals between 1981 and 2006 with the age distributions of resident non-immigrants at the time of each cohort's arrival. It is confirmed that immigrants to Atlantic Canada are indeed younger than non-immigrants at the time of arrival. Most new arrivals and non-immigrants are aged 25–44, the prime working age group. However, the population share of non-immigrants in this age group has been falling

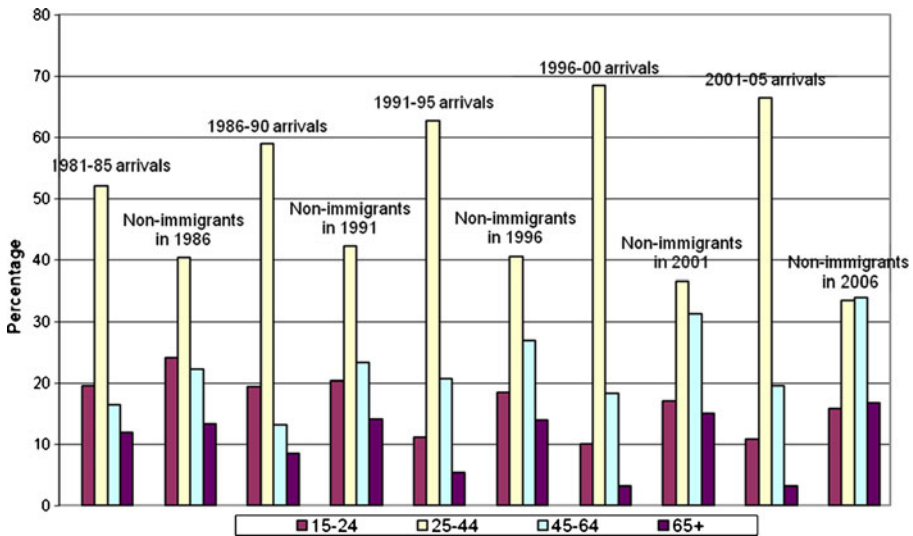


Fig. 1 Age distributions of recent immigrants and non-immigrants, Atlantic Canada, 1981–2006. Sources: Immigrant arrivals data were supplied by CIC. Non-immigrant data for 1986–2001 are based on Canadian population censuses (Public Use Micro Data Files PUMF, individual files), Statistics Canada. The 2006 census-based data are from Statistics Canada Cat. No. 97-557-XCB2006013, available on www.statcan.gc.ca

since 1991. By 2006, their share in total population had fallen below that of the 45–64 group, which is closer to retirement age. On the other hand, since 1991, more than 60% of immigrants arriving in Atlantic Canada have been in their prime working age.

Figure 1 also reveals the overall aging trend of the Atlantic population. The share of non-immigrants aged 65 and over has been rising throughout the period, while the share of youth (aged 15–24) has been declining. These trends reflect declining birth rates and out-migration of young people from the region. The results of this section indicate that immigration can be used (1) to meet labor shortages in the region and (2) to reverse the aging trend in the Atlantic population. However, current levels of immigration are too low to help offset the aging trend. Therefore, research is needed to determine what level of immigration would reverse the aging trend among Atlantic Canadians over the next 10 years.

Knowledge of Official Languages

Language barrier can be an important impediment to an immigrant's success in the labor market. Fluency in both official languages of Canada, English and French, earns up to 24 points. Chiswick and Miller (1995) provide evidence on the important role English language proficiency plays in labor market success of immigrants in a host country.

Thomas (2009) has shown that immigrants residing in smaller provinces of Canada are less likely to communicate in a language other than English or French at work than in larger provinces. In Atlantic Canada, only 6% and 7% of immigrants in the larger provinces of New Brunswick and Nova Scotia, respectively, report using a language other than English and French at work (Fig. 2). In Newfoundland and

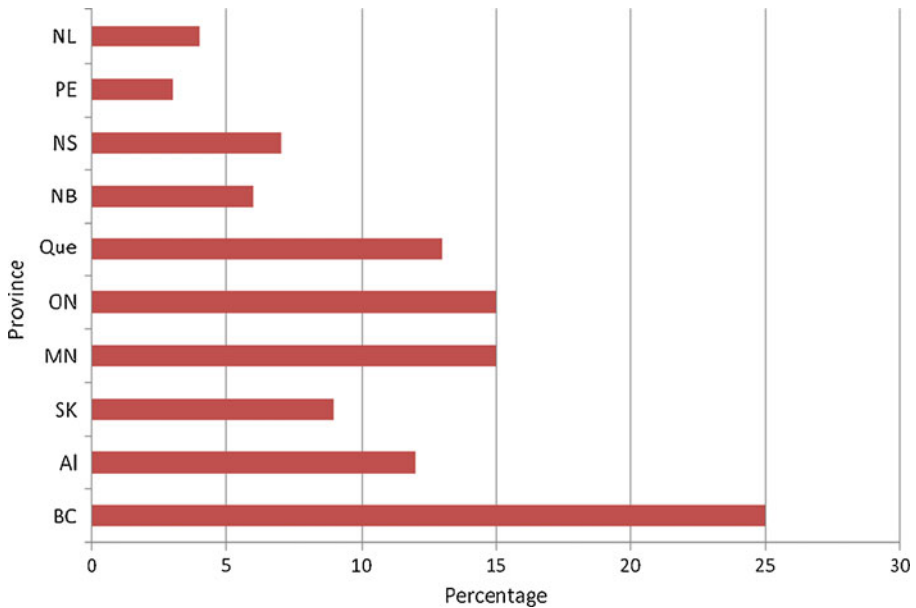


Fig. 2 Percentage of immigrant workers who used a language other than English or French in their job by province of work, Canada 2006. Source: Based on Thomas (2009, Chart 8) who obtained these data from census 2006

Labrador, and Prince Edward Island, these percentages are even lower, 4% and 3%, respectively. These immigrants may or may not have fluency in official languages at the time of arrival.⁹

The Atlantic provinces offer fewer opportunities for new arrivals to work within their own communities since these communities are smaller than in larger provinces of Canada and are also concentrated in a few large towns. Because of this, there is probably more interaction between new arrivals and the general population, which requires immigrants to become proficient in either English or French. Indeed, Chiswick and Miller (2001) also report that the use of English or French is greater among those adult male immigrants in Canada who live in an area where fewer people speak the immigrant's mother tongue.

Education Levels

Education is another important factor in an immigrant's economic success in Canada. Research has shown that individuals with higher education levels generally have lower unemployment rates and earn higher incomes than those with lower education levels. An immigrant can earn up to 25 points for education on his/her application to move to Canada.

Over time, educational levels among annual immigrant inflows to Atlantic Canada have risen, as is shown in Figs. 3 and 4. Figure 3 shows declining proportions of recent

⁹ Similar evidence is provided by Bernard (2008) for immigrants residing in mid-sized (100,000–500,000 residents) to small-sized (15,000–100,000) areas of Canada who have a better ability to speak in official languages than those who stay in larger areas.

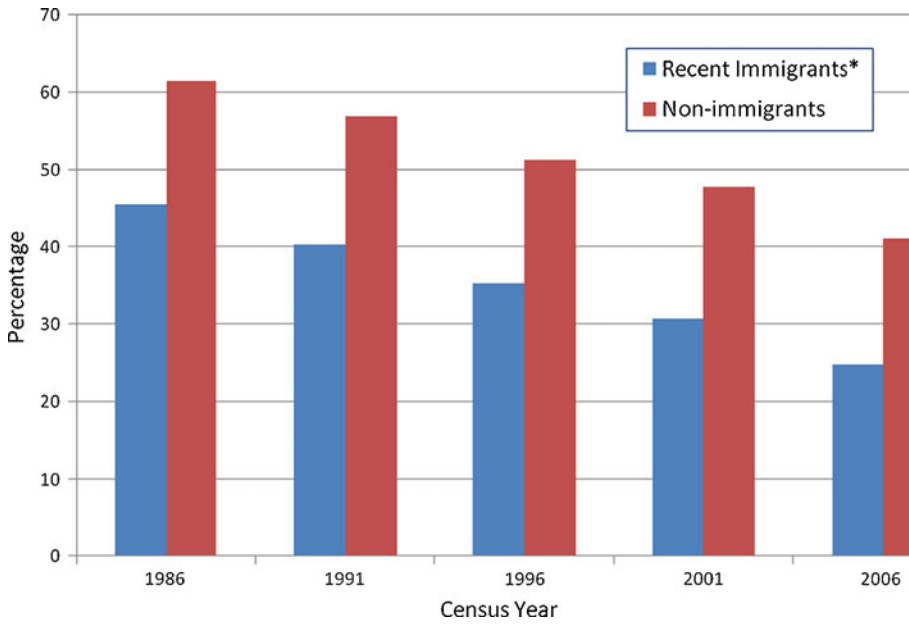


Fig. 3 Immigrants destined for Atlantic Canada and non-immigrants with high school or less education, 1986–2006. *Those who arrived within 5 years of the census year and were aged 25 and older at the time of arrival. Sources: Recent immigrants’ data are from CIC. Non-immigrants’ data are from the Census PUMF until 2001 and from Statistics Canada Catalogue No. 97-560-XCB2006025 for 2006. High school or less education = less than grade 5+grades 5–8+grades 9–13+secondary school graduation certificate. All data are reported for individuals aged 25 and over

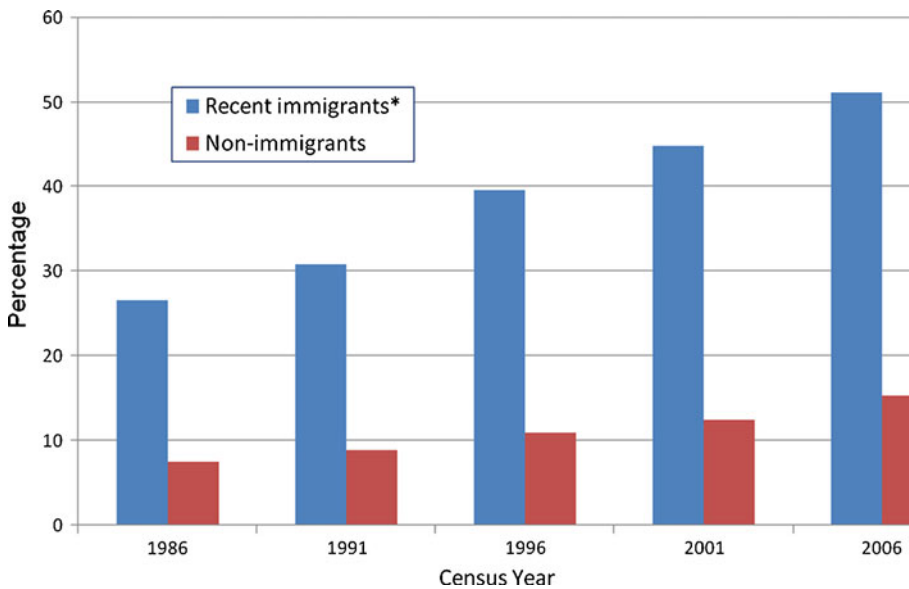


Fig. 4 Immigrants destined for Atlantic Canada and non-immigrants with a university degree, 1986–2006. *Those who arrived within 5 years of the census year and were aged 25 and older at the time of arrival. Sources: Same as for Fig. 3

immigrants who arrived between 1981 and 2006 with high school or less education. The same trend is observed among non-immigrants. However, throughout the period, lower percentages of new arrivals had only high school or lower education than did non-immigrants.

Figure 4, in contrast, shows a sharp increase in the percentages of university degree holders among recent immigrant arrivals. Although a similar trend is observed for non-immigrants, their percentages have risen more slowly and have been below those of recent arrivals throughout the period.

No data are available on non-immigrant degree holders after 2006. According to Statistics Canada (CANSIM, 477-0014), 38,604 new degrees were awarded by Atlantic Canadian universities during 2007–2008. During these two years, 3,925 immigrants holding foreign university degrees were destined for the region, about 10% of the total degrees awarded in the region.

In summary, these three predictors indicate that immigrants in Atlantic Canada should perform better in labor markets than non-immigrants. However, actual labor market outcomes can be hampered if the educational skills they bring with them are not recognized in Canada. Studies conducted by Statistics Canada have shown that many new immigrant arrivals in Canada face difficulty finding employment because their foreign educational credentials are not recognized in labor markets.

Another factor that can also affect immigrants' performance is any workplace discrimination on the basis of their country of origin. Since the 1980s, most immigrants have come to Canada from non-European parts of the world, while the majority of Canadian population can trace its origin to Europe. Atlantic Canada is no exception, but as was shown in Table 1, the source country mix of immigrants arriving in this region shifted from Europe to Asia and the Middle East only since the mid-1990s.

The above two factors can weaken the link between the labor market predictors and labor market outcomes of immigrants, thereby frustrating the all-important goal of Canadian immigration policy which is to select immigrants who would have a positive impact on the Canadian economy. They can also frustrate the goals of regional policy initiatives to attract and retain immigrants based on their potential economic contribution. Hence, it is necessary to analyze data on immigrants' labor market performance in Atlantic Canada.

Labor Market Performance of Immigrants in Atlantic Canada

In this section, three indicators of labor market performance of immigrants are analyzed. These indicators include: labor force participation rates, unemployment rates, and labor market earnings.

Labor Force Participation Rates

As discussed above, immigrants are generally younger than the resident population at the time of their arrival in Atlantic Canada. Most new immigrants of working age either have a job offer before arrival in the region or become a member of the labor force by looking for a job immediately after arrival, thereby increasing the region's labor force. Figure 5 (which provides data for the year before a census year)

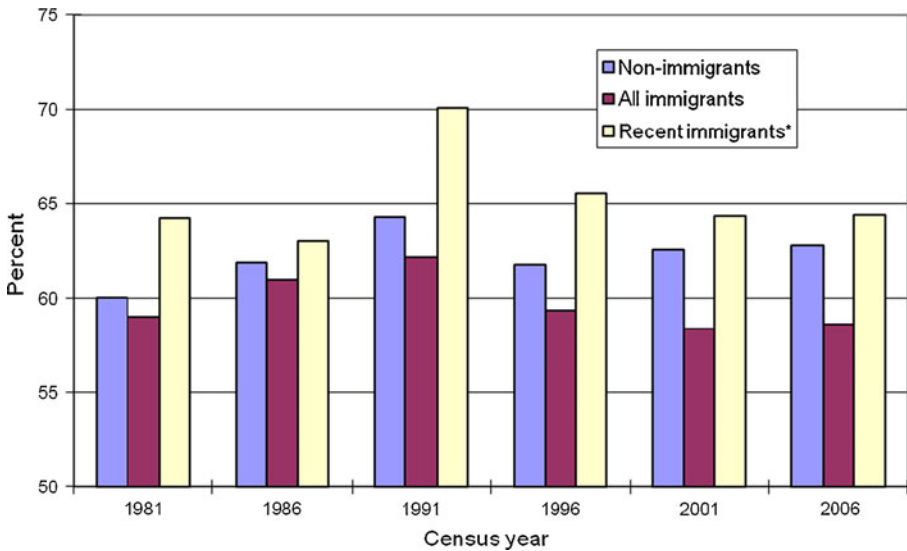


Fig. 5 Labor force participation rates among immigrants and non-immigrants in Atlantic Canada, 1981–2006. *Those who arrived within the past 5 years of the census date. Labor force activity data are reported for the year before the census year. Sources: (1) “Historical Labour Force Activity (based on the 1971 concepts) (8), Immigrant Status and Period of Immigration (10), Age Groups (18), Marital Status (7) and Sex (3) for Population 15 Years and Over, for Canada, Provinces and Territories, 1971, 1981–2001 Censuses—20% Sample Data.” Ottawa: Statistics Canada, March 25, 2003, Census of Canada, Catalogue No. 97F0012XCB2001003. (2) The 2006 census-based data are from Target Group Profile, Census of Canada, B20/20 files (purchased from Statistics Canada)

confirms a higher labor force participation rate among recent immigrants than among resident non-immigrants throughout the period 1981–2006. However, participation rates among recent immigrants declined substantially between 1991 and 1996 (from 70% to 66%) and then again between 1996 and 2001 (down to 64%) and have stayed constant since then. One reason may be that a large number of immigrants during 1991–1995 arrived toward the end of that period (mostly in 1995) and thereafter. By the 1996 census, these newcomers were still adjusting to the labor market in Atlantic Canada.

Another reason for the decline in participation rates after 1996 may be that most immigrants arrived from the Middle East, and they tended to have large families with many youth members who, instead of entering the labor force, enrolled in secondary and post-secondary educational institutions. There is some evidence, based on observations in Halifax, that (1) the enrollment of immigrant students from the Middle East increased in Nova Scotia universities during 1996–2001 and (2) in many Middle Eastern families, the family head may have returned to the country of origin for employment. More formal research should investigate these possibilities. The participation rates among all population groups remained unchanged at their 1996–2001 level during 2001–2006.

Figure 6 also shows that the participation rate among the entire immigrant population was lower than that among non-immigrants throughout the period, which can be attributed to differences in age distributions of the two groups. Most immigrants in Atlantic Canada arrived before 2001, and many are now at retirement

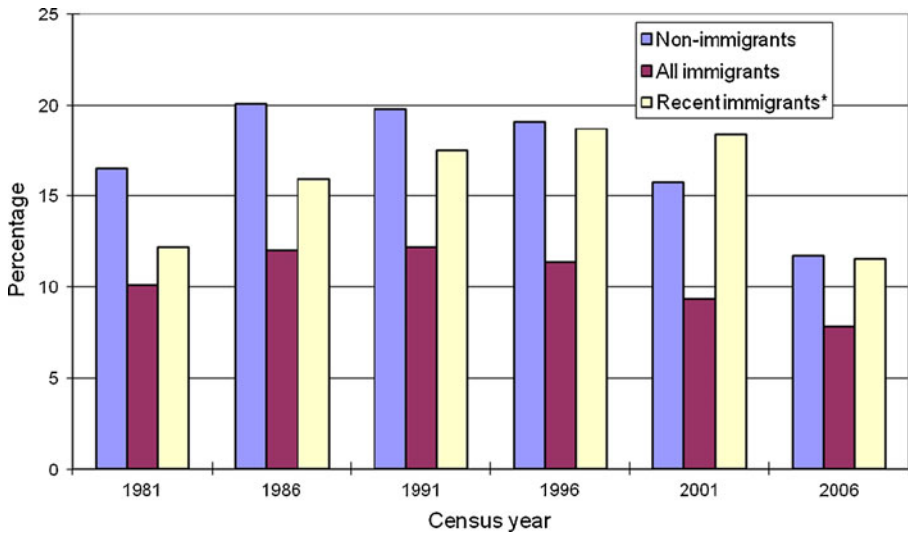


Fig. 6 Unemployment rates among immigrants and non-immigrants in Atlantic Canada, 1981–2006. *Those who arrived within the past 5 years of census date. Labor force activity data are reported for the year before the census year. Sources: Same as for Fig. 5

age (over 65). One study, using 2006 census data for Nova Scotia (Akbari 2009a, b), found that when the age distribution of immigrants was adjusted to match that of non-immigrants, immigrants' labor force participation rate exceeded that of non-immigrants because an immigrant was likely to remain in the labor force longer than a non-immigrant. Higher motivation to work, which is also part of the migration decision, could be a rationale for this result. Further research could be conducted for immigrants identified by their place of birth to account for differences in social norms and cultural practices.

Unemployment Rates

Unemployment rates among immigrants and non-immigrants are shown in Fig. 6 for the period 1981–2006. This figure indicates that once they are in the labor force, immigrants in Atlantic Canada do better overall in terms of finding a job than do non-immigrants. Unemployment rates are consistently lower among immigrants and have fallen since 1991. While it is also true that non-immigrant unemployment rates have also fallen (since 1986), they are still higher than for immigrants. Recent immigrants, however, have had higher unemployment rates than their counterparts in previous censuses. In 1981 and 1986, unemployment rates among recent immigrants were four percentage points lower than among non-immigrants. By 2001, however, the recent immigrants' unemployment rate was 2.5 percentage points higher than for non-immigrants.

That unemployment rates fell among both immigrant and non-immigrant populations toward the end of the 1981–2001 period indicated that the higher rates among recent immigrants in the 2001 census cannot be attributed only to the prevailing economic conditions of the region at that time. Possible employment barriers faced by recent immigrants due to their lack of knowledge of official languages, lack of credential recognition, or possible employer discrimination could explain the gap.

There was a steep drop in the unemployment rate for all population groups between 2001 and 2006. This drop could be the result of out-migration of working age people, mostly to Alberta, during this period. This would reduce the number of people looking for jobs in Atlantic Canada. The drop in the unemployment rate of recent immigrants could also be because their immigration to the region has been mostly job-oriented, as many came under one of the Provincial Nominee Programs to fill specific jobs. Initial results of the 2006 Labour Force Survey released by Statistics Canada show that in Atlantic Canada, the employment rate of those immigrants who arrived 5–10 years ago exceeds that of non-immigrants—83.6% for immigrants and 76.4% for non-immigrants (Zietsma 2007). It may also be that the overall aging of the Atlantic population has made more jobs available and has thus made it easier for all segments of the working age population to find work in the first decade of the twenty-first century. The higher incidence of unemployment rates among non-immigrants than among immigrants may be partly due to their larger percentage residing in rural areas.¹⁰

Foreign Educational Credentials and Labor Force Participation Rates

One important issue in the labor market outcome of immigrants is credential recognition. It is argued that immigrants coming from certain countries, such as those in the Third World, face employment barriers because their education and experience acquired in their country of origin are not recognized in Canada. Lack of immigrant credential recognition has at least three consequences. One is that these immigrants could face higher unemployment rates. Another is that even if they are employed, they may be working in a job that does not suit their qualifications. Finally, there is also a loss to the economy of Atlantic Canada of not fully benefiting from the human capital of its new residents.

To investigate this issue of foreign credential recognition, the available data from the 2006 census are used to review the labor market performance of those with post-secondary education from a country other than Canada. The indicators are reported for the total population (regardless of immigrant status) in Table 2. Those with post-secondary education from outside Canada generally have lower labor force participation and employment rates than those who obtained their education in Canada. Unemployment rates are also generally lower among the foreign degree holders. However, data analyzed by the countries where education was obtained produced mixed results. Those with qualifications from India, Pakistan, and South Korea have higher unemployment rates, while all others have lower rates regardless of whether they obtained their education in an English-speaking country. Note that these results apply to the total population and do not account for any underemployment among immigrants.

¹⁰ About 33% of non-immigrant and 27% of immigrant residents of Atlantic Canada reside in rural areas. Beshiri and He (2009) found higher propensity among recent immigrants to reside in rural areas than among all Canadian residents in the 2001–2006 period in all Canadian provinces, except for Prince Edward Island and Newfoundland and Labrador for which data were not available. However, recent immigrants were also more likely to move out of rural areas during the same period.

Table 2 Labor force activity of the total population by location of post-secondary education, Atlantic Canada, 2005

Location of study ^a	Participation rate (%) ^b	Employment rate (%) ^c	Unemployment rate (%) ^d	Labor force no. ^e
Overall	62.57	55.37	11.52	1,182,970
No post-secondary certificate, diploma/degree	51.85	43.72	15.67	518,970
Post-secondary certificate, diploma/degree	74.64	68.47	8.27	664,005
Inside Canada	75.30	69.02	8.33	639,120
Outside Canada	60.90	56.88	6.61	24,885
USA	62.77	59.09	5.82	10,225
UK	52.34	49.92	4.74	4,645
India	63.39	58.48	9.86	710
Philippines	78.30	73.58	2.41	415
People's Republic of China	65.04	60.18	6.12	735
Germany	57.06	53.74	6.31	1,030
France	73.55	69.03	7.02	570
Poland	72.27	73.95	2.33	430
Pakistan	73.13	64.18	8.16	245
South Korea	36.14	31.33	13.33	150
Other	63.70	57.57	9.53	5,720

Author's calculations using provincial data based on Statistics Canada—2006 Census. Catalogue No. 97-560-XCB2006025. For detailed notes, please see the publication on www.statcan.gc.ca

^a Refers to where the highest post-secondary certificate, diploma or degree was completed

^b Percentage of population 15 and over in the labor force

^c Percentage of population 15 and over employed

^d Percentage of labor force unemployed

^e Population 15 and over employed or unemployed

Earnings of Immigrants

Figure 7 compares the labor market earnings of an average immigrant and an average recent immigrant with those of an average non-immigrant in the year before each census year. The dollar amounts are not comparable over time because they may be affected by inflation. Instead, it is more meaningful to analyze the earning gap between groups in a given year and also the changes in this gap between years. To do this, the ratio of an average immigrant's earnings to a non-immigrant's earnings has been plotted. A ratio of <1 means that an average immigrant's earnings were lower than those of a non-immigrant's; >1 means the opposite.

Average employment earning has been higher among all immigrants than among non-immigrants throughout the 1981–2006 period. However, average earning among recent immigrants, relative to that of a non-immigrant, has been more variable. Since 1986, their average earning has been generally lower than that of non-immigrants. In short, a recent immigrant in 1981 earned 10% more than an average non-immigrant in

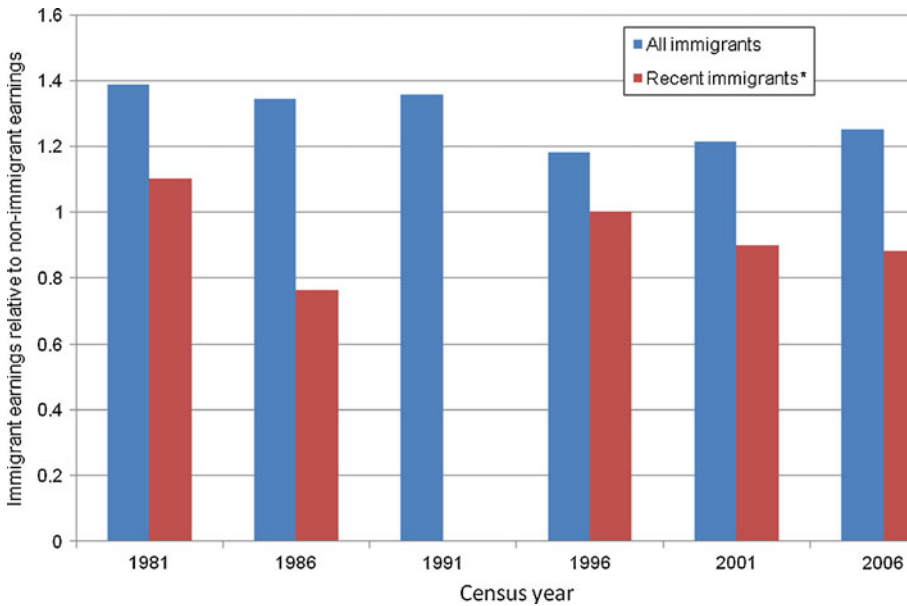


Fig. 7 Earnings of immigrants relative to those of non-immigrant residents in Atlantic Canada, 1981–2006. *Those who arrived within 5 years of the census year. Incomes are reported for the year before the census year. A ratio of “1” means earnings of immigrants and non-immigrants are equal. Sources: (1) Based on special tabulations performed by the author based on population censuses (PUMF, 1981–2001, individual files). Data on incomes of recent immigrants were not available in 1991 census PUMF. (2) The 2006 census-based data are from Target Group Profile, Census of Canada, B20/20 files (purchased from Statistics Canada)

Atlantic Canada, but earned 10% less than a non-immigrant in 2006. Separate calculations show that nationally, a recent immigrant earned about 38% less than a non-immigrant in 2006.

When comparing an immigrant’s earnings with those of a non-immigrant, it is important to control for differences in their demographic and labor market characteristics, such as age, gender, experience, and education, which are major determinants of earning differences between individuals. Changes in an immigrant’s earnings relative to the length of stay in Canada may also be examined to determine how long it takes for an immigrant to earn the same income as a non-immigrant. This analysis helps in understanding the pace of labor market integration of an average immigrant. While a detailed analysis of this issue has not been undertaken here, some broad patterns are presented.

A comparative analysis of the earning of an average immigrant and non-immigrant is provided first by controlling for differences in their ages. This analysis is based on Fig. 8 which provides the age–earning profile of an immigrant and a non-immigrant resident of Atlantic Canada aged 15 years and over based on labor market earnings in 2005. These profiles are based on the earnings of different individuals in the census, thus assuming that incomes of different individuals at different points in their life cycles represent the incomes of one typical individual at various points in his/her life cycle. However, this assumption may be challenged on the grounds that immigrants come from diverse backgrounds and face different

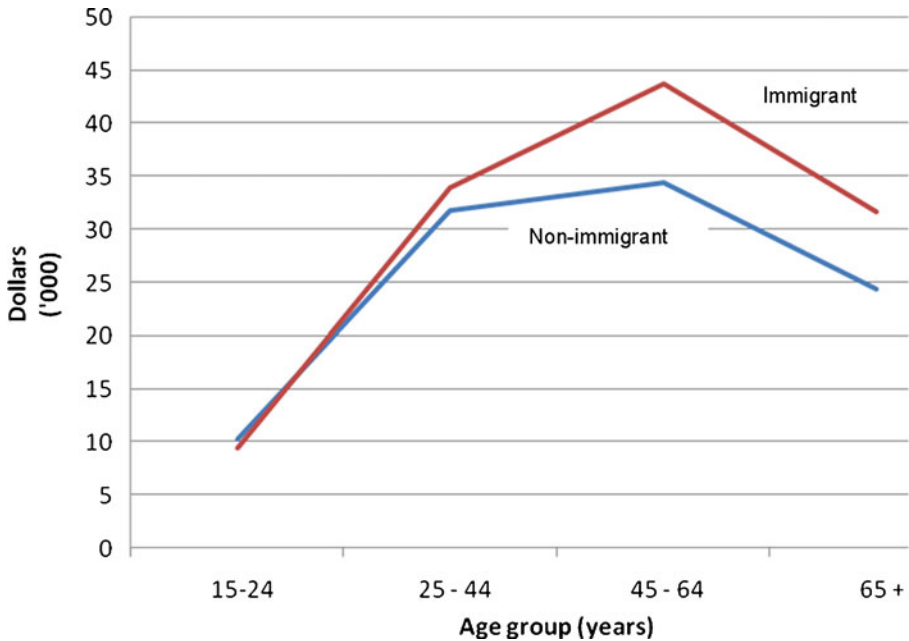


Fig. 8 Age-income profile of an immigrant and a non-immigrant residents of Atlantic Canada, 2005. Source: Author's calculations based on Statistics Canada, 2006 Census of Population, Statistics Canada Catalogue No. 97-563 XCB2006006

challenges in labor markets. Differences in their educational attainment levels and employers' perceptions of the quality of their education may also have correspondingly different effects on different immigrant groups, so the age-earnings profiles plotted in Fig. 8 should be interpreted with some caution.

Despite these caveats, the shapes of the earning curves in Fig. 8 are as expected. Growth in earnings is faster when an individual is young because the individual accumulates more human capital (such as training and experience) when young than when old. Earnings then decline at retirement. It is observed that an average immigrant's earnings rise faster than, and exceed those, of a non-immigrant after age 25. Even after reaching the retirement age, the immigrant earns more. Thus, the average earnings results for 2005 that were reported in Fig. 7 may be viewed as stable. Over the life cycle, then, an average immigrant in Atlantic Canada earns higher employment income than a non-immigrant.

Further insights to the above results on incomes are obtained by controlling for education as they may be affected by the lack of credential recognition in the case of immigrants. Hence, Fig. 9 compares the incomes of immigrants and non-immigrants aged 25 and above who hold university degrees.¹¹ Separate data are reported for men

¹¹ Since the data are reported only for university degree holders, considering those aged 25 and above is more appropriate. The younger group on whom these data are available is 15-24, which includes many individuals who do not have a university degree. Data on incomes of recent immigrants, i.e., those who arrived during 2001-2006 with university degrees, were not available for comparison at the time of writing this paper.

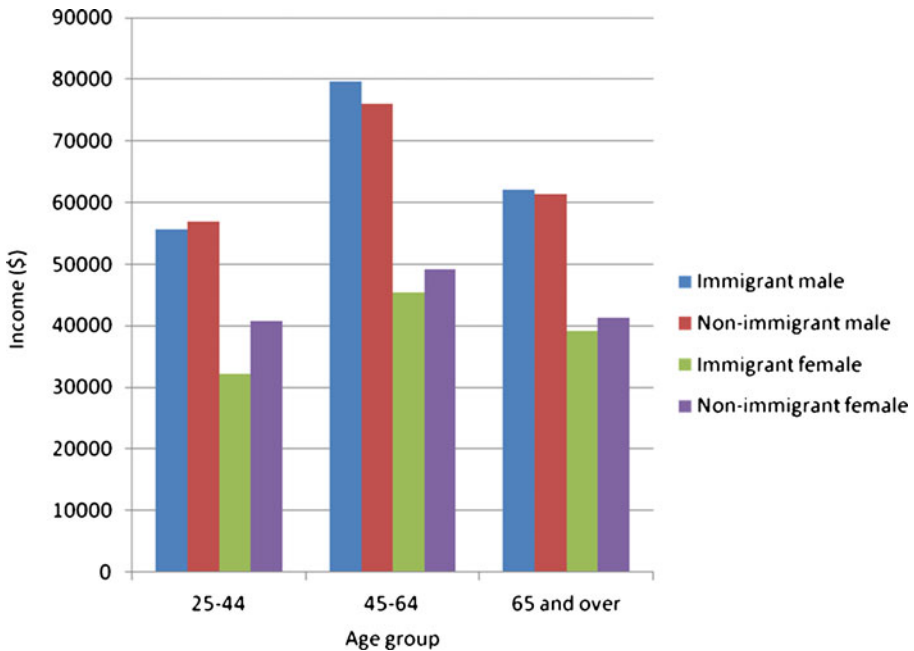


Fig. 9 Average incomes of immigrants and non-immigrants with university education, by age and gender, Atlantic Canada, 2005. Source: Same as for Fig. 8

and women. Incomes of those in the 25–44 age group also include the incomes of university degree holders at the time of entry into the labor market.

Figure 9 shows that an average male immigrant in Atlantic Canada earns comparable to a non-immigrant male when he is young and when he reaches the retirement age. During his prime working age, 44–64, a male immigrant earns more than his non-immigrant counterpart. A female immigrant, however, is at an income disadvantage in all age groups.

Immigrants' incomes are also affected by their length of stay in Canada. A newcomer lacks Canadian labor market experience and information about the availability of jobs and workplace culture, factors that may result in an underutilization of skills, which could result in a lower income earned. Figure 10 compares the 2005 labor market earnings of an immigrant according to the length of residence in Canada with those of a non-immigrant. Immigrants who arrived during 2001–2004 were the most recent immigrants to report 2005 income earned in Canada. Their income was lower than that of non-immigrants. However, all earlier entry cohorts had higher incomes, and even those who had stayed in the country for more than 45 years continued to earn more. In sum, an average immigrant in Atlantic Canada earns the same labor market income as a non-immigrant 5 years after arrival and continues to earn higher income thereafter. Unpublished estimates by this author (using the same data source as for Atlantic Canada) indicate that at the national level, a Canadian immigrant takes about 15 years to begin earning as much as a native-born Canadian.

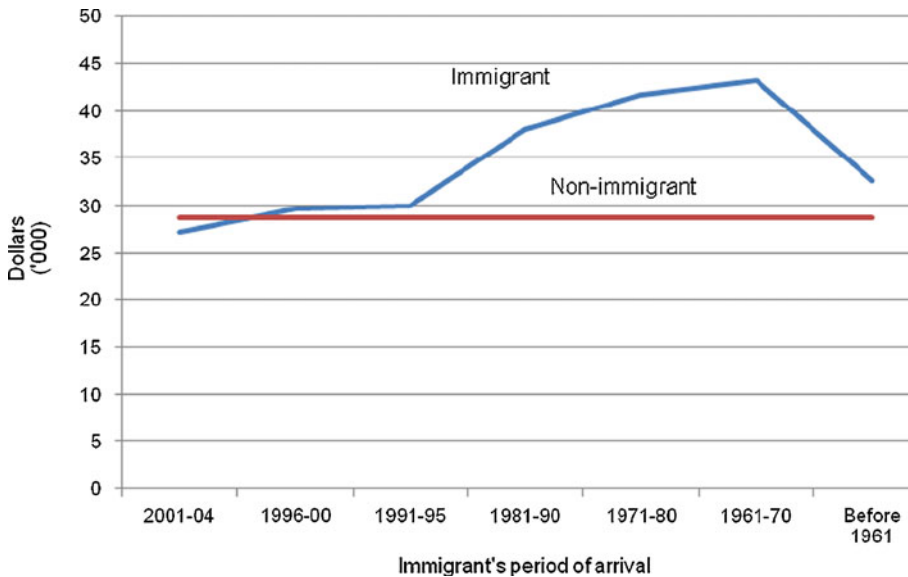


Fig. 10 Average earning of an immigrant by period of arrival and a non-immigrant, Atlantic Canada, 2005. Source: Same as for Fig. 8

Summary, Concluding Remarks, and Policy Implications

Using descriptive tools of statistical analysis, the present study has shown that labor market outcomes of immigrants are stronger than those of non-immigrants in Atlantic Canada. Immigrants have higher labor force participation rates, lower unemployment rates, and earn higher labor market incomes than non-immigrants. These findings contradict the findings of earlier studies that analyzed immigrants' economic performance using national data for Canada, but are consistent with a Statistics Canada study (Bernard 2008) which showed immigrants performing better in smaller Census Metropolitan Areas of Canada than in larger ones.

Unemployment rate among recent immigrants, i.e., those who arrived within the 5-year period of a population census, fell to equate with that of non-immigrants at the time of 2006 census. Their earnings remained at 90% of the earnings of non-immigrants at the time of the 2001 and 2006 censuses. Nationally, recent immigrants earned below 65% of what non-immigrants earned. Immigrant retention rates also increased in Atlantic Canada during this time, reflecting deliberate attempts of policymakers, settlement associations, and private sector to retain immigrants in the region.

Many reasons can be advanced for the findings summarized above. For example, problems of credential recognition as a barrier to labor market integration may be less in smaller provinces where there are fewer university degree holders. Also, a lack or a presence of smaller immigrant communities (linguistic, ethnic, religious) in smaller provinces leads to greater interaction between new arrivals and the original residents, thereby providing stronger information networks necessary for economic integration of new arrivals. The greater interaction between immigrants and original residents may also help immigrants in overcoming language barriers. Finally, the selection programs for new arrivals aimed at meeting labor market shortages (such as

the Provincial Nominee Program) may also be the cause of their stronger labor market outcomes.¹² All of these possibilities can be explored in a future research.

The results of the present study contrast with two other studies that have analyzed the regional economic performance of immigrants within the UK. Dustmann et al. (2003) have found that although immigrants' labor market performance in the UK has been poorer than that of non-immigrants, they do better in Greater London than in the rest of the country.¹³ This result is attributed to the larger economic success of Greater London compared to other regions. Another UK study (Wilson and Phillips 2009) found that immigrants from the A8+2 countries contribute about 30% of the gross value added in London, while in the Midlands, East and South East of England, this contribution is 10–15%.¹⁴ Thus, one can conclude from both studies that immigrants in fact perform better in larger areas of England than in smaller areas. However, results of the present Canadian study as well as of those cited earlier show that immigrants in relatively less prosperous areas of Canada do better. This difference in our results warrants a separate study on location choice of immigrants in the two countries.

Two important implications can be drawn based on the lessons learned from Atlantic Canada. First, any analysis of economic performance of immigrants in a host country based on the aggregate national data is likely to provide misleading results to policymakers who are investigating using immigration as a tool for regional economic development. While Grubel et al. (2009) have found that immigrants who arrived in Canada over the past decade have adverse economic effects on Canadians, they also note that past immigration has been beneficial to Canadians. However, these authors fail to recognize that past immigration in Canada has been concentrated in a few large provinces where immigrant concentration grew over time.

I argue that the growing concentration of immigrants in a few large provinces has caused a diminishing marginal product of immigrants in those provinces. Smaller provinces that have emerged as more popular immigrant destinations than before are at the same stage as were provinces like Alberta, British Columbia, Ontario, and Quebec more than a decade ago when they too enjoyed higher marginal products of immigrant workers.¹⁵ Hence, studies analyzing the economic performance of immigrants should pay attention to immigrants' performance in different regions within a host country where regional distribution of immigrants has changed in recent years.¹⁶

¹² Some of these reasons have also been suggested by Bernard (2008) for the relative successes of immigrants in smaller areas of Canada.

¹³ In 2000, only 9% of British-born whites of working age lived in London, while 40% of the foreign-born and 45% of the UK-born ethnic minorities lived there.

¹⁴ The "A8" countries are defined as the "Accession Eight" Eastern European countries joining the European Union on 1 May 2004. These countries include: Czech Republic, Poland, Latvia, Lithuania, Slovakia, Slovenia, Hungary, and Estonia. The "A8+2" countries include all of the A8 countries and Bulgaria and Romania, which joined the European Union on 1 January 2007.

¹⁵ A shift in source country composition of immigrants since the 1990s, from European toward non-European countries, does not appear to adversely affect immigrants' economic performance in Atlantic Canada.

¹⁶ In fact, the analysis should also be extended for smaller cities to confirm whether the results of Picot (2004), which show deteriorating economic performance of immigrants in larger cities of Montreal, Toronto, and Vancouver, apply.

Second, public policy can play an important role in altering the distribution of immigrants within a host country to obtain better economic outcomes. This role can be (1) to provide immigrants better access to local labor market information so that they can exploit their marginal products more efficiently and (2) to facilitate settlement of new arrivals in smaller areas through employers, community organizations, and settlement agencies.

This is the first study which has analyzed data across the past six population censuses on the economic performance of immigrant and non-immigrant residents in Atlantic Canada. Its results may be viewed as indicative of some general trends in the economic performance of immigrants who reside in the region. A more in-depth study may analyze each of the labor market performance indicators of immigrants and non-immigrants in a multivariate framework by controlling for age, gender, education, and the years since arrival. Separate analyses may also be conducted for immigrants coming from different countries. An analysis comparing immigrants' labor market performance in Atlantic Canada with those arriving in other smaller regions, such as in the Prairies, should also be undertaken.

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