



SOCIOECONOMIC AND DEMOGRAPHIC PROFILES OF IMMIGRANTS IN NOVA SCOTIA

by

Ather H. Akbari^{*}

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^{*} Department of Economics, Saint Mary's University, Halifax, NS. Principal investigator

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TABLE OF CONTENTS

LIST OF TEXT TABLES	IV
LIST OF CHARTS.....	V
EXECUTIVE SUMMARY	VI
I. INTRODUCTION	1
II. OBJECTIVES OF THIS STUDY.....	3
III. METHODOLOGY.....	3
IV. SOME DEMOGRAPHIC TRENDS IN NOVA SCOTIA AND THEIR POTENTIAL ECONOMIC CONSEQUENCES.....	4
V. AN OVERVIEW OF IMMIGRATION TO NOVA SCOTIA.....	11
V.1 THE COMPOSITION OF IMMIGRANTS	13
V.2 BROAD DEMOGRAPHIC TRENDS AMONG IMMIGRANTS	19
V.3 WHERE IMMIGRANTS COME FROM	22
V.4 WHERE IMMIGRANTS GO	25
V.5 THE RETENTION OF IMMIGRANTS	30
VI. IMMIGRANTS IN THE LABOUR FORCE OF NOVA SCOTIA	32
VI.1 LABOUR FORCE GROWTH.....	33
VI.2 RURAL-URBAN DISTRIBUTION OF LABOUR FORCE	34
VI.3 HUMAN CAPITAL	37
VI.4 IMMIGRATION OF SKILLED IMMIGRANTS TO NOVA SCOTIA	40
VI.5 INDUSTRIAL DISTRIBUTION OF LABOUR FORCE	41
VI.6 OCCUPATIONAL DISTRIBUTION OF LABOUR FORCE	42
VI.7 LABOUR MARKET OUTCOMES.....	43
VIII. MAJOR FINDINGS AND DIRECTIONS FOR FUTURE RESEARCH	59
APPENDIX.....	64

LIST OF TEXT TABLES

Table 1: Components of population growth in Nova Scotia, 2009-10	6
Table 2: Immigrant status of population in Nova Scotia, 1981-2006 censuses.....	12
Table 3: Federal-provincial/territorial agreements currently in force in the Atlantic provinces	17
Table 4: Nova Scotia Population net growth rate and contribution of recent immigrants to growth of provincial population	20
Table 5: Age distribution of new Nova Scotia immigrants (principal applicants) and non-immigrants, 1981-2010 (%)	21
Table 6: Top five source countries of immigrants destined for Nova Scotia, principal applicants and dependents, by year, 1981-2010	24
Table 7: Geographic distribution of immigrants in Nova Scotia.	27
Table 8: Immigrant retention rates for Nova Scotia, 1986-2006*	30
Table 9: Migration of immigrants destined for Nova Scotia.....	32
Table 10: Nova Scotia labour force net growth rate and contribution of recent immigrants to growth of provincial labour force, 1981-2010	33
Table 11: Rural-urban breakdown of labour force in Nova Scotia, 2006 and 2010.....	34
Table 12: Labour force and unemployment rates, immigrants and non-immigrants by rural and urban regions, Nova Scotia, 2010	36
Table 13: Immigrant and non-immigrant labour force by industry of employment, Nova Scotia, 2010.....	42
Table 14: Occupational distribution of non-immigrants and immigrants, Nova Scotia, 2010 ('000)	43
Table 15: Gender distribution of labour participation rates, immigrants, and non-immigrants, Nova Scotia, 2010*	46
Table 16: Labour force activity of total population by location of post-secondary education, Nova Scotia, 2005.....	49
Table 17: Average weekly earnings of immigrants, recent immigrants and non-immigrants by age group and gender, 2010.	53
Table 18: Top five source countries of international students studying in Nova Scotia, 2001, 2005 and 2010.....	59

LIST OF CHARTS

Chart 1: Components of population growth rates in Nova Scotia in the post-World War II period (per thousand persons).....	5
Chart 2: Birth and death rates, Nova Scotia, 1946-2010	6
Chart 3: Provincial representation in the Canadian House of Commons based on current rules and projected population growth rates	10
Chart 4: Immigrants destined for the Atlantic provinces, 1981-2010.....	13
Chart 5: Nova Scotia immigrants by class, 1986-2010 (%).....	14
Chart 6: Immigrants (principal applicants) destined for Nova Scotia, 1981-2010	15
Chart 7: Annual arrivals of provincial nominees, Nova Scotia, 2005-2010	18
Chart 8: Immigrants destined for Nova Scotia and non-immigrants with high school or less education, 1986-2011.....	38
Chart 9: Immigrants destined for Nova Scotia and non-immigrants with university degree, 1986-2001	39
Chart 10: Immigrants destined for Nova Scotia's labour force by major skill classification, 1981-2010	41
Chart 11: Nova Scotia labour force participation rates, immigrants and non-immigrants, 1981-2010.	45
Chart 12: Unemployment rates in Nova Scotia, immigrants and non-immigrants, 1981-2010.....	47
Chart 13: Employment income ratios of all immigrants and recent immigrants to non-immigrants, Nova Scotia, 1981-2010.....	50
Chart 14: Age-wage profile of an immigrant and a non-immigrant resident of Nova Scotia, 2010.....	52
Chart 15: Average weekly wages of an immigrant by period of arrival, and a non-immigrant, Nova Scotia, 2010.....	54
Chart 16: Percentage of total income received as government transfers by immigrants and non-immigrants in Nova Scotia, 1981-2006.....	55
Chart 17: Total entries of international students into Atlantic provinces, 1998-2010	56
Chart 18: International students studying in Nova Scotia by level of study, 2000-2010..	58

EXECUTIVE SUMMARY

This report, prepared for the Nova Scotia Office of Immigration, is based on a research project that analyzed the socioeconomic and demographic profiles of immigrants in Nova Scotia. It updates the 2008 Nova Scotia report that was one of five -- one for each Atlantic province and one for the Atlantic region -- prepared for the Atlantic Canada Opportunities Agency (ACOA) and the four Atlantic provincial governments. The primary objectives of this project were to 1) collect and tabulate data on various aspects of immigration to Nova Scotia; 2) analyze those data to highlight the socioeconomic, demographic and geographic dimensions of immigration to the province; 3) identify gaps in knowledge that must be filled to implement immigration attraction, integration and retention strategies in Nova Scotia; and 4) write a report bringing together all these elements.

To be consistent with previous immigration literature, the term “immigrant” in this study refers to all foreign-born individuals who are permanent residents of Canada. The primary data sources for this study were Citizenship and Immigration Canada (CIC) and Statistics Canada. The analysis covers mostly the period 1981-2010, although some available data from the 2011 census have also been referred to in a contextual sense. The most significant aspect of this project is that it analyzes the profiles of **resident** immigrants in Nova Scotia, and compares them with those of non-immigrants using data from five population censuses starting in 1981 and the Labour Force Survey of 2010.

General immigration trends

Immigrants comprise less than 5 percent of Nova Scotia’s population but 19 percent of the national population. Immigrant inflows to the province fluctuated dramatically over the 1981-2005 period, but in recent years (2006 and onwards), trends have been rising that are attributed to new policy initiatives aimed at attracting more immigrants to the province. Most immigrants to Nova Scotia come under economic class, followed by family class, then refugees. Projected demographic trends in the province indicate that, as is the case in many other Canadian provinces, positive population growth can only be sustained through immigration. In fact, Nova Scotia, whose population declined by 0.4 percent during 1996-2001, would have suffered a 0.9 percent population decline without immigration during this period. During 2001-2006, when net outmigration from the province had slowed, population rose by 1.8 percent, but this growth would have been only 1 percent, i.e., 43 percent lower, without immigration.

Countries of origin, settlement patterns and economic immigrants

During the 1980s, the United States and the United Kingdom were the top two source countries of immigrants in Nova Scotia, a position taken over by some Middle Eastern countries (in the aftermath of the Gulf War) and China in the 1990s. Towards the end of the last decade, these two English-speaking countries again became the top two source countries of immigrants in the province, but China and some Middle Eastern countries continue to be listed among the top five source countries.

Immigration to the province is heavily slanted in favour of Halifax County. However, more than one-fifth of immigrants who arrived in the province during 2006-2010 declared their intended destinations to be outside of Halifax, which indicates the potential for developing rural destinations for new immigrants.

Demographic profile

The age profile of immigrant inflows to Nova Scotia is dominated by the lower age groups. About three-quarters of immigrants aged 15 and older who arrived during 2006-2010 were under 45, with about 7.5 percent being under 25. The corresponding numbers for resident Nova Scotians aged 15 years and older in 2010 were 45 percent and 15 percent, respectively.

Reliance on government transfer payments

Since the start of the study period (1981), immigrants have relied far less on income from government transfers than has the native-born population. For instance, in 2006, the latest year for which these data are available by immigrant status, government transfers in total income earned amounted to less than 12 percent for immigrants and less than 10 percent for recent immigrants, compared to more than 15 percent for non-immigrants. These numbers are not surprising, however. If immigrants are young at the time of arrival, they do not receive such age-related transfers as Canada Pension Plan and Old Age Security payments. They also do not become eligible for employment insurance until they start working and pay employment insurance premiums.

Labour market outcomes

In terms of labour market outcomes, compared to non-immigrants, immigrant men and women in Nova Scotia have lower unemployment rates and earn higher employment incomes. This result is contrary to what has been reported nationally and implies that economic returns from immigration can be enhanced by facilitating immigrants' location choice in the country. This may be achieved by better dissemination of regional labour market information. Highly skilled immigrants (managers and professionals) exceed medium- and low-skilled immigrants destined towards the province's labour force in which about 80% of non-immigrants, 87 per cent of all immigrants and 89 per cent of recent immigrants work in the services sector. Specifically, health care and educational services are major service sector employers of immigrants, while in the case of non-immigrants, trade and transportation services are major employers. Larger percentages of immigrants than non-immigrants also work for professional, scientific and technical service industries. The occupational distribution of the non-immigrant labour force is more concentrated toward sales services, while that of non-immigrants is more widespread.

Retention of immigrants

Immigrant retention rates in Nova Scotia shrank from about 86 percent during 1981-1986 to only 48 percent during 1996-2001, but immigrant attraction and retention initiatives adopted in the last decade have since resulted in an increased immigrant

retention rate in the province. For example, 2008 data show that the retention rate among those who arrived in the province during 2003-2008 was about 70 percent. When those immigrants who had landed in other provinces during this period and later moved to Nova Scotia are accounted for, however, the net retention rate rises 88 percent.

International students

Most international students in Nova Scotia are in university and comprise 15 percent of total university enrolment across universities in Nova Scotia, a percentage that has risen since 2005 due to declining domestic enrolments. China, Saudi Arabia, Korea, the United States and India are the major source countries of international students.

Some research gaps in immigration trends and suggestions for future research

The information presented in this report needs to be enhanced through surveys and additional research to inform policymakers about the economic impacts of immigrants and how best to attract and retain them. Some research issues that may be important to policymakers are highlighted below.

First, it is important to know if immigrants leave the province at a rate that is different from that among non-immigrants and also why this rate is higher for some classes of immigrants, such as refugees and skilled class immigrants, than others. Such research will help assess the extent of human capital being lost by failing to retain immigrants. . Information is also lacking on what specific factors deter business immigration to Nova Scotia. Some of these factors could include taxation, infrastructure facilities, limited markets or competition with established businesses owned by resident immigrants or non-immigrants. Information regarding how enterprises established by immigrants perform and what difficulties they face is also lacking.

Another important investigation could be of the extent to which the human capital of skilled immigrants from non-traditional source countries is being lost, through underemployment if they are pushed into low-skill, low-wage jobs because their foreign-earned credentials are not recognized.

The above investigations will result in important information for those interested in the economic outcomes of immigration and will also provide good basis for the province to strengthen its immigrant retention policies.

Systematic research is also needed to explore what mix of skills should be encouraged to meet current shortages and the province's projected labour market needs. Research on the effects of immigrants on the earnings and employment of non-immigrants, as well as their effects on the public treasury, also can provide useful information to understand their role in Nova Scotia's economic development.

Finally, a comparative analysis of the socioeconomic and demographic profiles of immigrants in Nova Scotia and in other provinces is also important to investigate

whether the patterns and changes observed are unique to this province or common to Canada as a whole.

With the removal of the long form on the 2011 census, which used to collect detailed information about labour market performance of population by immigrant status and ethnicity, the Labour Force Survey (LFS) and Longitudinal Immigration Database (IMDB) remain the only two resources on which to base such research. However, population coverage on LFS and IMDB is limited, and a detailed analysis of smaller area data that was possible with the full census is not possible with either the LFS or IMDB. As a result, the data to help fill these research gaps will have to come from special surveys to provide the input for both quantitative and qualitative analyses of these issues so that effective policies can be formulated.

I. INTRODUCTION

The 2011 Canadian census revealed that Canada's population grew by 5.9 percent between 2006 and 2011, the highest growth among G-8 countries and higher than that observed between 2001 and 2006 when the Canadian population grew by 5.4 percent. Since the natural growth of the Canadian population has been on a continuous decline in the post-World War II period, most population growth between 2001 and 2006 was contributed to by international immigration (about two-thirds), and the same is believed to be true between 2006 and 2011. Except for Ontario, the Northwest Territories and Nunavut, the population growth rate increased in all provinces between 2006 and 2011 compared to the previous five years (2001-2006). Nevertheless, population growth has been uneven across all Canadian provinces, with Nova Scotia experiencing the slowest increase.

In Nova Scotia, a continuous decline in birth rates, with almost stable death rates in the post-World War II period, has resulted in a decline in the natural population growth rate from about 20 persons per thousand in the late 1940s to less than half a person per thousand over the last decade. In fact, estimates for Nova Scotia, as provided by the Demography Division of Statistics Canada, show that its natural population growth was negative in 2009-10. Net population out-migration from the province has been a permanent phenomenon in the post-World War II period, although it slowed slightly in the later part of the last decade.

Due to the recent trends of natural population growth and out-migration rates, Nova Scotia, like the rest of Canada, also will have to rely more heavily on immigration for positive population growth. This does not bode well for this province, given that the bulk of immigration inflows to Canada gravitate toward the major population centres in Ontario, Quebec, British Columbia and, increasingly, Alberta. As a result, these provinces have become "immigrant abundant" in that they account for a much larger share of Canada's immigrant population than they do of the national population. On the other hand, the relatively small immigrant inflows coming into Nova Scotia have made it relatively "immigrant scarce" in that its share of the immigrant population is significantly lower than the national share (about 5 percent compared to 18 percent as of the 2006 census).

The prospects of the negative population growth rate anticipated in the near future have no doubt raised serious concerns about the resulting adverse economic impacts on the province, which would exacerbate Nova Scotia's economic imbalance relative to the rest of Canada. Negative population growth in Nova Scotia would slow the growth rate of human, as well as of physical, capital formation, both of which would adversely impact the economic well-being of the resident population. Shortages in the availability of skilled workers, a decline in innovators and shrinking markets of goods and services are all serious consequences of negative population growth. Thus, for example, current age-related population decline in the size of the labour force suggests a 20 percent decline in

Nova Scotia's labour supply. The period between 2006 and 2016 is seen by researchers as one of transition between an era of labour surpluses and one of chronic shortages.¹

Declining population is also partly blamed for a decline in certain public and private services across Nova Scotia (see box 1.1). Many such services have fixed costs, which do not go down with population, thereby making them less economically feasible. Closures of schools, hospitals and mail and banking services in rural areas are also often heavily reported in the media.

It is not surprising, therefore, that the Nova Scotia government has recognized the need to increase immigration in the province as a way of addressing the adverse effects of population decline. Immigration attraction and retention initiatives adopted at federal, provincial and community levels resulted in an increase of about 41 percent in immigrant inflows to the province between 2001 and 2010 and raised immigrant retention rates to about 70 percent. These new immigrants will help increase the production of goods and services not only directly by filling skill shortages in labour markets but also indirectly as consumers. However, important issues arise from the perspectives not only on attracting, integrating and retaining new immigrants to the province but also on their impacts on labour markets, economic growth and public finances. As a result, policymakers, immigrant settlement organizations and academic researchers are becoming more interested in acquiring research-based knowledge on the economic role of immigrants in Nova Scotia, which is essential for policy formation and implementation.

This project is an effort to build a broader and deeper stock of knowledge relating to the many economic issues that immigration to Nova Scotia raises. It is aimed at outlining the economic dimensions of immigration by focusing on the role of immigration in promoting economic growth and development in the region. This report is organized as follows: Section II defines the objectives underlying the project, while Section III outlines the methodology used. Section IV presents some demographic trends in Nova Scotia's population and their potential economic consequences. A statistical outline of the economic, demographic and geographic characteristics of immigration to Nova Scotia since 1981 is also provided in the same section. Sections V and VI review in greater detail the nature of economic immigration to Nova Scotia, while Section VII analyzes the trends in the international student population of Nova Scotia because it represents a potential pool of highly skilled immigrants in the province. Section VIII presents major findings and suggests directions for future research.

¹ Ray Barton Associates Ltd. 2008. Final Report Trends and Patterns in Skills and Labour Shortages (Ottawa, March).

Box 1.1 Skill Shortages in Nova Scotia: some examples

- A shortage of construction workers, especially of bricklayers and electricians, has been identified by Competences Canada (Skills Shortages and Labour Market Trends in the Construction Industry, Issue 2).
- Between April 1, 2010 and March 31, 2011, emergency departments at eleven Nova Scotia hospitals had temporary closures for a total of 9,203 hours due to the unavailability of physician and nursing staff and accounted for 49 percent of all emergency department closures (temporary and scheduled). (Nova Scotia 2011. Annual Accountability Report on Emergency Departments (May)). In March 2012 alone, the Cape Breton District Authority announced temporary closures of emergency departments at Glace Bay and Northside General hospitals due to physician unavailability.
- “*Rural Nova Scotia faces a drastic lawyer shortage that will leave communities under-serviced if nothing changes,*” says the province’s barristers’ society. (The Chronicle Herald, November 5, 2011).

II. OBJECTIVES OF THIS STUDY

The primary objectives of this study include

- an investigation into the need for immigration to the province of Nova Scotia and the role immigration can play in the province’s population growth
- an analysis of the trends in immigrant inflows in Nova Scotia for the period 1981-2010, with a focus on economic immigration
- a descriptive analysis of the data to 1) highlight the demographic and geographic dimensions of immigration to Nova Scotia, and 2) analyze the labour market performance of immigrants in the province
- the identification of some gaps in research that can provide necessary information to implement immigrant attraction, integration and retention strategies in Nova Scotia
- a written report bringing all these elements together.

To meet the above objectives, this study analyzed the relevance, implications and effectiveness of immigration as a potential economic development strategy to address demographic and socioeconomic challenges faced by Nova Scotia.

III. METHODOLOGY

To be consistent with previous literature, “immigrant” in this study refers to all foreign-born individuals who are permanent residents of Canada. To meet the objectives of the study, careful steps were taken to ensure that the approaches used for data collection and their analyses were both reliable and easy to replicate. The primary data

sources for this study were Citizenship and Immigration Canada (CIC) and Statistics Canada.

Some data used in this study were obtained from the websites of the above government sources. However, much of the required data was not available in the public domain and had to be acquired through different channels. Some data were made available to the authors under the specific data-sharing agreements of the Metropolis project team with Statistics Canada and CIC, while some Statistics Canada data were accessed through the Internet Data Library System (IDLS). Being a member of the Canadian Association of Research Libraries Data Consortium (CARLDC), the Patrick Power Library at Saint Mary's University shares this access with the University of Western Ontario under the Data Liberation Initiative (DLI). Some data were also purchased from Statistics Canada through a customized request.

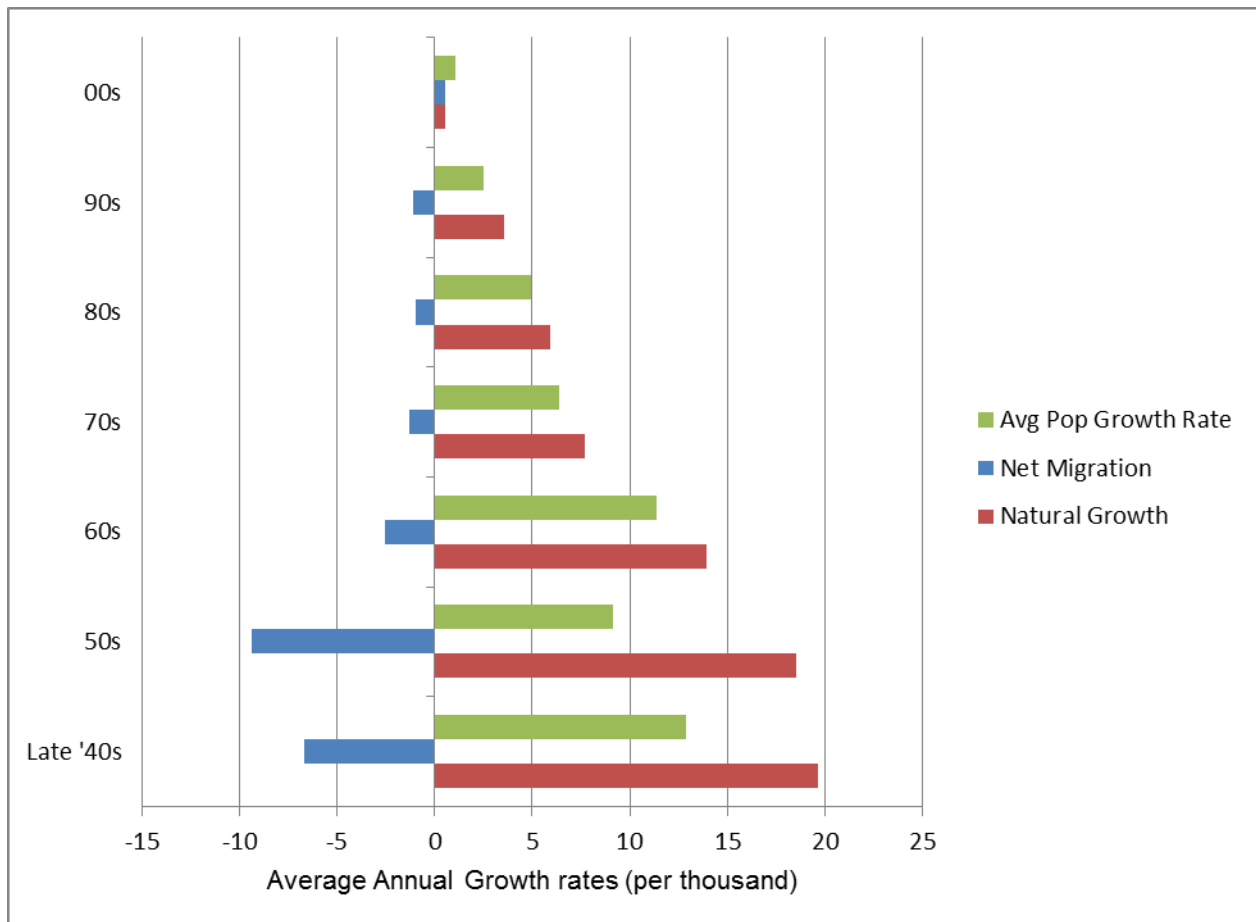
Analysis was based primarily on descriptive tools of statistical analysis. A distinction was made between immigrants destined for Nova Scotia and those who actually stayed in the province. Among those who stayed, separate data were also analyzed for more recent immigrants, i.e., those who arrived within five years before a population census or the Labour Force Survey (LFS), when possible. Some parts of the analysis also used data on the non-immigrant population to facilitate comparisons with immigrants.

Most analysis in this study covers the period 1981-2010. The CIC data are based on the landing documents of immigrants and are for immigrant inflows. These were available for the entire period of analysis. The Statistics Canada data are for resident immigrants and non-immigrants and were drawn from the six population censuses conducted during the period and the Labour Force Survey (LFS) of 2010. The question of immigrant status of respondents was introduced in the LFS in 2006. However, detailed demographic and geographic data on immigrants are not available from the LFS. As a result, in some cases, the demographic and geographic data are presented only until 2006, the latest census year for which immigrant data can be analyzed. This report also makes some reference to the recently released population counts based on the 2011 census.

IV. SOME DEMOGRAPHIC TRENDS IN NOVA SCOTIA AND THEIR POTENTIAL ECONOMIC CONSEQUENCES

The population growth rate in Nova Scotia has been in continuous decline for most of the post-World War II period, the most drastic taking place after the 1970s. Net out-migration from the province was a permanent factor until the turn of the current century. This means that to maintain some population growth, the province relied solely on natural increase (births minus deaths). However, this component of the population growth also has declined continuously. In the last decade, the natural growth rate was close to zero, but the net migration rate turned positive (meaning more people came to the province than who left), which helped maintain some population growth. Chart 1 shows the trends of the province's increasing reliance on a net in-migration of people (from other provinces or countries) for a positive growth rate in its population.

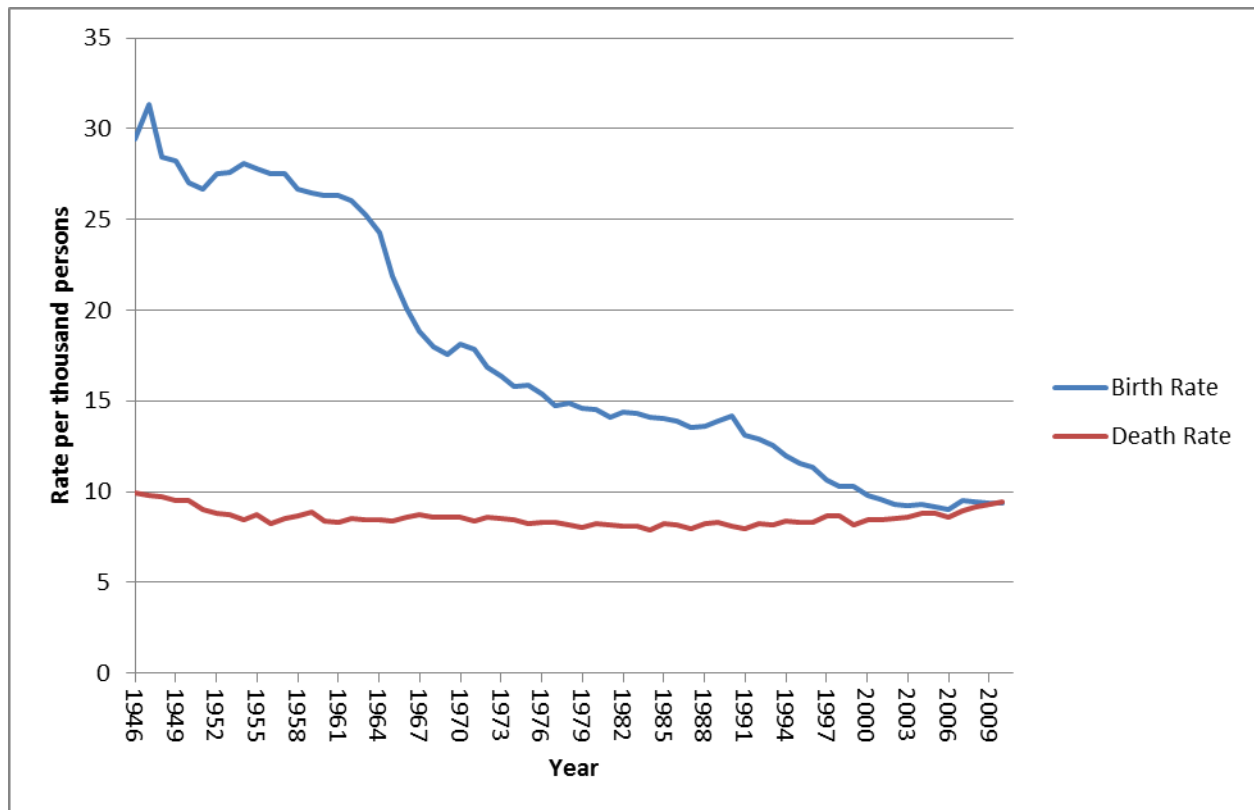
Chart 1: Components of population growth rates in Nova Scotia in the post-World War II period (per thousand persons)



Source and notes: Statistics Canada, Demography Division, special tabulations.

Chart 2 shows that since 1945, the declining natural population growth rate in Nova Scotia has been due mainly to declining birth rates because death rates remained almost constant over that entire period. In fact, the province experienced a zero natural population growth rate in 2005, which turned slightly positive in 2007, when the birth rate rose slightly, but fell again to zero in 2010.

Chart 2: Birth and death rates, Nova Scotia, 1946-2010



Source: Statistics Canada, Demography Division, special tabulations.

Despite the near zero growth in the natural component of population growth since about 2006, Nova Scotia experienced a slightly higher overall population growth during 2006 - 2011 (0.9 percent) than during 2001-2006 (0.6 percent), as revealed by the initial results of the 2011 population census of Canada (*The Canadian Population in 2011: Population counts and Growth*, Statistics Canada Analytical Document, Catalogue number 98-310-X2011001). This growth was the lowest in the country, however, and can be attributed to gains from interprovincial migratory flows and international immigration, when about 12,600 immigrants came to the province during this period.

Table 1 provides more detailed components of population growth in Nova Scotia during 2009-10, when, as a whole, the province experienced a population increase of 4,330 people. About 56 percent of this increase resulted from international migration (39 percent by *net* international migration), but the natural growth component was negative because the number of deaths exceeded the number of births (by about 0.3 percent). About 36 percent of population growth resulted from net non-permanent residents and less than 5 percent from net interprovincial migration. To summarize, international migration has become a major source of population growth in Nova Scotia, as was shown by Akbari (2009) for the whole Atlantic region.²

Table 1: Components of population growth in Nova Scotia, 2009-10

² http://community.smu.ca/atlantic/research_policy_e.html.

Component of population growth	NS
Births (1)	8810
Deaths (2)	8840
Immigration (3)	2409
Emigration (4)	714
Net temporary emigration (5)	474
Returning emigrants (6)	442
Net non-permanent residents (7)	1544
Net interprovincial migration (8)	205
Population Growth (9) = (1) - (2) + (3) - (4) - (5) + (6) + (7) + (8)	4330
Immigrants in population growth % = (3) of (9)	56

Source: Statistics Canada, CANSIM database.

Based on Statistics Canada data for 2010, the slowing of Nova Scotia’s natural increase in population has resulted in the highest percentage of seniors in its population among all Canadian provinces (15.4 percent). The province is also the first to have more seniors than youth (population aged 15 and younger). Box 4.1 summarizes some demographic implications for the province in 2026 if the current conditions prevail. With these current trends of birth and death rates, Nova Scotia will continue to rely on immigration to maintain a positive growth in its population for a long time.

Box 4.1 Nova Scotia in 2026 if current conditions prevail

- Population: 895,000, down 4.6 per cent from 2004
- Seniors (65+): up by 70.8 per cent
- Primary and secondary students: down 31.5 per cent
- University-aged population: down 29.8 per cent
- Traditional workforce: three times more rapid drop than population as a whole.

(Source: Population Forum 2010, <http://www.cbc.ca/news/canada/nova-scotia/story/2010/02/10/ns-aging-population.html> accessed April 8-2012).

Population decline and population aging potentially can have at least six economic consequences for the province:

1. Population decline can lead to the creation of policies for restructuring the economy to provide the goods and services demanded by a growing elderly population. However, such restructuring cannot have a long-lasting effect if the

death rate continues to either exceed or remain close to the birth rate in the province.

2. An aging population can result in fewer labour force participants, thereby causing shortages of different types of labour demanded by employers in the region. Box 1.1 cited some examples of emerging skill shortages in Nova Scotia
3. An aging population can also create increased pressure on younger labour force participants to provide the social programs for the elderly (for example, higher contributions to the Canada Pension Plan and higher taxes).
4. Population decline can result in shrinking markets for goods and services, thereby creating an adverse impact on incentives for business investments.
5. Population decline also means a corresponding decline of some federal funds determined by population size, such as social and health care transfers.
6. As noted in a study published by the Atlantic Provinces Economic Council, rural Atlantic Canada has been affected the most by regional population decline.³ This phenomenon is of concern because most natural resource-based industries are located in rural Atlantic Canada, including in Nova Scotia. When populations decline, the cost of public, as well as private, services does not adjust immediately, and there is a point below which base costs cannot go regardless of population size. As a result, the economic feasibility of providing such services becomes questionable. Losses of hospitals and mail and banking services, as well as consolidation of schools in rural Atlantic Canada, including in Nova Scotia, have become increasingly common. Closure of public and private services further accelerates rural population decline as people move closer to metropolitan areas in search of those services.

Another consequence of population decline that can also indirectly adversely affect the province economically is the weakening of its political representation in the Canadian House of Commons. According to the *Constitution Act* of 1985, each province's representation is based on its population size. A "grandfather" clause, however, protects each province from losing seats in the House below its 1976 level. This method of determining a province's number of seats in the House implies that as the population of a province grows, not only would the number of seats allocated to that province but also its total number of seats in the House above its 1976 level. In turn, proportionate representation of other provinces, whose population either remains stable or falls, would decline.

A study published by the C.D. Howe Institute (Tomlin, 2007) noted the imbalance in provincial representation in the House of Commons that has resulted from population

³ Atlantic Provinces Economic Council. 2007. [Where Have All the Ne Workers Gone? Why Atlantic Canada's Labour Force Has Stopped Growing and What We Can Do About It?](#) (January 5).

imbalance among the provinces.⁴ The study also projected that if the uneven trends in population growth rates across provinces continue, the imbalance in provincial representation will worsen by 2021. As Chart 3 shows, each Atlantic province had fewer than 4 percent of the total seats in the House of Commons in 1976. By 2021, declining population is projected to further weaken this representation.

This weakening of the provincial representation of smaller provinces in the House of Commons has already started. On October 27, 2011, the federal Conservative government introduced Bill C-20, entitled the Fair Representation Act to add a total of 30 new seats to the House of Commons for Alberta (6), British Columbia (6) Ontario (15) and Quebec (3), while all other provinces were to maintain their existing numbers. The bill passed on December 16, 2011. Changes in the number of seats were based on the changes in each province's population size.⁵

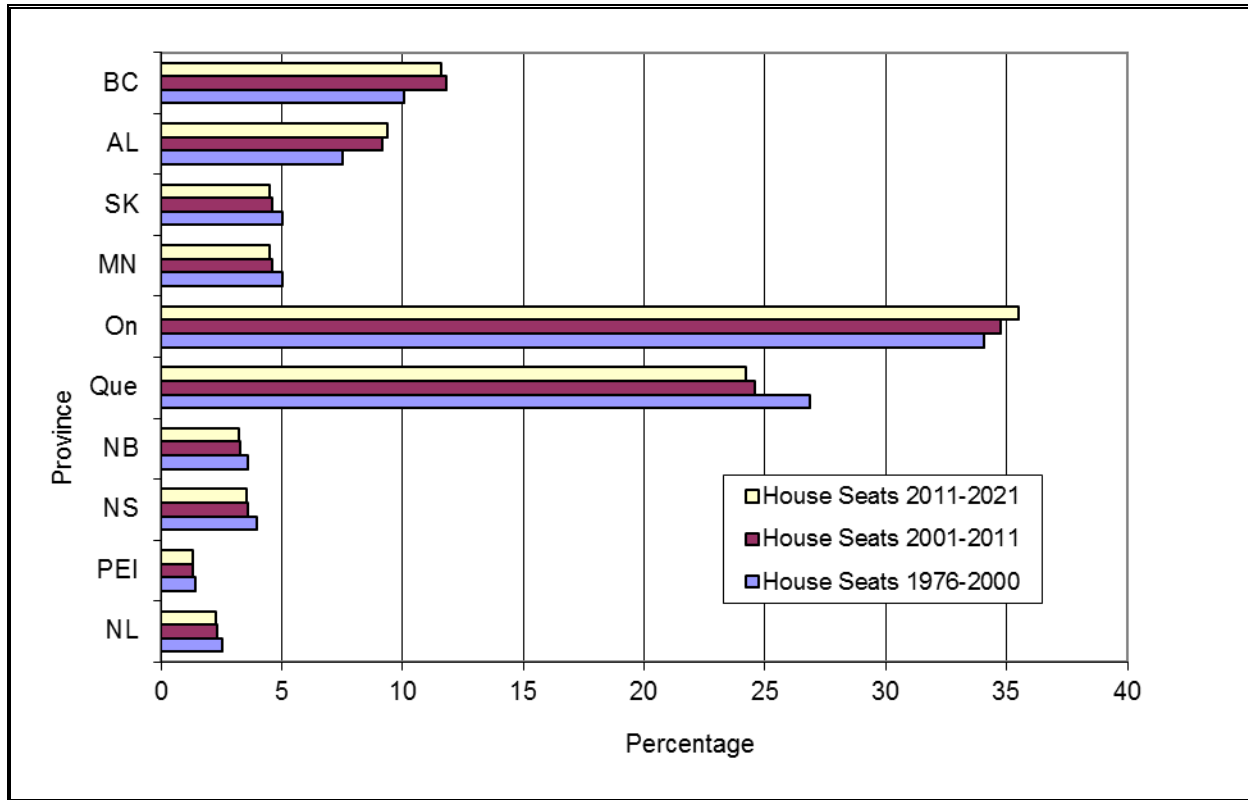
As a result of these additions, the percentage representation of the Atlantic provinces in the House has declined, with Newfoundland and Labrador down from 2.09 to 1.41 percent, Prince Edward Island down from 1.41 to 0.42 percent, Nova Scotia down from 3.61 to 3.28 percent, and New Brunswick down from 3.28 to 2.99 percent.

As a step towards addressing the negative economic and political consequences of population decline, each Atlantic province is now aiming to increase its annual share of Canadian immigrant inflows. In Nova Scotia, a separate government department, the Nova Scotia Office of Immigration, has been formed with the mandate to increase both 1) the level of skilled worker immigration as a way to deal with skill shortages and 2) the retention rate of annual immigrant inflows, which has been low since the mid-1990s. The province is now a signatory to the Provincial Nominee Program (PNP), a federal-provincial bilateral agreement that allows each participating Canadian province to target and recruit immigrants to meet its own particular needs and who are then fast-tracked through the system by CIC, and is collaborating with other provincial governments in the region and federal departments to develop promotional material, participate in overseas marketing missions, conduct research, assess and recognize foreign credentials and share information.

⁴ Tomlin, B., 2007. The Seat Shortage: Changing Demographics and Representations in the House of Commons C.D. Howe Institute Institut C.D. Howe e-Brief (May 29).

⁵ <http://www.parl.gc.ca/LegisInfo/BillDetails.aspx?Language=E&Mode=1&Bill=C20&Parl=41&Ses=1>

Chart 3: Provincial representation in the Canadian House of Commons based on current rules and projected population growth rates



Source: Tomlin (2007).

The Atlantic Canada Opportunities Agency (ACOA), a federal government agency with a regional economic development mandate, also recognizes the importance of immigration in Atlantic Canada’s economic development. ACOA works closely with the region’s governments, as well as with settlement organizations, to facilitate the settlement and integration of immigrants. ACOA also established an Atlantic Population Table (APT) with representations from the CIC, Human Resources and Social Development (HRSD) and the four Atlantic provincial governments. APT was instrumental in marketing and recruitment efforts; on regional, national and international front; to meet the region’s workforce needs. The funding agreement supporting the APT expired in January 2012, but the four provincial governments have now established an Atlantic Workforce Partnership with the objective of developing the region’s workforce to meet the changing skill requirements especially in mining, energy and shipbuilding capital projects.⁶ Another federal department, the Rural Secretariat, has investigated a rural re-population strategy, with immigrant settlement in rural regions as one key component of rural economic development.

With the above policy and community initiatives undertaken in Atlantic Canada and the observed demographic changes in its population, immigration has begun to play an

⁶ <http://www.gov.ns.ca/news/details.asp?id=20120606011>

enhanced role in both the region's population growth and its economic development. As a result, issues relating to the social and economic impacts of immigration, which are often raised in public circles in the immigrant-abundant regions of western and central Canada, are expected to occupy a central place in public policy discussions in this region as well. Some of those issues include the impact of immigrants on the public treasury, poverty, employment and the wages of the native-born and surface more in public debates during periods of economic downturn, such as the current one.

This study is designed to build a broader and deeper stock of knowledge relating to the many economic issues that increased immigration to Nova Scotia raises. This information will both provide input to immigration policy discussions and design in the province and also be useful for the region's policymakers, immigrant settlement organizations and academic researchers, who may wish to pursue some immigration-related issues in greater depth. The primary focus of this report is on the role of immigration in promoting economic growth and development in Nova Scotia.

V. AN OVERVIEW OF IMMIGRATION TO NOVA SCOTIA

This section analyzes annual immigration trends in Nova Scotia over the period 1981-2010 based on data provided by CIC. Statistical profiles of immigrants resident in the province are also analyzed at five-year intervals along a range of socioeconomic, demographic and geographic variables. These profiles are based on data obtained from the 1981, 1986, 1991, 1996, 2001 and 2006 Canadian population censuses and the Labour Force Survey of 2010 conducted by Statistics Canada.

Under the Constitution of Canada, immigration is a shared jurisdiction between federal and provincial/territorial governments. The federal government has final authority over who permitted to enter Canada. Provinces and Territories, under federal-provincial agreements are responsible for design and management of Provincial Nominee Programs, which allow provinces/territories to nominate individuals that fit their economic and labour market needs.

Unlike some provinces, such as Ontario, the Atlantic provinces are immigrant scarce; immigrants comprise less than 4 percent of the regional population compared to the national average of about 18 percent. Among the Atlantic provinces, this percentage is higher in Nova Scotia, and in 2006, the latest year for which data are available, immigrants comprised about 5 percent of the total provincial population (Table 2).

Year	Total Population	Non-Immigrants	Immigrants	Immigrants in total Population (%)
1981	839,800	798,085	41,715	4.9
1991	890,950	850,140	39,110	4.4
2001	897,570	853,655	41,320	4.6
2006	903,090	854,495	45,190	5.0

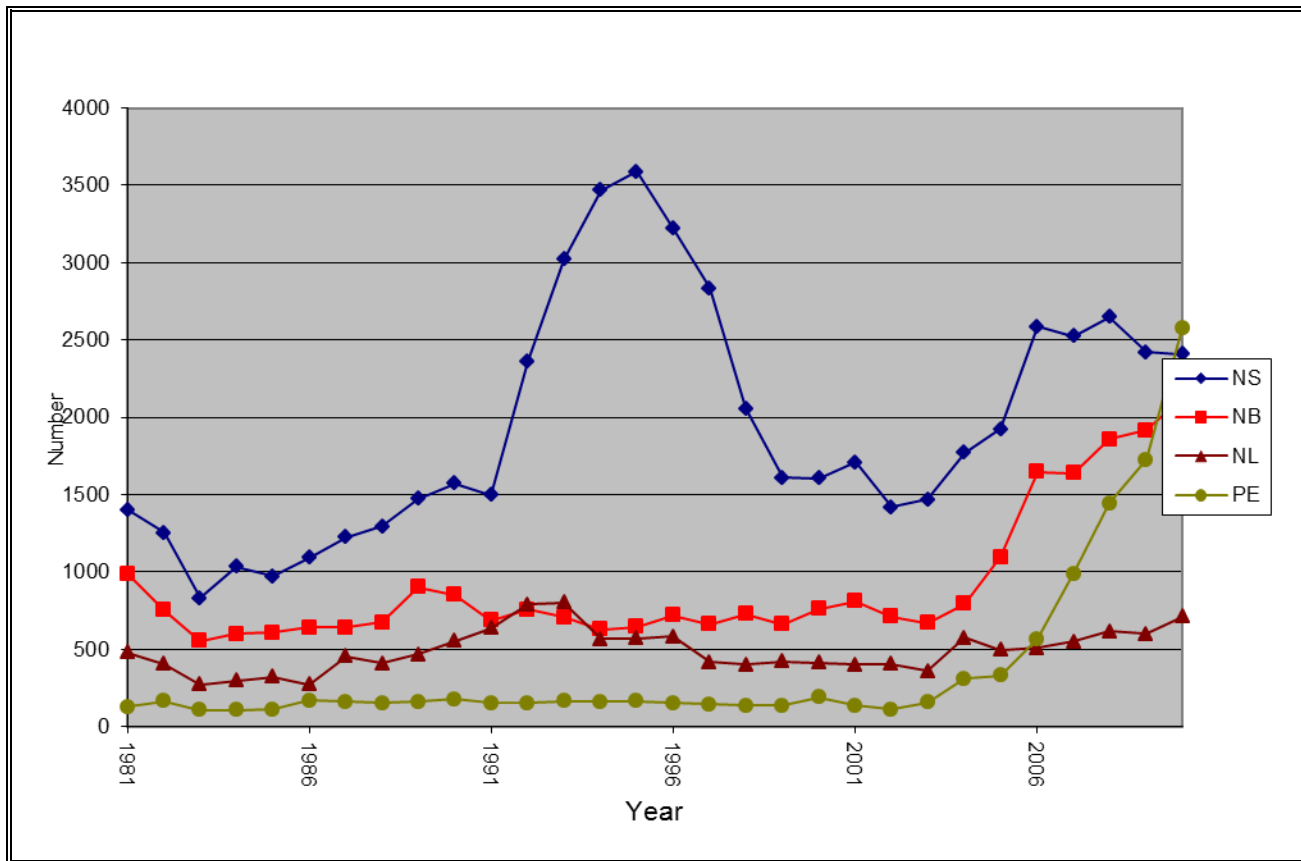
Source: Statistics Canada, catalogue no. 97-557-XCB2006006. The 2011 census revealed that Nova Scotia's population was about 911,220 (Statistics Canada catalogue no. 98-310-X2011001). No information is yet available on the immigrant status of total population for the post-2006 period. Special tabulations based on the Labour Force Survey indicate that in 2010, immigrants comprised about 5.5 percent in Nova Scotia's population aged 15 and above.

Nova Scotia has a higher composition of immigrants than the regional population because most immigration to Atlantic Canada before 2009 took place in this province.

As Chart 4 shows, immigrants (including principal applicants and dependents) destined for Nova Scotia averaged about 1,100 per year (or about 48 percent of the average intended inflow into Atlantic Canada and 1 percent of total Canadian inflows) during the 1981-1985 period. There was a sharp increase over the first half of the 1990s, with immigration peaking at almost 3,600 persons in 1995, a solid 72 percent of the total inflow into Atlantic Canada in that year and which resulted in some active immigrant consultant activity in the province (see box 5.2 in the following pages).

Between 1995 and 2002, however, immigration inflows retreated, reaching just over 1,400 persons in 2002, a level virtually the same as that in 1981. Since 2002, the province's immigrant inflows have risen consistently, with its share of immigrants destined for Atlantic Canada being 41.4 percent in 2006; however, since 2008, Nova Scotia has experienced a decline in its immigrant inflows, while New Brunswick and Prince Edward Island experienced sharp increases, largely due to the Provincial Nominee Program. In 2010, Nova Scotia fell behind Prince Edward Island, which received about 19 times more immigrants in that year since it had in 2001. However, preliminary estimates for 2011 indicate that immigrant inflows in PEI have dropped, which could be due to a redesigning of their Provincial Nominee Program (PNP). It appears unlikely that PEI will return to the 2010 levels due to this redesigning (PNP).

Chart 4: Immigrants destined for the Atlantic provinces, 1981-2010



Source: CIC, special tabulations.

V.1 The composition of immigrants

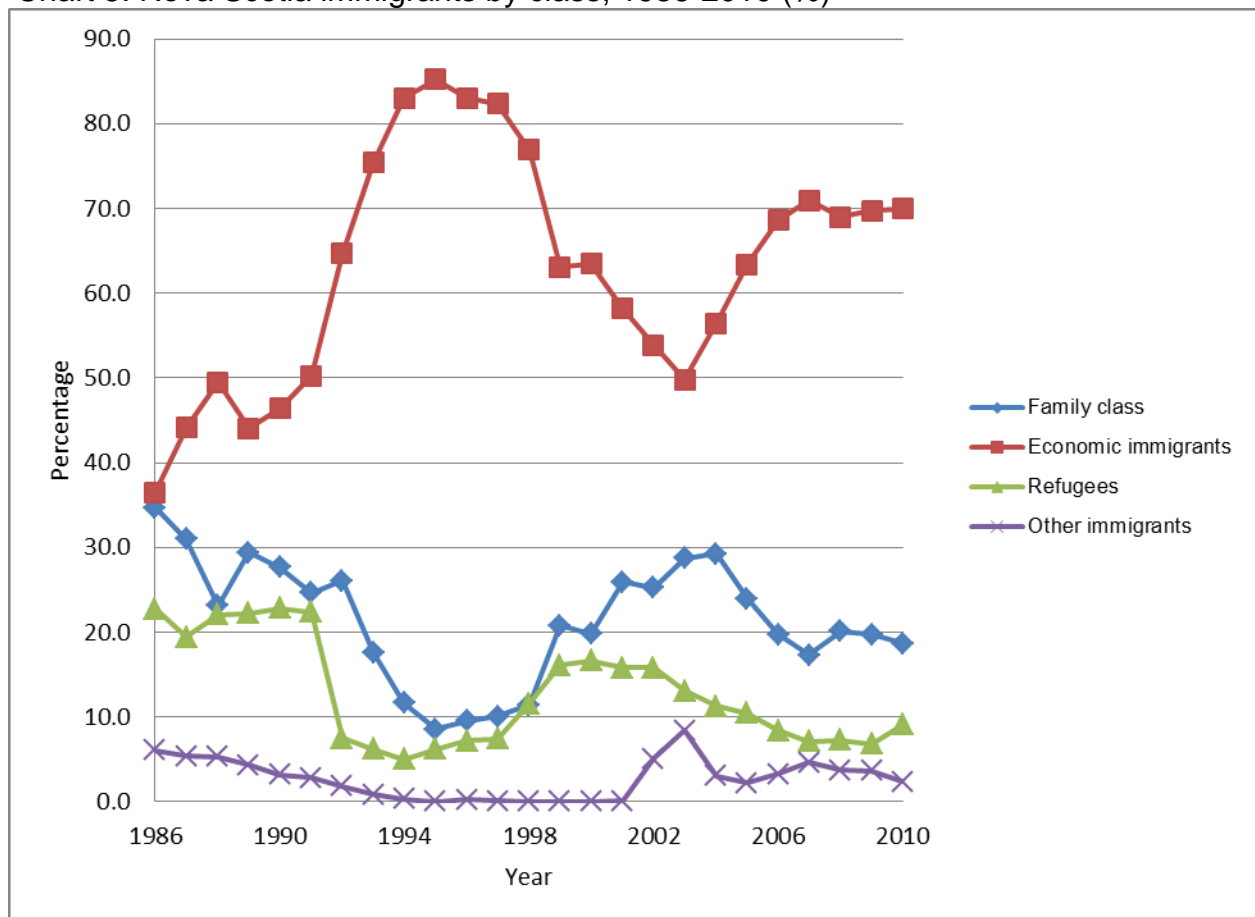
Box 5.1 Summary Points

- In 2010, one-third of all principal applicants destined for Nova Scotia were in family class, followed by skilled immigrants (25 percent) and refugees (8 percent).
- Business immigration was the most dynamic component of immigration from the early to mid-1990s, rising from about 4 percent of total inflows in 1990 to about 43 percent in 1994. Its percentage in total inflows has retreated dramatically since then to its pre-1990s share of total inflows. In 2010, the province received only 20 business class immigrants. Prevailing business opportunities that fell short of immigrants' ambitions may account for this decline.

Refugee class immigration reflects Canada’s commitment to humanitarian principles, while **family class** is intended to foster family re-unification, that is, facilitating individuals to enter Canada if they have close relatives who are already permanent residents/citizens. **Economic immigrants**, on the other hand, are chosen for their expected direct, positive economic contribution to Canada through the skills, expertise, entrepreneurship or capital they bring with them. The economic class category comprises skilled workers, business immigrants, provincial and territorial nominees and live-in caregivers.

Chart 5 plots the percentages of inflows of all immigrants (principal applicants and dependents) in Nova Scotia by class for the period 1986-2010 for which consistent data are available. Economic immigrants are observed to have dominated all other classes throughout the period, followed by family class. The rise and fall of economic class immigrants generally followed the overall inflows observed in Chart 1, with the consistent rise in this class since 2003 being the result of deliberate policy attempts to attract immigrants to the province.

Chart 5: Nova Scotia immigrants by class, 1986-2010 (%)



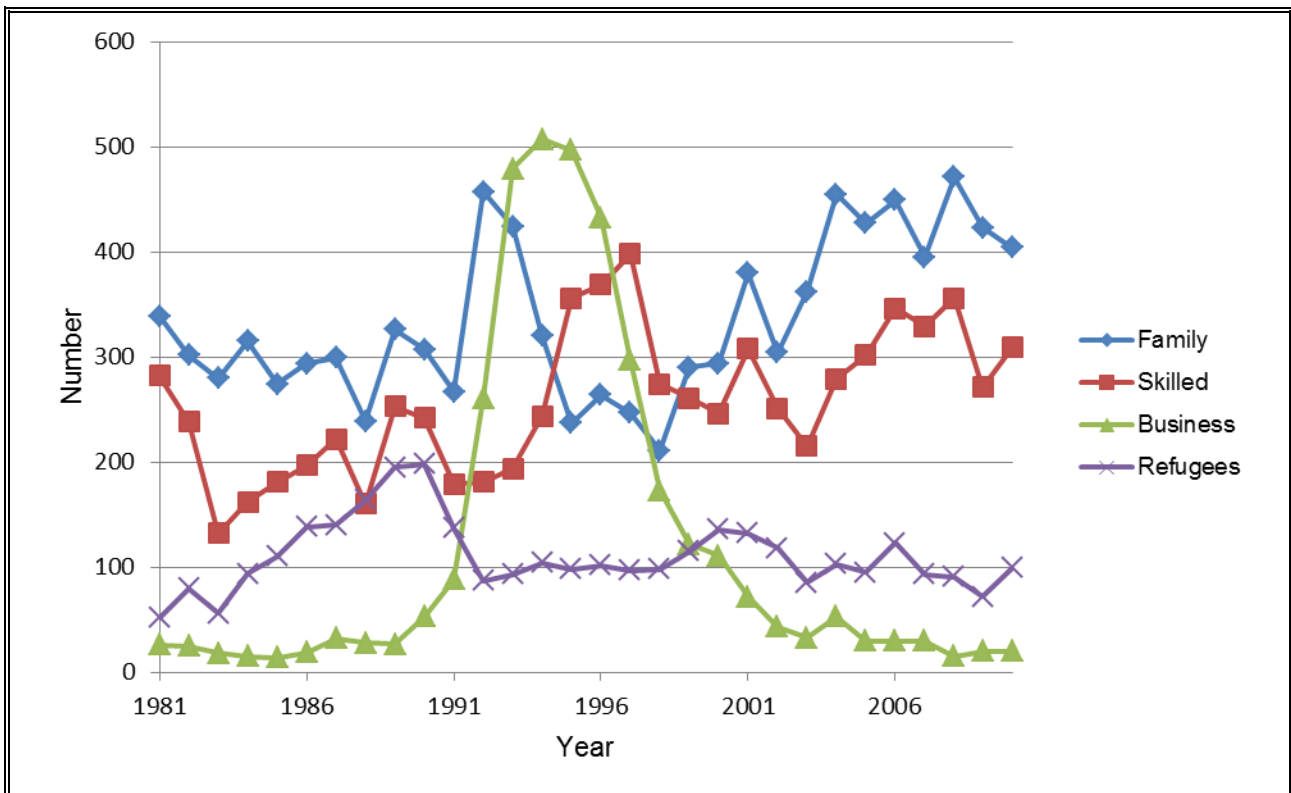
Source: CIC, special tabulations.

Chart 6 provides annual immigration inflows (of principal applicants) by class of immigrants destined for Nova Scotia during 1981-2010. In addition to the family and refugee classes, two sub-classes of economic immigrants, i.e., skilled and business

classes, are also shown. In general, the number of immigrants destined for Nova Scotia in each immigrant class was vulnerable to fluctuations over the reference period.

Specifically, the pattern of business immigration to the province has been the most dramatic. Its sudden rise and fall in Nova Scotia during the 1990s had some specific reasons (See Box 5.2).

Chart 6: Immigrants (principal applicants) destined for Nova Scotia, 1981-2010



Source: CIC, special tabulations. Business class immigrants for post 2005 period also include dependents.

Box 5.2 The Rise and Fall of Immigration in Nova Scotia in the 1990s

In the aftermath of the first Gulf War, many Palestinian and expatriate groups living in Kuwait and its neighbouring countries started to leave. Rising emigration from the Middle East caught the attention of some aggressive immigration consultants who promoted Nova Scotia as a province with a more conservative family lifestyle that was safer than big Canadian cities and with nationally ranked educational institutions. As a result, immigration peaked at 3,600 in 1995 and remained close to 3000 per year until 1997 (Chart 4). Most immigrants from the Middle East came as business class immigrants. The federal entrepreneur program at the time had fairly relaxed requirements (start a business within two years and employ one Canadian). Many immigration consultants even helped clients write business plans so they could get into the country. However, many of these immigrants were actually professionals with no prior business experience but were told by consultants that it would be easy to do business in Nova Scotia. They had the money to invest, and Nova Scotia appealed to them. However, they encountered the following problems:

- Many found that there were not as many business opportunities and settled for small retail operations, which they could not manage properly.
- Even those with some business experience had mostly done international trade (import/export business), which was not a lucrative business in Nova Scotia.
- Incomplete or erroneous information had been provided by consultants about business opportunities in the province.

As a result, many immigrants started to leave the province and may have also advised potential newcomers not to immigrate to Nova Scotia. Therefore, by 1999, the province had returned to its pre-1991 level of annual immigrant inflows.

In 2002, the federal government, concerned about the abuses of the system, changed the entrepreneur program drastically, requiring, among other things, recent entrepreneurial experience, a large initial investment, and more direct involvement in the business to be eligible under the program. As a result, business immigration to the province, which had already declined significantly since the 1990s, has now dropped to below its 1981 level (Chart 4). The federal government has also taken major steps to monitor immigration consultant activity throughout the country

The consultants' attention was also diverted from business immigrants when Nova Scotia signed a PNP agreement with the federal government in 2002, which has recently been renewed for an indefinite period.

Source: Based on information collected from the Immigrant Settlement and Integration Services (ISIS).

Movements in the other immigrant categories have also been volatile but far less dramatic.

Since 2002, Nova Scotia, New Brunswick and Prince Edward Island have been welcoming increasing numbers of immigrants each year. Growth has been slower in Newfoundland and Labrador but appears to have picked up since 2007. These increases may be largely attributed to deliberate attempts at government and community levels to attract immigrants to, and retain them in, the region. The introduction of the Provincial Nominee Program (PNP) is one example as it allows provinces and territories to nominate immigrants who have specific qualities that will contribute to the local economy. Under this agreement, each province nominates candidates who want to work and live in that province. Nominees must meet federal admissibility requirements, such as those related to health, criminality and security. As a part of the agreement, local communities can also identify an immigrant nominee to fulfill their own labour market needs. As Table 3 shows, in 1999, New Brunswick was the first province to enter such an agreement. Different provinces entered the agreement with the federal government at different dates, initially for a limited term, but now each has been granted indefinite extensions to its original agreement.

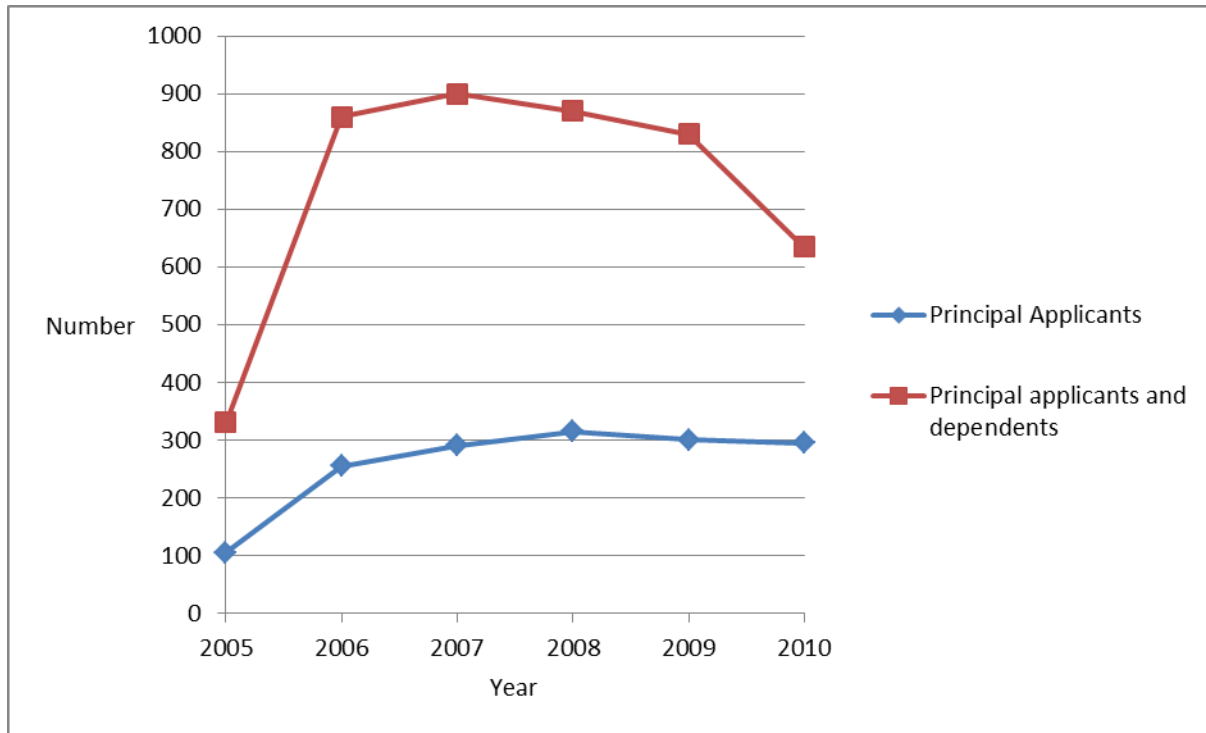
Table 3: Federal-provincial/territorial agreements currently in force in the Atlantic provinces		
	Date Signed	Expiry Date
<i>Canada-New Brunswick Agreement on Provincial Nominees</i>	January 28, 2005 Amended: March 29, 2005 (Original signed in February 1999)	Indefinite
<i>Agreement for Canada-Prince Edward Island on Immigration</i>	March 29, 2001 Extended: March 2007	Indefinite
<i>Canada-Nova Scotia Agreement on Provincial Nominees</i>	August 27, 2002 Amended: September 2007	Indefinite
<i>Canada-Newfoundland and Labrador Agreement on Provincial Nominees</i>	September 1, 1999 Extended: December 1, 2005 and 2006	Indefinite

Source: CIC (retrieved from www.cic.gc.ca on March 20, 2009) and information gathered from individual provinces.

Chart 7 data for Nova Scotia show that annual immigrant arrivals under PNPs rose between 2005 and 2007 but have since declined. Arrivals of principal applicants,

however, have remained constant since 2007, indicating that the overall drop is due to fewer dependents arriving under this category.

Chart 7: Annual arrivals of provincial nominees, Nova Scotia, 2005-2010



Source: CIC, special tabulations.

While skill shortages resulting from population aging are emphasized as motivation for increasing immigration, it should also be noted that new economic development projects such as the Churchill Falls electricity generation project and the award of a ship building project by the federal government to Irving Shipbuilding in Halifax will generate demand for new skilled and unskilled workers in Nova Scotia. These opportunities are likely to slow youth out-migration rates in the long run and, in the short run, increase the inflow of workers from other parts of Canada, as well as from abroad. Hence, the PNP is likely to become more important in attracting new immigrants to the province

V.2 Broad demographic trends among immigrants

Box 5.3 Summary Points

- Nova Scotia's share of annual immigration into Canada has generally hovered around the 1 percent range. The share peaked in 1995 but then fell steadily. In recent years, deliberate policy attempts have resulted in a return of the provincial share to 1 percent of national inflows.
- New immigrants accounted for 21 percent of population growth in the province during 1981-1986, rising to 72 percent during 1991-96. Although during 2001-2006 this contribution fell, it remained significant at 43 percent.
- For the period 1981-2010, the age profiles of Nova Scotia's non-immigrant population and of newcomers to the province suggest that at the time of their arrival, immigrants were younger than the resident non-immigrant population.
- That immigrants are younger than the resident population at the time of arrival suggests that for a long time after their arrival, immigrants are not likely to be heavy users of such age-related components of Canada's social security system as pension and old age security benefits and health care.

Table 4 shows how immigration has been an important component of population growth in Nova Scotia. For instance, during the 1981-86 period, almost 21 percent of the population growth of 24,350 was due to the arrival of new immigrants. This proportion was the highest (almost 72%) during the 1991-96 period, when immigration was also at one of the highest levels in the province but population growth was at its lowest level, growing at an annual average of only 0.2 percent. During 1996-2001, Nova Scotia's population fell by 2,767 despite the new immigration of 5,745 persons. Without the latter, however, the population decline would have been about 8,512 persons, i.e., 67.5 percent greater. During 2001-2006, the provincial population grew at an average rate of only 0.35 percent annually. Out of the total 15,892 people added to the population during this period, 6,900 were new immigrants, i.e., about 43.2 percent of total population growth.

Table 4: Nova Scotia Population net growth rate and contribution of recent immigrants to growth of provincial population					
Period	1981-1986	1986-1991	1991-1996	1996-2001	2001-2006
End of period population	864150	890950	899965	897570	913462
Population Change (1)	24350	26800	9015	-2767	15892
Change without immigration (2)	19250	24100	2525	-8512	8992
Recent Immigrants (3)	5100	5400	6490	5745	6900
Percentage contribution of immigration to population growth [(3/1)x100]	21	20	72	---	43.4

Sources and notes:

- 1) For end of year population, Statistics Canada Catalogue number 97F0009XCB2001001. These data are not adjusted for undercoverage.
- 2) For recent immigrant data, a) in the 2001 census, Statistics Canada Catalogue number 97F0009XCB-2001004; b) in the 1996 census, Statistics Canada Catalogue number 93F0023XDB96003; c) in the 1991 census, CIC Recent Immigrants in the Halifax Metropolitan Area (selected charts) Census 1991 (October, 2002); d) in the 1986 census, Census 1986 PUMF-microdata, individual file, variable used include: year of immigration and immigrant status indicator.
- 3) Recent immigrants include those who arrived within five years before the census date. Data on recent immigrants in the 1991 census are not available in the census PUMF.
- 4) Census data are different from the estimates of population provided by the Demography Division of Statistics Canada. See Appendix for further explanation.

The above numbers show that if population growth due to natural factors and net interprovincial migration of non-immigrants slows or turns negative, as is projected in another 20-30 years, expansion of immigration will be an important demographic policy tool for counteracting that effect. It should also be noted that the data in the above table only show the contribution to population growth of *recent* immigrants. Immigrants also make their contribution to population growth through reproduction, which can have a more lasting effect on population growth. To estimate this contribution, one needs to account for the fertility rate of the immigrant population, which is not considered in this report. However, some implications regarding these rates can be drawn by analyzing the age distributions of new arrivals, as done in Table 5.

Table 5 compares the age distributions of immigrants and non-immigrants in Nova Scotia, one important difference being that immigrant distributions are more concentrated in the lower age groups, 15-24 and 25-44, and thinner in the top ranges of 45-64 and 65 and above. In other words, new immigrant arrivals are generally younger than the resident population. Table 5 also shows an aging trend among non-immigrants. These facts confirm the important implication of the economic theory of human capital investment that young people are more likely to migrate than older people because they have a longer time available to reap the benefits of their investment in migration. These facts also suggest that for a long time after arrival in Canada, immigrants are not likely to be heavy users of such age-related components of Canada's social security system as pension and old age security benefits and health care.

Table 5: Age distribution of new Nova Scotia immigrants (principal applicants) and non-immigrants, 1981-2010 (%)

Age group	Immigrants arriving 1981-1985	Non-immigrants in 1986	Immigrants arriving 1986-1990	Non-immigrants in 1991	Immigrants arriving 1991-1995	Non-immigrants in 1996	Immigrants arriving 1996-2000	Non-immigrants in 2001	Immigrants arriving 2001-2005	Total population in 2006	Immigrants arriving 2006-2010	Total population in 2010
15-24	18.22	23.46	20.19	19.49	9.62	17.58	9.1	16.45	10.48	15.41	7.79	15.4
25-44	52.56	39.64	58.37	42.33	59.91	40.49	66.98	36.95	66.79	31.54	65.85	29.1
45-64	16.56	22.54	13.09	23.43	26.09	27.36	21.05	30.87	19.38	35.03	23.39	36.3
65+	12.66	14.36	8.35	14.75	4.37	14.57	2.87	15.73	3.35	18.02	2.96	19.3
Total	100	100	100	100	100	100	100	100	100	100	99.99	100

Sources and notes: 1) Immigrant data for the period 1981 – 2000 are from Permanent Resident Data System microdata, as provided to AMC under contract by CIC. Principal applicant is based on variable "f_stat2", and an immigrant's age is based on variable "fage". Data for later period are from CIC, special tabulations.

2) Non-immigrant data are based on Canadian population censuses (PUMF, 1986-2001, individual files), Statistics Canada. For the period 1991-2001, non-immigrant data are based on the variable "immigrant status indicator", while for 1986 are based on the variable "year of immigration" since the "immigrant status indicator" was not provided with the 1986 census. Hence, 1986 data also include those for non-permanent residents. For 2006, non-immigrant data are not available. Hence, total population data based on the 2006 census are used for that year as they emulate non-immigrant data. These are based on Statistics Canada catalogue number: 97-551-XCB2006005. The 2010 data are estimates based on CANSIM Table 05-0001 accessed March 25, 2012.

V.3 Where immigrants come from

Table 6 shows the top five source countries of principal applicants and dependents destined for Nova Scotia. The mix of these source countries has become more diverse since the early 1990s but has also been changing. Countries of the Middle East dominated the top five source countries in the 1990s when the United Kingdom and United States disappeared from the list. This shift in composition is attributed to many causes (see box 5.4 entitled “Shifting Source Regions of Immigrants to Canada”). Two main reasons are the 1) presence of a large Lebanese community in the province, which has been here for more than 100 years and has been an attractive factor for immigrants from that country, and 2) emigration of certain groups from the Middle East in the aftermath of the first Gulf War, which attracted the attention of immigrant consultants in the province (as discussed earlier).

The United Kingdom and the United States returned to the list of top five source countries of immigrants after 2001, while China, Iran and Philippines were added to the list towards the end of the last decade.

Table 6 also shows that the top ranked source countries sent fewer than half the immigrants destined for Nova Scotia since the 1990s, indicating that although Nova Scotia receives less than 1 percent of national inflows, they tend to arrive from diverse source countries, as is also true for all other provinces of Canada.

Box 5.4 Shifting Source Regions of Immigrants to Canada

In 1961, the Canadian government abolished the “preferred country” clause, which had given preference to admitting immigrants from countries of Western Europe. This clause had formed the basis of a 1910 Immigration Act, but with its abolition, all immigrant applications are now evaluated using a “point system” under which importance is given to an applicant’s age, education and suitability for the Canadian labour market, as well as to such factors as the presence of family members in Canada, regardless of the country of origin. The new rules were fully promulgated in 1967. One reason for this change was that Canadians wanted to play a greater role on the international front in the post-World War II era. Another reason was that the economic prosperity that followed soon after that war increased the demand for skilled labour.

The period of the early 1960s was also a time when economic conditions in Europe, adversely affected by World War II, had begun to improve. More labour was in demand there, and incomes were rising. As a result, immigration from Europe to North America generally slowed. Immigration slowed further with the formation of the European Union and re-unification of Germany, which allowed for a greater mobility of workers within Europe.

As a consequence of the above changes, as well as of the greater mobility of workers in a globalized world and continuing political discourse in countries of the Third World, Canada has seen a shift in source countries of its immigrant inflows from those of Western Europe to those of Asia, Africa and South and Central America over the past three decades.

Table 6: Top five source countries of immigrants destined for Nova Scotia, principal applicants and dependents, by year, 1981-2010

	1981-1985		1986-1990		1991-1995		1996-2001		2002-2005		2006-2010	
Rank												
1	USA	1570	USA	1358	Egypt	1519	Kuwait	1629	China	570	UK	1670
2	UK	919	UK	718	Kuwait	1247	China	893	USA	560	USA	1110
3	Vietnam	398	Vietnam	455	Hong Kong	894	Jordan	828	UK	470	China	1015
4	Poland	331	Lebanon	444	Saudi Arabia	887	Korea	783	Saudi Arabia	355	Iran	890
5	India	208	Poland	413	USA	850	Saudi Arabia	677	Kuwait	345	Philippines	550
Total, 5 Countries		3426		3388		5397		4810		2300		5235
Province Total		5497		6659		13924		13003		6580		12590

Source: For the period 1981-1995, Permanent Residence Data System, microdata (CIC). Post 1995 data are based on CIC, special tabulations.

V.4 Where immigrants go

Box 5.5 Summary Points

- While most immigrants arriving in Nova Scotia go to Halifax, in recent years, greater percentages of them have also been declaring places outside of Halifax as their intended destinations. As a result, during 2001-06, about 82 percent of new arrivals were destined to Halifax, but this percentage dropped to 78 percent during 2006-10.
- The 2006 census had revealed that about 16 percent of immigrants who arrived during 2001-2006 lived in Metro-adjacent and non-Metro-adjacent areas, viewed as rural areas, of Nova Scotia. This finding is important for population planners interested in developing new immigrant destinations that are smaller and predominantly rural as a means of reversing the declining trend of rural populations. Research should investigate factors that determine immigrants' choice of location.
- More recent immigrants resided in metro and non-Metro-adjacent areas at the time of the 2006 census than were originally destined there. Larger numbers were also destined towards these areas during 2006-2010.
- Annapolis, Cape Breton, Colchester, Hants, Kings and Pictou counties account for most of the immigrant population that lived outside of Halifax in 2006.
- The increasing shift of recent immigrants towards destinations outside Halifax is the result of promotion by community organizations who actively participate in the "Community Identified Stream" of the Nova Scotia Provincial Nominee Program.

Responding to the trend of a declining rural population, which can cause 1) a decline of natural resource industries such as agriculture and mining, 2) a decline in public and private services in rural regions, and 3) increased pressures on the provision of services in metropolitan (urban) areas as the rural population moves there, federal and provincial governments in Canada have considered rural repopulation strategies. One component is the initiative to attract immigrants to rural regions, and the Provincial Nominee Program, and community-based initiatives are used as tools to achieve this goal. The province has launched a Rural Newcomer Navigation Initiative in collaboration with CIC, the aim of which is to ensure that navigation and settlement services are available in rural regions province wide to retain newcomers. The initiative is implemented through Regional Development Agencies [(RDAs), see Box 5.6].

Box 5.6 Rural Newcomer Navigation Initiative

Strait-Highlands, Antigonish and Guysborough County RDAs consider the retention and successful settlement of newcomers in the region a priority and have been taking a regional approach to newcomer settlement activities for several years.

Our Newcomer Navigator, Kerry Urquhart, provides support to newcomers as they make their transition to life in rural Nova Scotia. She provides a starting point for anyone newly settling into the quad county region of Inverness, Richmond, Antigonish and Guysborough.

Kerry's position is part of the Rural Newcomer Navigation; a province-wide initiative administered through the RDA network. The objective of the program is to provide a range of services to newcomers, such as

- Personalized, case by case support to help newcomers make informed decisions and understand life in rural Nova Scotia,
- Support to help newcomers establish strong social and economic networks, including connections to employment, language training, community integration, ways to navigate their new community, and
- Referrals to local service providers that will help with employment needs and equip them with the language and skills essential to their success.

Kerry also works with community groups, employers, and organizations trying to make our communities more welcoming for newcomers.

As part of the Newcomer Settlement support offered in the quad-county region, a *Relocation and Settlement Guide* has been designed with newcomers in mind. It is a valuable resource for people moving here from other countries and other parts of Canada and even for former residents.

The Guide is available to download here or can be picked from any of the three RDA offices. Information from the Guide is also available at www.newcomerfriendly.ca.

The Nova Scotia Office of Immigration, Citizenship and Immigration Canada and other federal and provincial agencies are all partners in the Rural Newcomer Navigation Initiative.

Source: http://www.strait-highlands.ns.ca/shrda/shrda_main.nsf/a3c1126ca5c3cc5784256ea200678f78/8723820ca43c2ed48425738d004dc0a7?OpenDocument

Table 7 shows the geographic distributions of both immigrant and non-immigrant residents of Nova Scotia, as revealed by the 2006 census year. For comparison, the number of arrivals during 2001-2006 and 2006-2010 are also provided in the same table.

Immigrants accounted for 5 percent of Nova Scotia's population in 2006, and, as in the case of native-born Canadians, most gravitated toward Halifax County. The other major population centres – Annapolis, Cape Breton, Colchester, Hants, Kings, Lunenburg and Pictou -- each had more than 1,000 immigrant residents in 2006. Each of these CMAs was home to more than 100 of the 6,900 immigrants who had arrived in the province during 2001-06 and were still living there at the time of 2006 census.

Table 7: Geographic distribution of immigrants in Nova Scotia.

Census Metropolitan Area ¹	Population In 2006	Non-immigrants In 2006	Immigrant residents in 2006		Total immigrant arrivals in	
			All	Those who arrived in 2001-06	2001-06	2006-10
Nova Scotia	903080	854485	45190	6900	10313	9765
Halifax	369455	339835	27410	5060	8,435	7675
Cape Breton	104,660	102,805	1730	155	229	302
Metro Adjacent**	154115	147660	6125	650	598	699
Colchester	49,520	47,530	1915	195	194	236
Lunenburg	46,610	44,440	2115	260	260	267
Hants	40,860	39,210	1540	135	96	119
Richmond	9,625	9,325	240	35	26	36
Victoria	7,500	7,155	315	25	22	41
Non-Metro Adjacent**	274850	264185	9925	1035	1071	1089
Shelburne	15,405	14,925	460	50	39	71
Yarmouth	25,870	25,035	760	95	112	96
Digby	18,715	18,060	590	65	43	77
Queens	11,055	10,760	290	30	40	22
Annapolis	21,140	19,720	1375	185	104	141
Kings	59,260	56,395	2635	250	326	277
Cumberland	31,175	30,155	975	70	63	92
Pictou	45,815	44,475	1265	125	114	141
Guysborough	8,950	8,780	155	25	18	16
Antigonish	18,715	17,830	810	85	115	89
Inverness	18,750	18,050	610	55	77	67

**Based on Statistics Canada classifications.

¹Outside of Halifax County is viewed as predominantly rural.

Source: Statistics Canada. 2007. Census 2006 Community profiles (see the Excel sheet for how to cite). Last column is based on special tabulations obtained from CIC.

In Table 7, the difference in total arrivals and those resident at the time of a census may be because some have left the country or for other provinces or simply relocated within the province. At the time of the 2006 census, about 67 percent of immigrants who had arrived over the past five years were still living in Nova Scotia (some may have moved in from other provinces). Halifax and Cape Breton, the two top population centres, lost

about 40 percent of them. On the other hand, Metro-adjacent areas (viewed as weak to moderately rural) had greater numbers of these new arrivals than were originally destined for them, and non-Metro-adjacent areas (viewed as strongly rural) lost only about 3 percent of such immigrants. However, among these areas, Annapolis, Pictou and Digby counties received more immigrants than those originally destined for them.

The last column of Table 7 shows the immigrant arrivals during 2006-10. Data on how many of these immigrants still reside in the province are not available. However, one can compare their distribution across the province with that of the 2001-06 arrivals. In 2001-06, about 82 percent of immigrants had declared Halifax as their destination in Nova Scotia, but in 2006-10, the percentage of such immigrants had dropped to 78 percent. Both Metro-adjacent and Non-Metro-adjacent areas showed gains in their percentage shares of immigrant inflows.

In summary, while on the whole immigrants to Nova Scotia show the same tendencies (albeit on a smaller scale) as immigrants to Canada, that is, they tend to move to major population centres characterized by ethnic clusters, new immigrants in Nova Scotia are also settling in smaller areas and rural towns. This change in the geographic distribution of immigrants may be attributed to the new initiatives adopted at community levels in smaller areas to attract and retain immigrant labour to meet shortages of professionals.

Box 5.7 Invest in Kings – Kings RDA

Smaller communities are using the new initiatives introduced by the provincial government in Nova Scotia to attract immigrants. One is Kings County in central Nova Scotia with a population of approximately 60,589, an area famous for its fruit crops (i.e., apples, vineyards), dairy farming and cattle ranching.

Kings RDA actively participates in the Nova Scotia Provincial Nominee Program (NSNP) through its “Community Identified Stream,” which is aimed at selecting individuals who have long-established connections to a Nova Scotia community, wish to live here permanently, and are employable and can contribute to the labour market and economy of our community. This stream is community driven. The applicant must have a Letter of Identification from an organization mandated by the Nova Scotia Office of Immigration before submitting an application to the NSNP. The final approval of an application comes from CIC. To date, 854 international applicants have received information on Kings County. Kings RDA has assisted 83 applicants under the Community Identified stream, with 27 having received permanent residency status to date.

In addition, under the “Invest in Kings” program, an initiative of the Kings RDA, Kings County is promoted within Canada and internationally as a great place to work, start a business and raise a family. It is also advertised as being a short drive to Halifax (Nova Scotia’s capital city) and the Halifax International Airport. Kings County appeals to people of all ages and backgrounds, and most find out about it through community newspaper advertising, community websites, international trade shows, NSNP and word of mouth. To date, 6,071 applicants have received information on Kings County, with 339 families moving to Kings as a direct result of the “Invest in Kings” program. The average family spends approximately \$50,000 to settle in Kings County (excluding housing costs). To date, the monetary growth from the “Invest in Kings” program equals \$16,950,000

Source: Kings Regional Development Agency (Kings RDA)

V.5 The retention of immigrants

Box 5.8 Summary Points

In Nova Scotia, five-year immigrant retention rates dropped from 86 percent in the early 1980s to about only 48 percent at the end of the 1990s. This was also the time when the province began to experience a shift in the source region mix of its immigrant inflows from Western Europe to Asia and Africa. The retention rate rose again in the last decade to 67 percent by the decade's middle and to about 69 percent towards its end. When accounting for in-migration of recent immigrants from other provinces, this rate rises to 88 percent. Refugees are the most likely to leave the province, while family class immigrants are the least likely to do so. In-migration rate of immigrants from other Canadian provinces also has increased in Nova Scotia.

If immigrants are to make a durable contribution to Nova Scotia, the province's success in retaining its immigrants is critical. Census-based data presented in Table 8 show five-year immigrant retention rates. These data show that retention of immigrants was a significant problem for the province during the 1990s, when the retention rate had fallen below 50 percent. Recent attempts at government and community levels have started to show results, however, and the retention rate rose to 67 percent by the middle of the last decade (see Table 8).

Table 8: Immigrant retention rates for Nova Scotia, 1986-2006*

Period	New immigrants arriving in Nova Scotia**	New immigrants residing in Nova Scotia at the end of period**	Retention rate (%)
	(1)	(2)	(3)=(2)/(1)×100
1981 – 1986	5896	5100	86
1986 – 1991	7208	5400	75
1991- 1996	15023	6490	43
1996 – 2001	12021	5745	48
2001-2006	10313	6900	67**

*Retention rates may be slightly higher than reported because no provision can be made for deaths among new arrivals. Other studies have shown that the ten-year immigrant retention rate in Nova Scotia in 2001 was only 40 percent. In a previous version of this report, rates were reported only for those aged 15 and above at the time of arrival based on census PUMF.

**Data for the final census years in each period used in columns 1 and 2 are only for the first five months. Source: Data in column (1) are based on PRDS – microdata, while those in column (2) are based on Canadian population censuses obtained from the following sources:

1. For 2001-2006 data, Statistics Canada Catalogue number 99F0009XCB-2001004.
1. For 1996-2001 data, Statistics Canada Catalogue number 97F0009XCB-2001004.
2. For 1991-96 data, Statistics Canada Catalogue number 93F0023XDB96003.
3. For 1986-91 data, Citizenship & Immigration *Recent Immigrants in the Halifax Metropolitan Area (Selected Charts) Census 1991* (October 2002).
4. For 1981-86 data, Statistics Canada population census 1986, PUMF-microdata.

Table 8 results are based on 2006 census data, which do not differentiate between immigrants who were originally destined to the province and those who arrived from other provinces. Neither do they differentiate among various immigrant classes. These differentiations are possible in the Longitudinal Immigrant Database (IMDB) compiled at Statistics Canada in collaboration with the Canada Revenue Agency (CRA) and CIC.

The IMDB is for immigrants destined for a particular Canadian province in a given year. They are followed for a 15-year period in Canada according to the information they provide while filing their tax returns, which includes province of residence at the time of filing. This database can be used to determine what percentage of immigrants destined for a particular province in a given year were living in another province at the time of filing. Separate calculations are also possible for refugees, two sub-classes of economic immigrants, i.e., business and skilled immigrants, and family class immigrants (principal applicants only). The latest taxation year for which the IMDB data are available is 2008, and the data are available for immigrants arriving over the period 1993-2007. Table 9 presents these data for Nova Scotia.

About 60 percent of all immigrants originally destined to Nova Scotia over the 15-year period, 1993-2007, had left the province by 2008, which represents a low retention rate of only 40 percent. However, this out-migration was partially offset by 18 percent, resulting from the in-migration of those originally destined to other provinces, for a net retention rate of 60 percent over the period 1993-2007. Among those originally destined to Nova Scotia, refugees are the most likely to leave, followed by skilled, business and family class immigrants (in that order). Skilled immigrants comprise most of those coming to the province from elsewhere in Canada.

To investigate the outcomes of recent immigrant retention initiatives undertaken in the province, the above data are also reported in Table 9 for recent immigrants, those originally destined to the province during 2003-07. About 31 percent of them had left the province by 2008, indicating a five-year retention rate of 69 percent, which is closer to the rate observed in Table 8 for immigrants arriving within five years of the 2006 census. Immigrants who arrived in other provinces of Canada during this period helped offset the out-migration rate by about 19 percent by moving into Nova Scotia, thereby resulting in the net retention rate of about 88 percent among recently arrived immigrants in Canada who settled in Nova Scotia. Compared to arrivals during the entire 1993-2007 period, out-migration rates among 2003-07 arrivals are lower for all classes of recent immigrants except for refugees, who continue to have the highest out-migration rate. However, their in-migration rate, from other provinces is also the highest among all classes. The province also received a large number of recent skilled immigrants from other provinces, resulting in their lowest out-migration rate (1.7 percent).

Table 9: Migration of immigrants destined for Nova Scotia

	Period of Arrival in Canada: 1993-2007							
	Number of immigrants					As percentage of numbers destined		
	Resident in 2008	Destined at landing	Out-migration*	In-migration**	Net out-migration	Out-migration	In-migration	Net out-migration
By category								
Family	5500	5165	965	630	335	18.68	12.20	6.49
Business (P.A.)	3945	2910	1115	80	1035	38.32	2.75	35.57
Skilled (P.A.)	4912	4372	1460	920	540	33.39	21.04	12.35
Other Econ	NA	NA	4845	1030	3815	NA	NA	NA
Refugee	3006	1771	1520	285	1235	85.83	16.09	69.73
Other	NA	NA	235	150	85	NA	NA	NA
Overall	10410	17460	10140	3090	7050	58.08	17.70	40.38
	Period of Arrival in Canada: 2003-2007							
	Number of immigrants					As percentage of numbers destined		
	Resident in 2008	Destined at landing	Out-migration*	In-migration**	Net out-migration	Out-migration	In-migration	Net out-migration
By category								
Family	2294	2194	300	200	100	13.67	9.12	4.56
Business (P.A.)	186	176	30	20	10	17.05	11.36	5.68
Skilled (P.A.)	1496	1471	340	315	25	23.11	21.41	1.70
Other Econ	NA	NA	305	270	35	NA	NA	NA
Refugee	1148	678	630	160	470	92.92	23.60	69.32
Other	NA	NA	80	50	30	NA	NA	NA
Overall	4710	5355	1680	1025	655	31.37	19.14	12.23

*Immigrants originally destined to Nova Scotia, now residing elsewhere in Canada.

**Immigrants originally destined to elsewhere in Canada, now residing in Nova Scotia.

Source: Special tabulations obtained from Statistics Canada based on Longitudinal Immigration Database for 2008 taxation year.

VI. IMMIGRANTS IN THE LABOUR FORCE OF NOVA SCOTIA

Immigrants represent a vital human resource that can bring major economic and other benefits to Nova Scotia. One way to assess how immigrants are doing in the economic sphere is to analyze their contributions to the quantity and quality of human capital in the province and how they compare to the native born in terms of both various labour market outcomes and the level of their dependence on social transfers. We examine these issues in turn.

VI.1 Labour force growth

Box 6.1 Summary Points

Immigrants are an important source of labour force growth in Nova Scotia. In fact, their contribution rose substantially from under 7 percent in the early 1980s to about 19-24 percent over the last decade.

Labour force growth is an increase in the quantity of human capital and, therefore, contributes to improving an economy's productive capacity and the standard of living of its residents in the long term. In Nova Scotia, labour force growth has shrunk dramatically since 1981. As Table 10 shows, while the labour force grew by almost 33,500 workers during 1981-86, it lost about 9,000 workers during 1991-1996. Since then, labour force growth has been modest but has not reached the growth levels of the 1980s. Indeed, the labour force would have grown even more slowly in the current century had there been no immigration. New immigrants accounted for only between 6 and 9 percent of labour force growth during the 1980s, but their contribution was much more substantial, averaging about 25 percent over the 1991-2001 period. Since then, their average contribution has stayed between 18 and 27 percent, according to the different measures shown in Table 10.

Table 10: Nova Scotia labour force net growth rate and contribution of recent immigrants to growth of provincial labour force, 1981-2010

Period	Total growth of labour force	Growth owed to new immigrants	Growth without new immigrants ¹	Immigrants' contribution to labour force growth (%)	
				(4a)=(2)/(3)x100 ²	(4b)=(2)/(1)x100 ³
	(1)	(2)	(3)		
1981-1986	33510	2090	31420	6.65	6.20
1986-1991	32610	2585	30025	8.61	7.90
1991-1996	-8950	2820	-11770	*23.96	31.50
1996-2001	10985	2350	8635	27.21	21.40
2001-2006	19510	3455	16055	21.52	17.71
2006-2010	20000	4200	15800	26.60	21.00

¹Attributed to natural growth and net interprovincial migration. New immigrants are those who arrived during the listed period.

²Measures percentage recent immigrants caused labour force to increase by virtue of their presence.

³Measures percentage of labour force growth contributed by recent immigrants.

*Measures percentage of labour force decline averted by new immigrants. Absolute value of Column (3) is used in calculation.

Source: For 1981-2001, based on Statistics Canada census catalogue number 97F0012XCB2001003. For 2001-2006, based on Statistics Canada census catalogue number 97564XCB2006008. For 2006-2010, based on Statistics Canada Labour Force Survey special tabulations obtained through CIC and Statistics Canada data sharing agreement. While data for the period 1981-2001 are comparable across periods, later data may not be comparable to the previous period because they are based on different sources.

VI.2 Rural-urban distribution of labour force

One component of immigrant attraction and retention initiatives undertaken by Nova Scotia is the attraction of immigrants to rural regions. The Provincial Nominee Program and community-based initiatives are used as tools to achieve this goal, which is included in Nova Scotia’s current immigration strategy. (See box entitled “Attracting New Farmers to Nova Scotia” as one example).

More immigrants are now settling in smaller areas and rural towns where they are contributing to the growth of the labour force. Information on the growth of the rural and urban labour force by immigrant status can be obtained from the Labour Force Survey, which has been collecting data on immigrant status since 2006. Table 11 shows the composition of the rural and urban labour force in Nova Scotia in 2006 and 2010. Note that the CMA / CA are viewed as urban areas, while non-CMA / CA are viewed as rural.

Table 11 data reveal that during 2006-10, the urban labour force in Nova Scotia grew by 5.6 percent, while the rural labour force grew by only 1.2 percent. A large part of this growth in both areas is attributed to the growth of the immigrant labour force, which grew by 18.4 percent in urban, and by 34.2 percent in rural, areas compared to only 4.6 and 0.3 percent growth, respectively, of the non-immigrant labour force.

	2006			2010		Percentage growth	
	CMA/CA	Non-CMA/CA		CMA/CA	Non-CMA/CA	CMA/CA	Non-CMA/CA
TOTAL	324.5	154.3		342.7	156.1	5.6	1.2
Immigrant	16.3	3.8		19.3	5.1	18.4	34.2
Non-immigrant	304.4	149.5		318.5	150	4.6	0.3

Source: Statistics Canada, Labour Force Survey, 2010, special tabulations.

Box 6.2 Attracting New Farmers to Nova Scotia Agriculture

The Department of Agriculture is partnering with the Nova Scotia Office of Immigration to attract immigrant farmers to rural Nova Scotia through the Provincial Nominee Program.

Agriculture Minister John MacDonell and Ramona Jennex, Minister of Immigration, announced today, October 18, 2010, \$260,000 in funding from the Community Development Trust to attract new producers to set up farming operations in Nova Scotia.

"We are looking to attract farmers to Nova Scotia who are a right fit for our province and agriculture industry," said Mr. MacDonell. "We will be talking to experienced producers who are interested in immigrating and setting up sustainable farming operations. This initiative allows us to strengthen our rural communities by creating good jobs and growing the economy."

The project includes developing detailed agriculture sector profiles, a website and a database of available farm land in Nova Scotia. It also involves hosting information sessions in targeted countries and preparing profiles of Nova Scotia and selected agricultural sectors.

The Office of Immigration will support the initiative by creating an Agri-food Sector Pilot stream as part of the Nova Scotia Nominee Program. This will provide a specific and efficient way to process applications from international farmers. After an evaluation, similar programs for other sectors will be considered in co-operation with provincial departments.

"Nova Scotia's agri-food sector has benefitted for generations from the expertise of immigrants," said Ms. Jennex. "This new stream provides another opportunity for the province to benefit from experienced and innovative farmers from around the world."

Ciro Comencini and Alessia Pulze and their children recently immigrated to Nova Scotia from Italy. They are operating a sheep dairy farm in Kennetcook, Hants Co., that will produce Italian cheese.

"I loved Nova Scotia the first time I saw it; it is a very beautiful place," said Mr. Comencini. "It is a good market for the cheese and a good place to grow the family."

Funding for the project is provided through the Community Development Trust Fund, a \$34.9 million program established in 2008 by the federal government to help communities and sectors experiencing economic challenges.

Source: Chronicle Herald October 18, 2010

Table 12 uses 2010 Labour Force Survey data to provide a breakdown of the rural and urban labour force by immigrant status, unemployment rate and gender. (For recent immigrants, these data cannot be interpreted because of their smaller numbers.) A

breakdown by gender is important because the decision to settle in rural and urban areas may differ between men and women for social and cultural reasons or because of the differential availability of social and health services or of economic opportunities that men and women may prefer. Furthermore, a family's decision to locate in an urban or rural area may reflect joint preference if both spouses are in the labour force.

About 20 percent of immigrant and 32 percent of non-immigrant labour force works in rural Nova Scotia. Compared to men, there is a slightly larger number of non-immigrant women in the urban labour force, while on the whole there are slightly fewer non-immigrant women in the provincial labour force. Among immigrants, this division is reversed, but again differences in the numbers of men and women are small. In the rural labour force, gender differences are much higher among non-immigrants and there are more men than women. However, among immigrants there are almost equal numbers of men and women. It is possible that some immigrant families with both spouses in the labour force settle in rural areas only after both have found jobs.

Table 12: Labour force and unemployment rates, immigrants and non-immigrants by rural and urban regions, Nova Scotia, 2010

	Rural (Non-CMA / CA)			Urban (CMA / CA)			Provincial		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Labour Force (thousands)									
Immigrants	2.7	2.5	5.1	10.4	8.9	19.3	13.1	11.3	24.4
Recent immigrants	0	0	0	2.2	1.7	3.9	2.4	1.8	4.2
Non-immigrants	78.9	71.1	150	157.9	160.6	318.5	236.7	231.7	468.5
Unemployment rate (%)									
Immigrants	0	0	9.8	6.7	6.7	6.7	7.6	6.2	7
Recent immigrants	0	0	0	0	0	12.8	0	0	11.9
Non-immigrants	12.8	10.1	11.5	9.6	7.2	8.4	10.6	8.1	9.4

Source: Statistics Canada, Labour Force Survey, 2010 (special tabulations). A zero value indicates either zero value or data suppressed by Statistics Canada for reasons of confidentiality.

The unemployment rates are higher in rural than in urban areas but lower among immigrants in both cases. Among non-immigrants, men face higher unemployment rates than women. (Data on the gender distribution of unemployment rates are not available.)

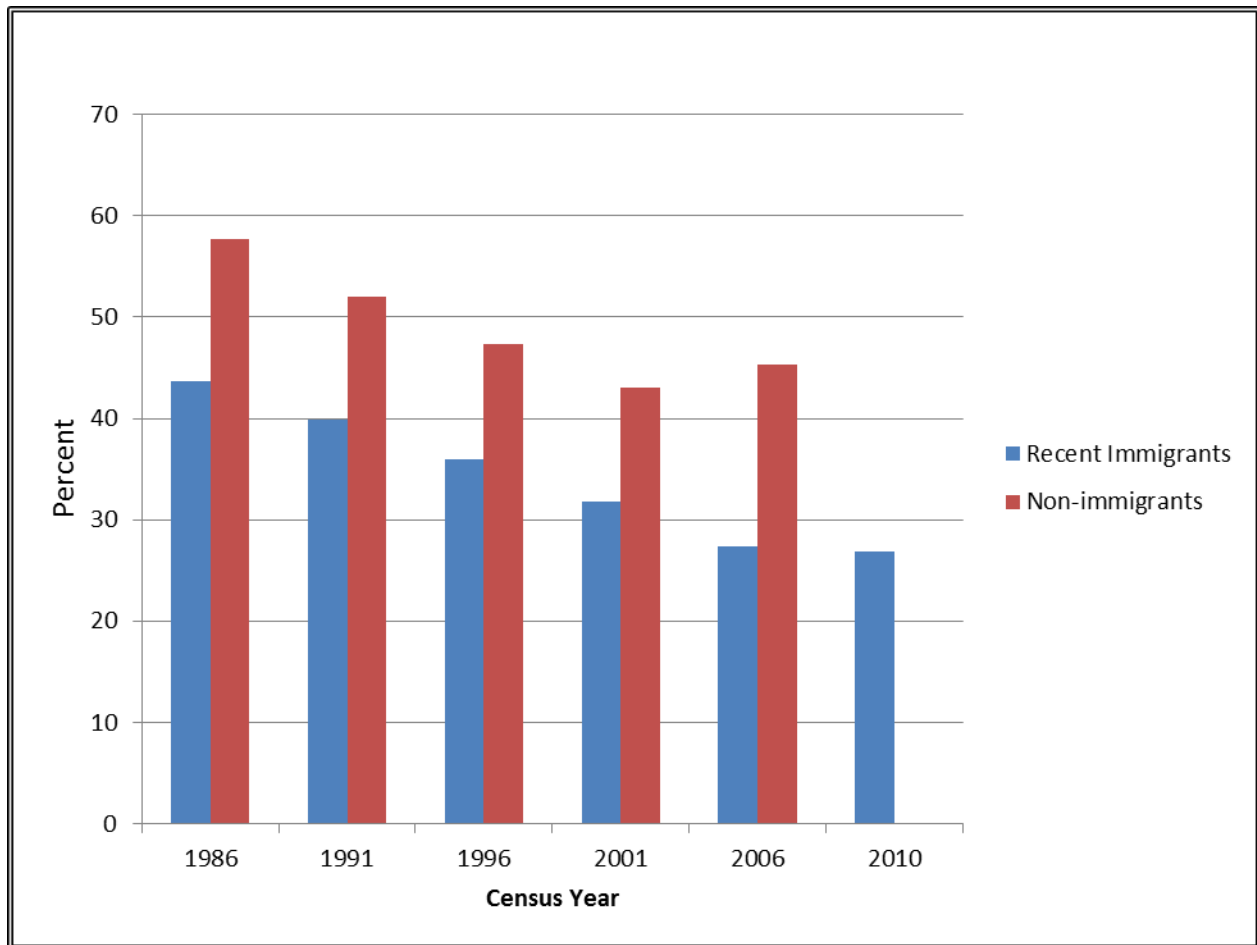
VI.3 Human capital

6.3 Summary Points

- In terms of human capital, the education level of immigrants to Nova Scotia compared favourably with that of non-immigrants over the 1981-2006 period.
- At the time of the 2001 census, about 45 percent of non-immigrants in Nova Scotia had acquired high school or less education, while this percentage was only 30 among recent immigrants (those who arrived during 1996-2001). Only 22 percent of those who arrived during 2001-05 came with high school or less education.
- A higher percentage of recent immigrants (46 percent) held a university degree than non-immigrants (13 percent). These percentages were up from 8 and 28 percent, respectively, in 1986. About 55 percent of new arrivals during 2001-05 held university degrees.

Economic growth and living standards are governed by more than increases in the quantity of human capital. The quality of that capital also matters. How do immigrants contribute to the growth in that quality? This is difficult to assess because data on the quality of human capital are difficult to come by. Typically, economists look at various schooling and labour market experience measures. This section compares the human capital characteristics of immigrants to Nova Scotia to those of non-immigrants by looking at schooling levels of the two groups. Charts 8 and 9 suggest that throughout the period 1981-2005, the educational attainment of immigrants coming to Nova Scotia compared favourably with that of non-immigrants. Smaller percentages of recent immigrants had high school or less education than did non-immigrant Nova Scotians. On the other hand, higher percentages of recent immigrants had university degrees than resident non-immigrants. Furthermore, since 1981, the percentages of recent immigrants arriving with high school or less education have declined, while the percentages of those arriving with university degrees have risen. The same holds true for non-immigrants.

Chart 8: Immigrants destined for Nova Scotia and non-immigrants with high school or less education, 1986-2011

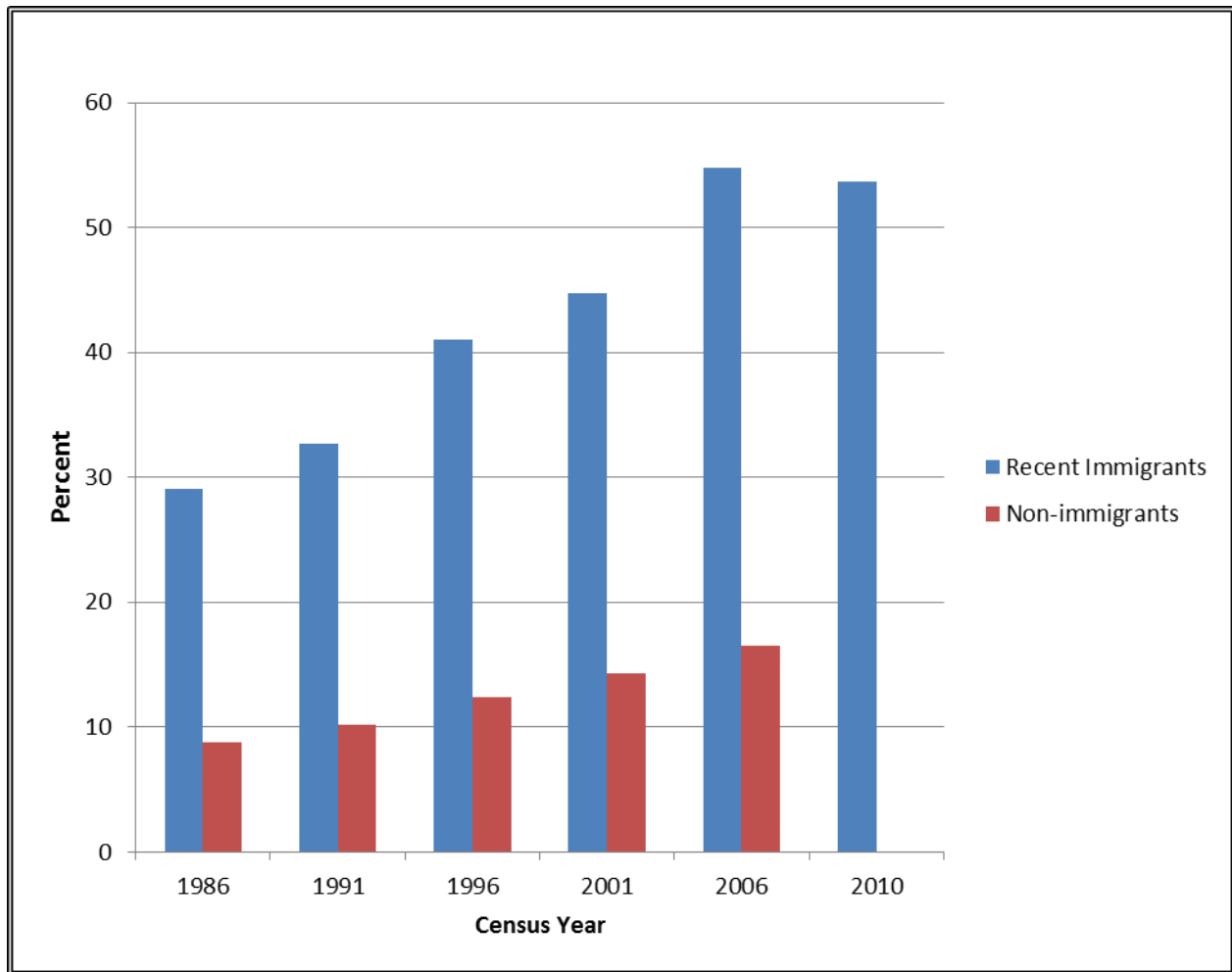


Note: Recent immigrants are those who arrived within five years of the census year.

Source: 1) For immigrant data until 2000: PRDS – microdata (CIC), for immigrants. Variables used: "prov", "ed_qua", "fage". High School or Less Education = None + Secondary or less. For 2001-2010: CIC, special tabulations.

2) Canadian population censuses (PUMF, 1986-2001, individual files) for non-immigrants. Variables used: "province or territories", "immigrant status indicator", "age", "highest level of schooling". For the 1986 census, "place of birth" is used instead of "immigrant status indicator" because the latter is not available to determine whether the individual is a non-immigrant. High School or Less Education = less than grade 5 + grades 5-8 + grades 9-13 + secondary school graduation certificate. For 2006, non-immigrant data are based on Statistics Canada census catalogue number 97-564-XCB2006008 (Canada, code01). Both the immigrant and non-immigrant data are for those 25 years or older.

Chart 9: Immigrants destined for Nova Scotia and non-immigrants with university degree, 1986-2001



Note and Source: Same as for Chart 8 above.

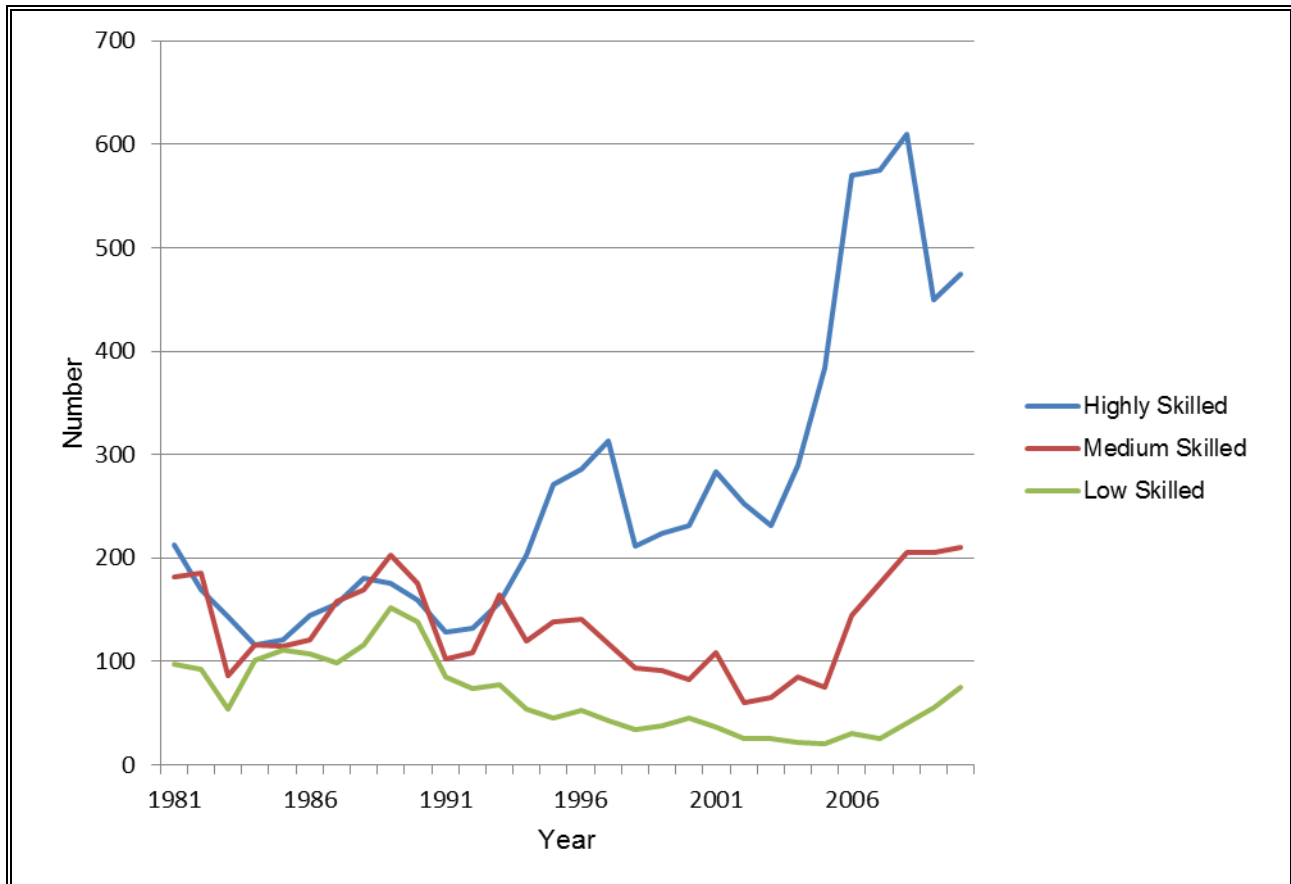
The findings of this section point to increasing skill levels all around among immigrants. More significantly, they show that the educational level of immigrants is generally superior to that of non-immigrants in Nova Scotia. As we note later in our discussion of economic immigrants to Nova Scotia, they are also engaged in high-skill occupations in greater proportions than non-immigrant Nova Scotians. Therefore, the human capital of immigrants makes a positive economic contribution to the province. However, while human capital characteristics represent a potentially higher economic contribution, that potential may not be fully realized if the quality of human capital that immigrants bring with them is not recognized. In the absence of the data in requisite detail, however, it is impossible to assess the extent to which this is happening. Nevertheless, actual labour market outcomes can give us a sense of how immigrants perform in those labour markets. This question of potential is addressed in the next subsection.

VI.4 Immigration of skilled immigrants to Nova Scotia

While Nova Scotia abides by national objectives that allow immigration on humanitarian grounds for refugees and others for family re-unification, paramount is the need to foster economic immigration suited to the long-term needs of the province. Immigration policy falls under federal jurisdiction, but all provinces can (and do) work out special arrangements for promoting immigration perceived to be in their interest. Quebec has had such an arrangement for many years, but smaller provinces have begun to engage in such initiatives only over the past ten years. Every Atlantic province operates a Provincial Nominee Program aimed at promoting economic immigration

CIC provides data on the occupational classifications of immigrants destined for the labour force according to the five classifications used by HRSDC defined in Table A5. These classifications are used in the present report to derive three occupational groups: “highly skilled”, “semi-skilled” and “low-skilled” immigrants. Chart 10 provides annual trends for these three occupational groups of immigrants destined for Nova Scotia’s labour force, showing that since 1992, highly skilled immigrants (managers and professionals, i.e., groups “O and “A”) comprised the highest proportion of those destined for the labour force in Nova Scotia. The sharp increase in their inflows since 2003 can be attributed to the province’s participation in the PNP since 2002.

Chart 10: Immigrants destined for Nova Scotia’s labour force by major skill classification, 1981-2010



¹National Occupational Classifications (NOC) were further classified as highly skilled = “O” and “A”; medium skilled = “B”, low skilled = “C” and “D”. Detailed definitions of NOC are provided in Table A5. Source: PRDS – microdata (CIC). Variables used: “NOC2”, “PROV”.

VI.5 Industrial distribution of labour force

Table 13 provides the industrial distribution of the employed immigrant and non-immigrant labour force in Nova Scotia based on the 2010 Labour Force Survey. While 80 percent of non-immigrants are employed in the services-producing sector, a slightly higher percentage of immigrants, about 87 percent, work in this sector. The trade sector is the most popular employment sector among non-immigrants, while health care and social services is the largest employer of immigrants. Compared to non-immigrants, larger percentages of immigrants are also employed by educational services; professional, scientific and technical services; and accommodation and food services. Recent immigrants are largely employed in the services-producing sector. It is not possible to interpret their detailed distribution, however, mainly because of their smaller numbers.

Table 13: Immigrant and non-immigrant labour force by industry of employment, Nova Scotia, 2010.

	Non-immigrants	All immigrants	Recent immigrants
Total employment	424.5	22.7	3.7
Goods-producing sector	83.1	2.9	0
Agriculture	5.5	0	0
Forestry, fishing, mining, oil and gas	11.6	0	0
Utilities	4	0	0
Construction	30.7	1.2	0
Manufacturing	31.3	1.1	0
Services-producing sector	341.4	19.7	3.3
Trade	72.9	2.9	0
Transportation and warehousing	17.5	0.9	0
Finance, insurance, real estate and leasing	23	1	0
Professional, scientific and technical services	20.4	2.4	0.6
Business, building and other support services	22	1.3	0
Educational services	30.5	2.5	0
Health care and social assistance	64.7	3.4	0
Information, culture and recreation	18	1	0
Accommodation and food services	26	2	0.7
Other services	17.5	0.8	0
Public administration	29	1.4	0

Source: Statistics Canada, 2010, Labour force Survey (special tabulations). A zero could indicate no employment or data suppressed by Statistics Canada for reasons of confidentiality.

VI.6 Occupational distribution of labour force

Table 14 provides information about the occupational distribution of immigrant professionals in 2010. These data are also based on the 2010 Labour Force Survey. Sales and services occupations are the most popular among immigrants and non-immigrants. For non-immigrants, this is followed by trade, transport and equipment operation. Among immigrants, other major choice occupations include business, finance and administrative occupations; management; natural and applied sciences; trade, transport, equipment operation; and health. In short, while non-immigrants tend to be concentrated in fewer occupations, the occupational distribution of immigrants is more widespread. Unfortunately, the distribution of recent immigrants cannot be interpreted because of their smaller numbers.

Table 14: Occupational distribution of non-immigrants and immigrants, Nova Scotia, 2010 ('000)

	Non-immigrants	All immigrants	Recent immigrants
All occupations	424.5	22.7	3.7
Management	38.8	3.1	0
Business, finance and administrative	71.8	3.3	0.7
Natural and applied sciences and related occupations	25.2	2.7	0.6
Health	36.8	2	0
Social science, education, government service and religion	36.6	2.7	0
Art, culture, recreation and sport	11.7	0.7	0
Sales and service	110	4.9	1
Trades, transport, equipment operators and related	62.2	2.1	0
Occupations unique to primary industry	16.8	0.6	0
Occupations unique to processing, manufacturing and utilities	14.5	0.6	0

Source: Statistics Canada, 2010 Labour force Survey (special tabulations). A zero could indicate either no employment or data suppressed by Statistics Canada for confidentiality reasons.

Data presented in Tables 13 and 14 suggest that in Nova Scotia, immigrant workers are in demand in all occupations but in selected employment sectors.

VI.7 Labour market outcomes

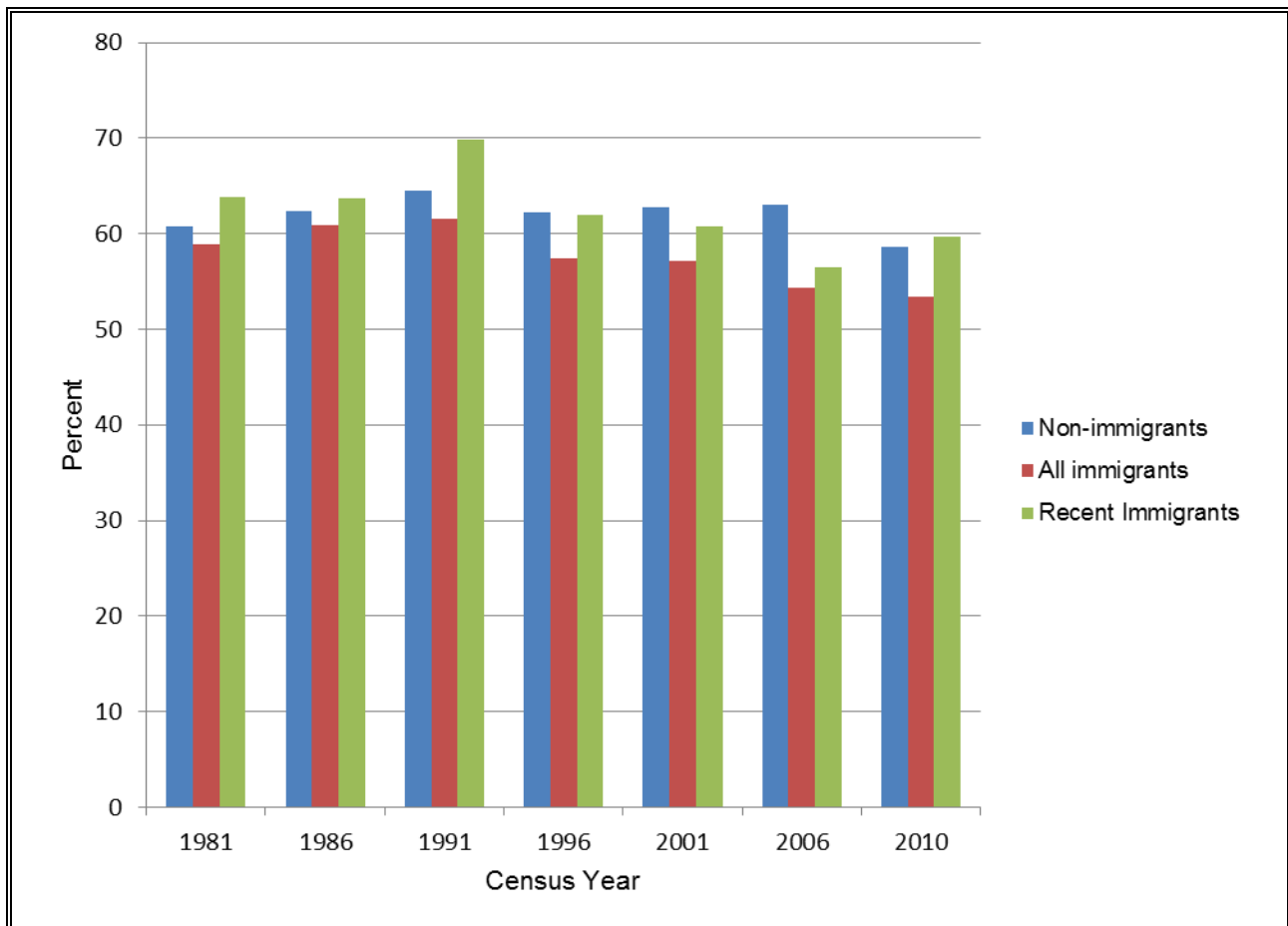
6.4 Summary Points

- Labour force participation rates (LFPR) of immigrants are generally below those of non-immigrants. However, LFPR of recent immigrants are higher because they are younger than non-immigrants. Their higher LFPR is also an indicator of an immigrant's motivation to be a productive member of the labour force.
- The unemployment rates remained the lowest among the overall immigrant population throughout the period but highest among recent arrivals. However, over time, the gap in the unemployment rate between recent immigrants and non-immigrants has narrowed.
- Over the last decade, unemployment rates dropped for all population groups in Nova Scotia.
- Recent immigrants depend less on government transfer payments for income support than both non-immigrants and immigrants in general.

Chart 11 displays labour market participation rates among non-immigrants and immigrants during 1981-2010. Over the 1981-2001 interval, labour force participation rates of non-immigrants averaged 2-5 percentage points higher than those of the overall

immigrant population aged 15 and over. The falling participation rates of recent immigrants since the mid-1990s until 2006 may be due to larger enrolments of youth among them attending post-secondary institutions as full-time students. Some evidence, based on the author's observation of university enrolment in Halifax universities, suggests a rising population of students from the Middle East. These students are from either Middle Eastern families or those of expatriates who lived in the Middle East but recently migrated to Canada. (Children of expatriates in many Middle Eastern countries are prohibited from attending universities there.) Since 2006, larger numbers of immigrants have arrived in the province from the United Kingdom and United States (see Table 6, discussed earlier). Youth among these immigrants are likely to have acquired their studies in their countries of origin and their credentials are recognized in Canada so are more likely to join the labour force on arrival than immigrants arriving from other parts of the world. However, a systematic research study on this topic could reveal more concrete information about differential labour market participation rates among recent immigrants identified by their country of origin.

Chart 11: Nova Scotia labour force participation rates, immigrants and non-immigrants, 1981-2010.



*Those who arrived within five years of the census date.

Source: For 1981- 2001, based on "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 number 97F0012XCB2001003. Data are reported in Table A4. For 2006, Statistics Canada, 2006 Census of Population, Statistics Canada catalogue no. 97-560-XCB2006025 (Nova Scotia / Nouvelle-Écosse, Code12). For 2010, Statistics Canada, Labour Force Survey 2010 (special tabulations).

Chart 11 also shows that the labour force participation rate among the entire immigrant population was lower than that among non-immigrants throughout the period, which can be attributed to differences in the age distributions of the two groups. Most immigrants in the province arrived before 2001, and the composition of the retirement-aged population (those over 65) is higher among them. One study, using 2006 census data for Nova Scotia (Akbari, 2009), found that when the age distribution of immigrants was adjusted to match that of non-immigrants, immigrants' labour force participation rate exceeded that of non-immigrants because an immigrant was likely to remain in the labour force longer than a non-immigrant. Higher motivation to join the labour force, which is also a determinant of the migration decision, could be a rationale for this result.

The labour force participation rates can also vary between demographic groups due to their gender composition. In general, women may have lower participation in the labour force than men do because of many reasons. For example, women may have interruptions in their labour force activity as they traditionally undertake family responsibilities (such as child bearing) at different points in their life cycle. They may also face labour market discrimination. Hence, further insights into the above results can be gained by obtaining a gender distribution of labour force participation rates for immigrants and non-immigrants. This is done in Table 15 using the most recent Labour Force Survey data of 2010.

	Male	Female
Non-immigrants	68.52	61.10
All immigrants	64.21	51.13
Recent immigrants	77.42	58.10

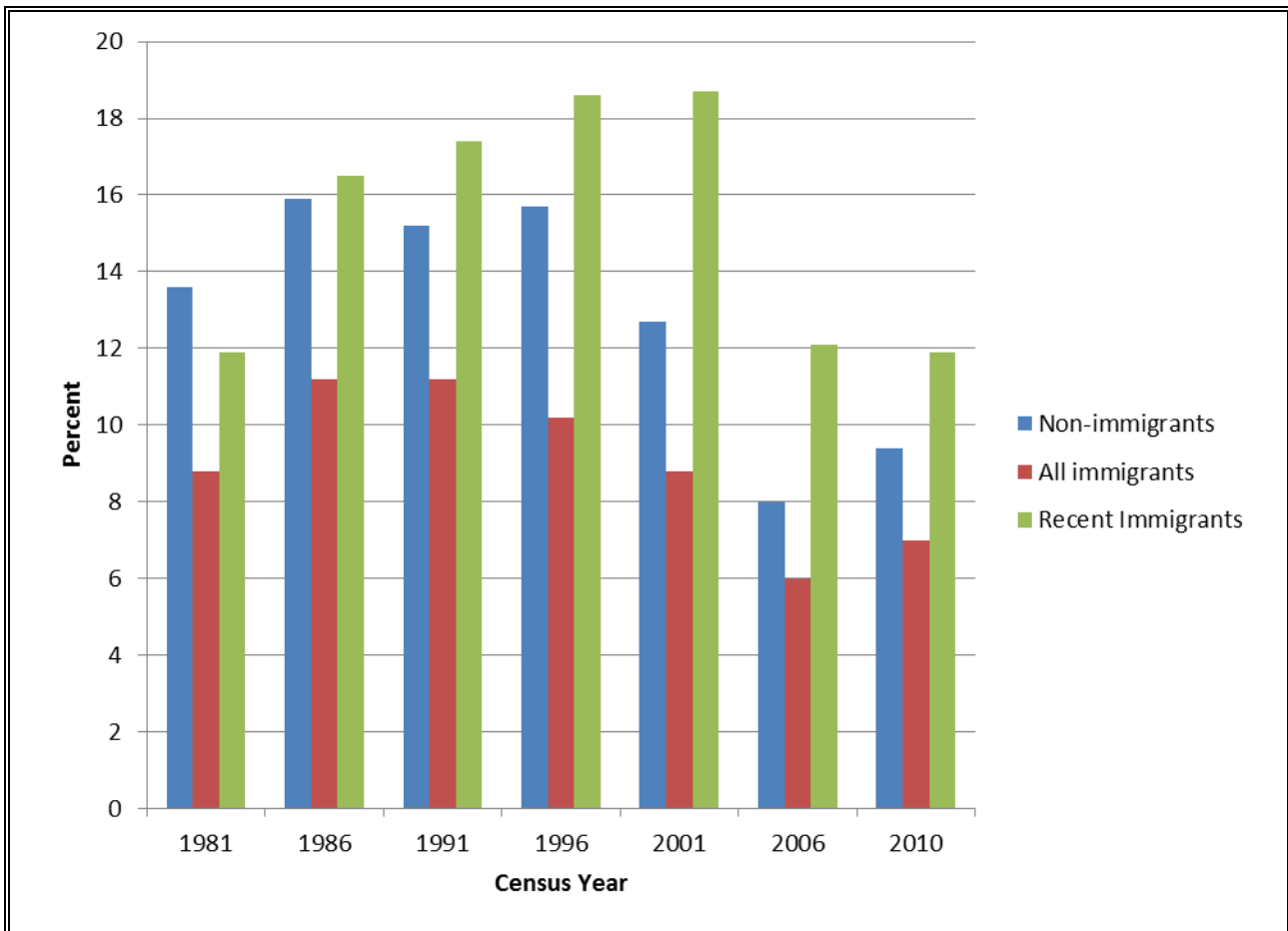
*Reported for population aged 15 and above.

Source: Based on Labour Force Survey, 2010 (special tabulations).

Table 15 data clearly indicate higher labour force participation among men in all three groups. While the rate is lower among all immigrants than among non-immigrants, men among recent immigrants tend to have higher participation rate, perhaps because most of them are younger at arrival in Canada. For similar reason, women’s participation rate among recent immigrants is closer to that among non-immigrants than it is for women in the all immigrant group.

Chart 12 gives the unemployment rates for immigrants and non-immigrants from 1981-2010. Although the unemployment rate among overall immigrants has generally been substantially lower than that of non-immigrants, recent immigrants experienced significantly higher unemployment rates than non-immigrants. However, their unemployment rate in the last decade has dropped as it has for other population groups. Their unemployment rate was the highest relative to non-immigrants at the time of the 2001 census. Most immigrants who arrived during 1996-2001 had come from East Asia and the Middle East and are known to have had difficulty getting their educational credentials recognized in Canada. As was shown earlier, immigrants from the United Kingdom and the United States dominated the list of top five immigrant source countries in the last decade. As these immigrants have a similar educational and cultural background as Canada’s, they face less difficulty in integrating into labour markets. However, more than half of immigrants to the province also originate in other countries with different educational and cultural backgrounds. As a result, it is not clear whether the drop in unemployment rate observed for arrivals in the last decade can be attributed to the changing composition of source countries. A separate analysis of the incidence of unemployment rates among immigrants arriving from different countries will permit more insights into these results.

Chart 12: Unemployment rates in Nova Scotia, immigrants and non-immigrants, 1981-2010.



Note: Recent immigrants are those who arrived within five years of the census year.
 Source: 1) For 1981-2001: based on "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 to 2001 Censuses - 20% Sample Data". Ottawa: Statistics Canada, March 25, 2003. Census of Canada. Catalogue number 97F0012XCB2001003, 2). For 2006, Statistics Canada, 2006 Census of Population, Statistics Canada catalogue no. 97-560-XCB2006025 (Nova Scotia / Nouvelle-Écosse, Code12). For 2010, Statistics Canada, Labour Force Survey 2010 (special tabulations).

One important issue in the labour market outcome of immigrants is credential recognition. It is argued that immigrants from certain countries such as those from the developing 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 Nova Scotia of not fully benefiting from the human capital of its new residents. Current data and time restrictions do not permit a detailed analysis of these issues, however, some light can be shed by analyzing some broad labour market

performance indicators using 2006 census-based data. These indicators are reported in Table 16 for those who finished their post-secondary education in a different country. Due to lack of data, these indicators are reported for the total population regardless of immigrant status. It is found that those who obtained their post-secondary education outside of Canada generally have lower labour force participation and employment rates than those who obtained their education in Canada. Unemployment rates are also slightly lower among the foreign degree holders. However, data analyzed by the countries where education was obtained yield some mixed results. Those who finished their post-secondary education in India, Pakistan or South Korea have higher unemployment rates (higher than 10 percent), while all others have lower rates, regardless whether they obtained their education in an English-speaking country.

Table 16 results are general and do not account for any underemployment among immigrants, which should be addressed in a separate study. One should also analyze any differences in labour market incomes by countries where degrees were granted.

Table 16: Labour force activity of total population by location of post-secondary education, Nova Scotia, 2005

Location of study (1)	Participation rate, % (1)	Employment rate, % (2)	Unemployment rate, % (3)	Labour force(4)
Overall	62.9	57.2	9.1	476120
No post-secondary certificate, diploma/ degree	51.9	45.4	12.4	194840
Post-secondary certificate, diploma/ degree	73.8	68.7	6.9	281285
Inside Canada	74.6	69.5	6.9	268130
Outside Canada	60.7	56.6	6.7	13155
United States of America	63.8	60.5	5	5245
United Kingdom	50.3	47	6.2	2425
India	63.2	57.1	10.7	420
Philippines	82.1	76.9	6.2	160
China, People's Republic of	67.5	63.3	6.2	405
Germany	54.6	52.7	3.6	560
France	68.3	65.1	4.7	215
Poland	76.2	75.2	2.5	400
Pakistan	71.4	57.1	20	100
Korea, South	38.3	36.2	11.1	90
Other	63.6	57	10.4	3125

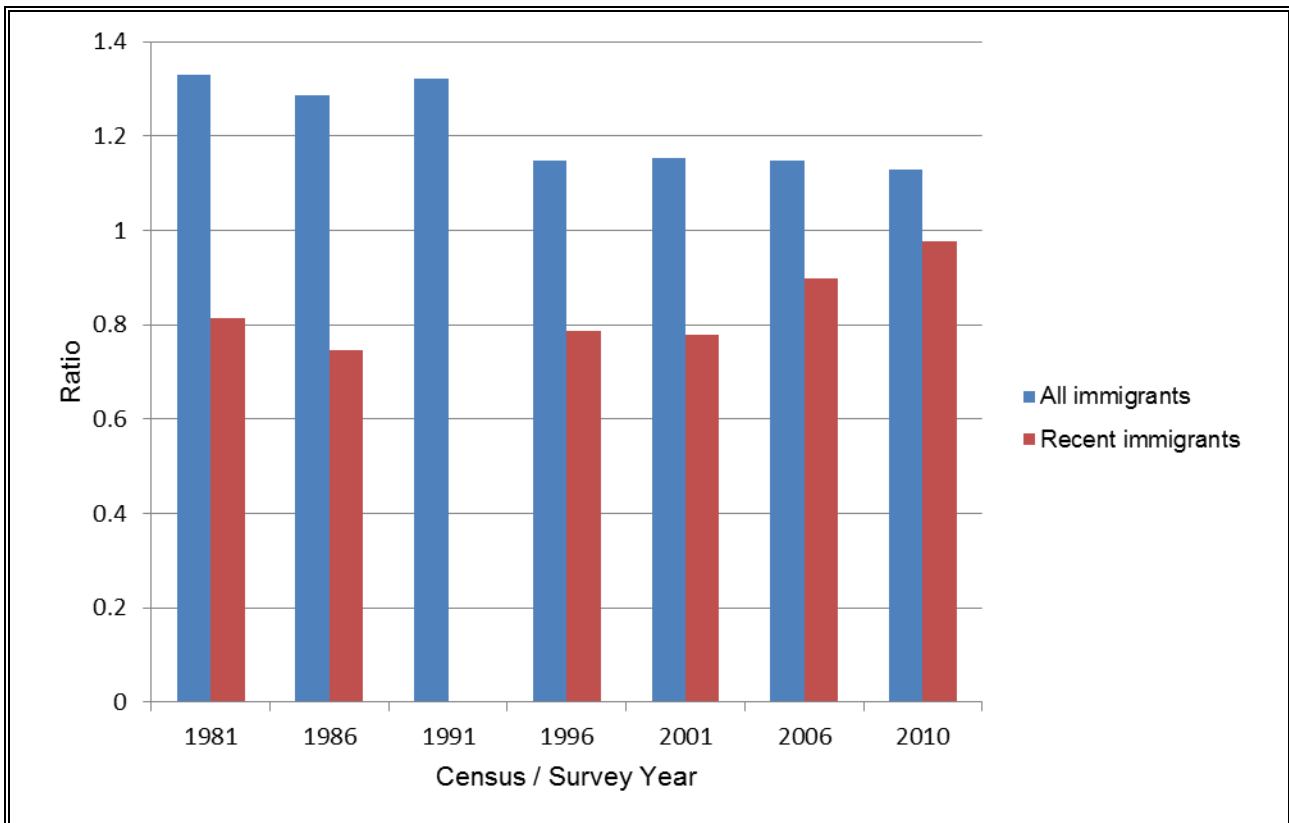
Source: Author's calculations using provincial data based on Statistics Canada - 2006 Census. Catalogue Number 97-560-XCB2006025. For detailed notes, please see the publication on www.statcan.gc.ca.

Notes:

1. Refers to where the highest post-secondary certificate, diploma or degree was completed.
2. Percentage of population 15 and over in the labour force.
3. Percentage of population 15 and over employed.
4. Percentage of labour force unemployed.
5. Population 15 and over employed or unemployed.

Turning next to employment earnings, Chart 13 suggests that over the entire 1981-2010 period, an average employed immigrant earned a higher income than an average non-immigrant (employment income ratio higher than unity in Chart 13 means immigrants earned more than non-immigrants). However, the employment earning of recent immigrants has been consistently lower than that of non-immigrants (i.e., their employment ratio has been lower than unity). This earning gap widened from 19 percent in 1981 to about 22 percent in 2001. In the last decade, the gap narrowed, with a recent immigrant earning more than 90 percent (an earning gap of less than 10 percent) of what a non-immigrant earned. As was discussed in relation to labour force participation and unemployment rates, one explanation is that a higher composition of immigrants from the United Kingdom and the United States may have generated these results. However, given that most immigrants originate in other countries with different educational and cultural backgrounds, a separate analysis of immigrants' earnings according to their country of origin will provide more insights to these results.

Chart 13: Employment income ratios of all immigrants and recent immigrants to non-immigrants, Nova Scotia, 1981-2010



Note: Recent immigrants are those who arrived within five years of the census year. Data on recent immigrants in the 1991 census were not available in the census PUMF for Nova Scotia.

Source: For 1981 to 2006, Special tabulations by the author based on Canadian population censuses (PUMF, 1981-2006, individual files). For 2010, Statistics Canada Labour Force Survey, 2010 (special tabulations).

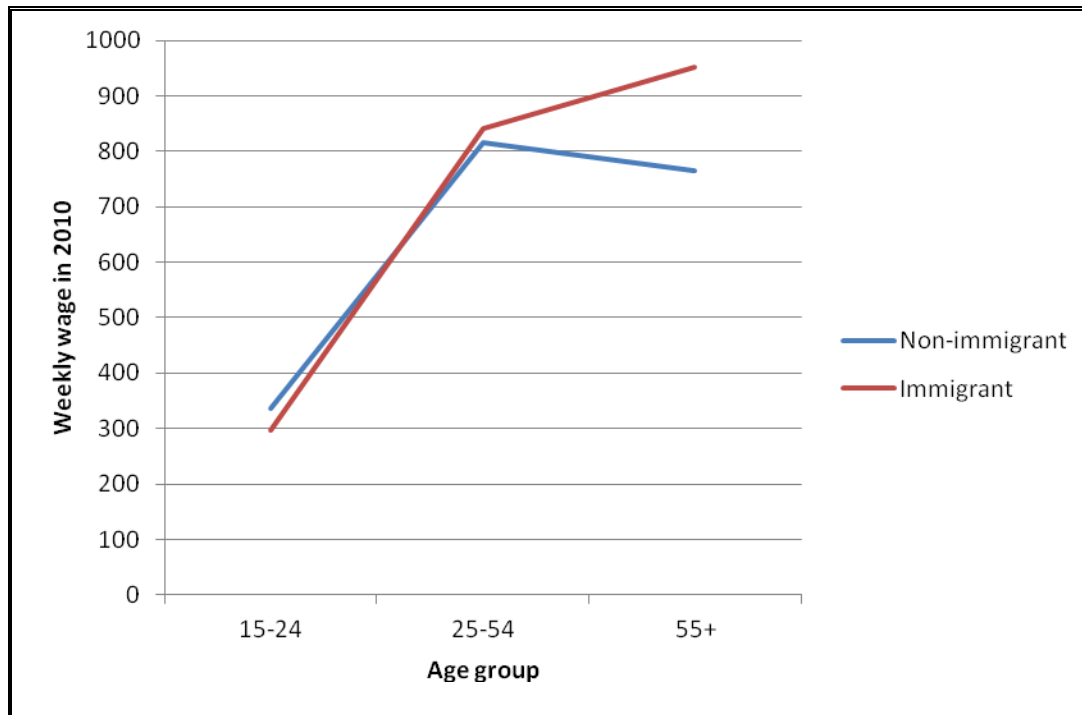
When comparing an immigrant’s earnings with those of a non-immigrant, analysts often control for differences in their demographic and labour market characteristics, such as age, gender, experience and education, which are major determinants of earning differences between individuals. They also examine changes in immigrant earnings relative to immigrants’ length of stay in Canada to determine how long it takes for an immigrant in Canada to earn the same income as a non-immigrant. This analysis helps explain the labour market integration of immigrants. A detailed analysis of this issue can be conducted in a separate research study by using the 2006 Canadian census data or the Labour Force Survey data (questions on immigrant status of respondents were introduced in LFS from 2006). Some broad patterns are discussed below based on the 2010 Labour Force Survey data.

To illustrate those patterns, we first provide a comparative analysis of the earnings of an average immigrant and non-immigrant by controlling for differences in their ages. Chart

14 displays the weekly age-wage profile of an immigrant and a non-immigrant resident of Atlantic Canada aged 15 years and over based on labour market earnings in 2010. These profiles are based on the earnings of different individuals in the survey, 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 challenges in labour 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 these age-earnings profiles plotted in Chart 14 should be interpreted with some caution.

Despite the above caveats, the shapes of the earning curves in Chart 14 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 older. Earnings then decline at retirement. It is observed that an average immigrant's earnings when in the youngest age group are slightly lower than those of a non-immigrant but rise faster and exceed those of a non-immigrant after age 24. Thus, the average earnings results for 2010 reported in Chart 10 (13?) may be viewed as stable. Over the life cycle, then, an average immigrant in Nova Scotia earns higher employment income than a non-immigrant.

Chart 14: Age-wage profile of an immigrant and a non-immigrant resident of Nova Scotia, 2010



Source: Statistics Canada, Labour Force Survey, 2010, special tabulations based on B20/20 files provided by Statistics Canada.

Table 15 results, discussed earlier, showed that men comprise a slightly higher percentage than women in the immigrant and non-immigrant labour force of Nova Scotia, and that the labour force participation of men and women in the all immigrant group and of women in the recent immigrant group is lower than that of non-immigrants. This differential gender distribution of labour force participation can have its implications on earnings of immigrants and non-immigrants. For example, it is well known from the economic literature that women's earnings fall below those of men in Canada for a variety of reasons, including differential human capital accumulation, disruptions in labour force participation of women over their life cycle and labour market discrimination against women. In addition, immigrant status could also affect the earnings of women. The impacts of these factors can be analyzed in a detailed study. Table 17 provides only a broader picture by presenting the earnings of men and women in different age groups as permitted by the 2010 Labour Force Survey data. Again, for each demographic group, not all data are available because of suppression by Statistics Canada owing to smaller numbers.

Table 17 data reveal, as expected, lower earnings of women than men by immigrant status and in all age groups. However, overall, immigrant women earn more than non-immigrant women. When analyzed by age groups, their earnings are either similar to or higher than those of non-immigrant women. Also, immigrant men earn more than non-immigrant men in all age groups considered.

In summary, the earlier results that immigrants earn higher incomes than non-immigrants in Nova Scotia apply to both men and women. A future study could investigate the reasons for these results.

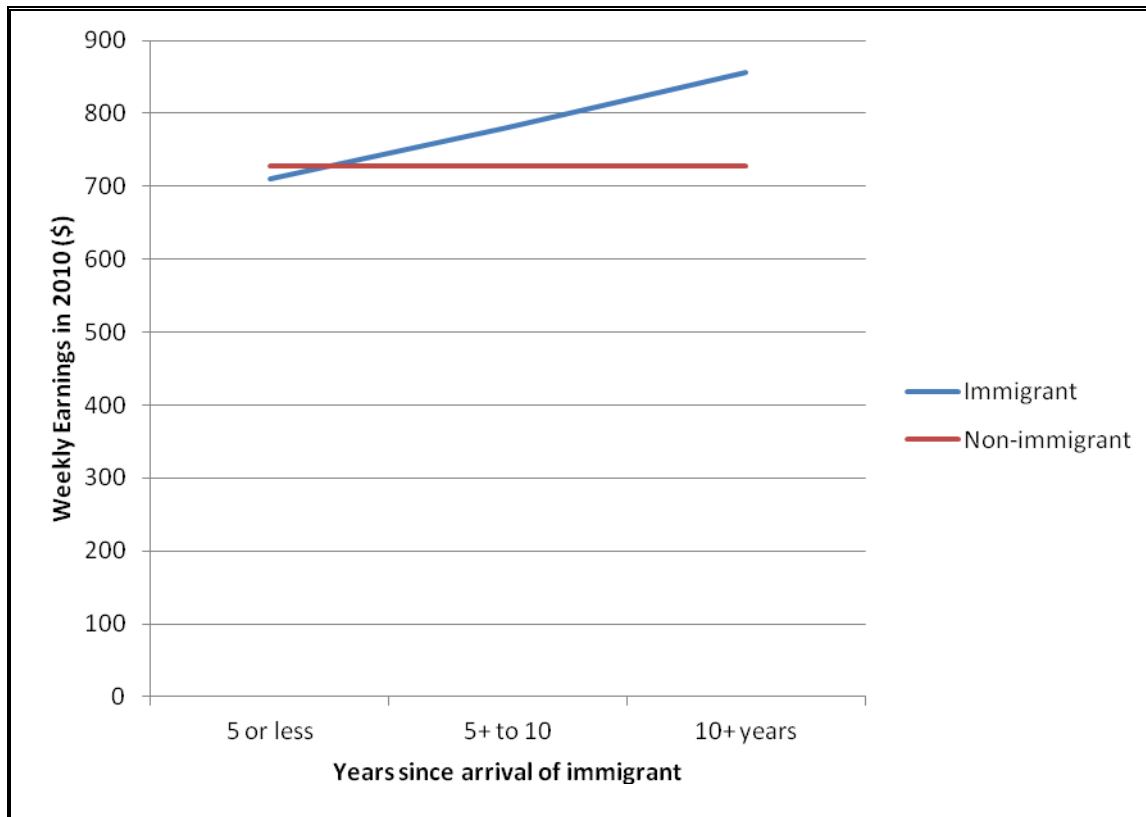
Table 17: Average weekly earnings of immigrants, recent immigrants and non-immigrants by age group and gender, 2010.

Immigrant Status	Gender	Earnings and no. of Employees	Age Group			
			15+	15-24	25-54	55+
Immigrant	Male	Earnings	952	NA	962	1114
		No. ('000)	8.8	0.7	5.5	2.6
	Female	Earnings	684	280	717	766
		No. ('000)	8.6	0.9	5.4	2.2
	Both	Earnings	820	297	840	952
		No. ('000)	17.4	1.6	10.9	4.8
Recent Immigrant	Male	Earnings	826	NA	NA	NA
		No. ('000)	1.8	NA	NA	NA
	Female	Earnings	553	NA	NA	NA
		No. ('000)	1.3	NA	NA	NA
	Both	Earnings	710	NA	NA	NA
		No. ('000)	3.2	NA	NA	NA
Non-immigrant	Male	Earnings	827	382	928	890
		No. ('000)	175.4	30.3	115	29.7
	Female	Earnings	636	292	720	642
		No. ('000)	194.4	32.3	132.3	29.7
	Both	Earnings	727	335	817	766
		No. ('000)	369.8	62.6	248	59.4

Source: Statistics Canada, Labour Force Survey, 2010, special tabulations.

Immigrants' earnings are also affected by their length of stay in Canada. A newcomer lacks Canadian labour market experience and information about availability of jobs and workplace culture, factors that may result in an underutilization of skills, thereby adversely affecting labour market performance, which could then result in a lower income earned. Chart 15 plots the weekly 2010 labour market earnings of an immigrant according to his/ her period of arrival in Canada and compares them with those of a non-immigrant. Immigrants who arrived during 2006-10 were the most recent immigrants to report 2010 income earned in Canada, which was observed to be lower than that of non-immigrants. However, all earlier entry cohorts had higher incomes. To summarize, an average immigrant in Atlantic Canada earns the same labour market income as a non-immigrant five years after arrival. When more data are available, incomes of various immigrant entry cohorts can be compared by controlling for education, ethnicity, gender and country of origin.

Chart 15: Average weekly wages of an immigrant by period of arrival, and a non-immigrant, Nova Scotia, 2010.

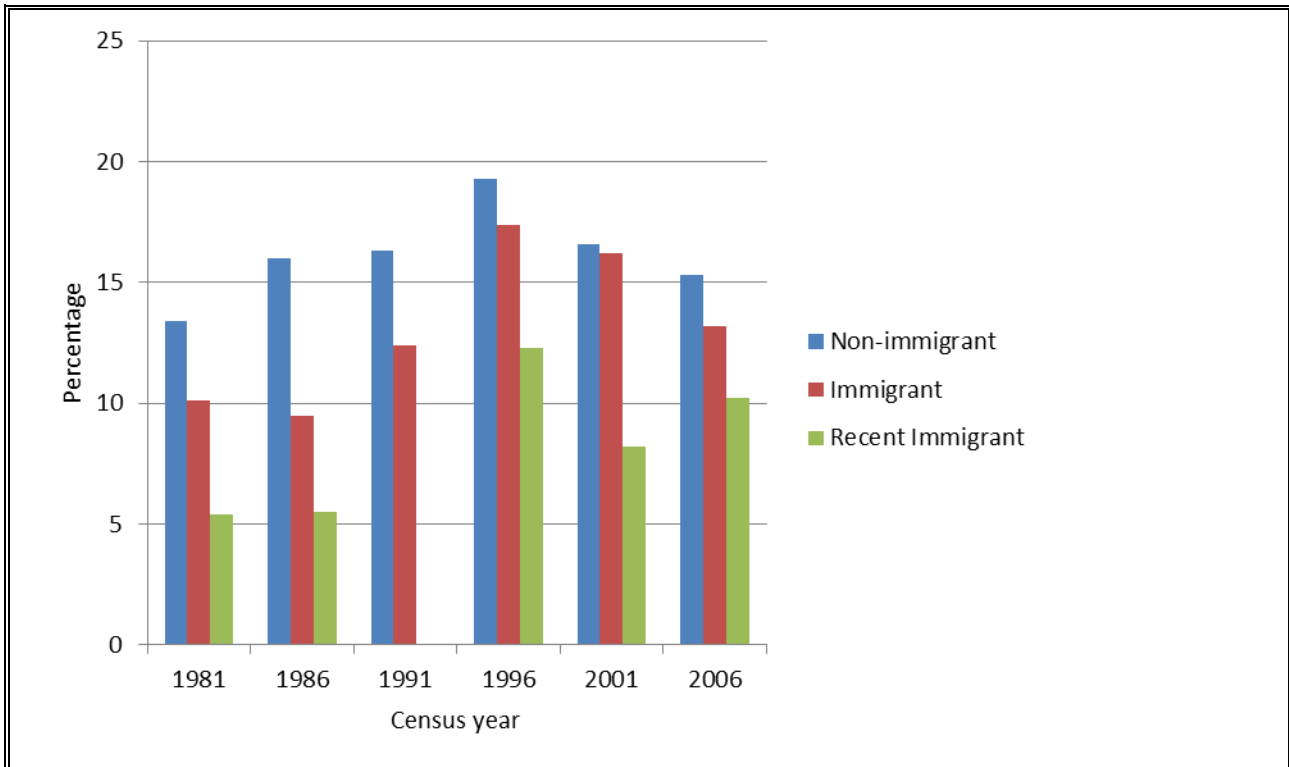


Source: Statistics Canada, Labour Force Survey, 2010, special tabulations.

A common public misperception about the economic impact of immigrants is that they tend to rely more on government transfers, such as income assistance, employment insurance benefits, welfare payments and old age security income. Rather, that immigrants have higher employment incomes suggests that their reliance on government transfer payments would be lower, as confirmed in Chart 16, which provides data until the middle of the last decade (later data are not available). In fact, immigrants overall, as well as recent immigrants, received lower percentages of total incomes as government transfers than did non-immigrants throughout the period. A large component of government transfer incomes is age related. For example, income received in the form of Old Age Security and the Canada/Quebec Pension Plan is available only to those 60 and over. Since most immigrants are young at the time of arrival, they do not become eligible for such transfer incomes for a long time after arrival in Canada. Another component of government transfer payments is employment insurance income, which 1) is available only to those who have worked for a certain number of weeks in Canada, 2) supplements the income of the unemployed who contributed to the program while employed, and 3) is determined on the basis of the contribution made by the recipient when he/she was employed and by his/her employer. Also, as recent immigrants may not have accumulated sufficient work experience in Canada and may

not have contributed enough into the program, many are not be eligible to receive employment insurance.

Chart 16: Percentage of total income received as government transfers by immigrants and non-immigrants in Nova Scotia, 1981-2006



*Those arriving within five years of the census year. Source: For 1981- 2001, special tabulations based on Canadian population censuses (PUMF, 1981-2001, individual files). For 2006: Statistics Canada 2006 census of population, Statistics Canada Catalogue number 97-564-XCB 2006008 (Canada, Code 01). Data on recent immigrants in the 1991 census were not available in the census PUMF for Nova Scotia.

Overall, the evidence presented in this section suggests that labour market outcomes for immigrants are generally superior to those of non-immigrants but tend to be worse for recent immigrants. However, over the last decade, the outcomes improved for recent immigrants as their labour market indicators became closer to those of non-immigrants. On the other hand, recent immigrants rely less on social transfers for income support than both the native born and immigrants in general.

To summarize, the analysis in this section reveals that an average immigrant in Nova Scotia has strong labour market outcomes. In 2010, an immigrant’s unemployment rate was lower than it was in 2001 and was also lower than that of a non-immigrant. In the case of a recent immigrant, the unemployment rate gap with non-immigrants diminished in 2010. A resident immigrant also earned about 10 percent more income in the labour market than did a non-immigrant in that year. A recent immigrant earned 12 percent less than a non-immigrant in 2010, while in 2001, this earning gap was 22 percent. An immigrant’s income rises faster than that of a non-immigrant over his/her life cycle and exceeds a non-immigrant’s income five years after arrival. Finally, immigrants are less likely to rely on government transfers than do non-immigrants.

VII. INTERNATIONAL STUDENTS IN NOVA SCOTIA

Box 7.1 Summary Points

Most international students in Nova Scotia are university students, who represent a potential source of highly skilled immigrants for the province. Their annual inflows have been increasing slowly since 2001. In 2010, most international students came from China. Saudi Arabia, Korea, the United States and India are also among the top five source countries of international students in the province. The most remarkable increase is in the number of students from Saudi Arabia, whose numbers rose from 50 in 2001 to 1,166 in 2010.

In smaller provinces like Nova Scotia, international students play two important roles. First, they are viewed as potential new immigrants. International graduates are “young, with advanced English language skills, with fully recognized qualifications, locally relevant professional training and a high degree of acculturation”.⁷ These characteristics are believed to facilitate integration into both the labour market and the social sphere. Second, because most international students are university students, their presence in Nova Scotia helps offset some of the decline in enrolment resulting from the decline in 1) the domestic university-aged population (18-24 age group) by 24 percent since 1985, and 2) university enrolment rates among the university-aged population (from 25 percent in 2002 to 21 percent in 2010).⁸

On average, according to CIC, 15-20 percent of international students can be expected to eventually settle and work in Canada (data presented by Martha Justus, CIC, at the 11th International Metropolis Conference in Lisbon, 4 October 2006).

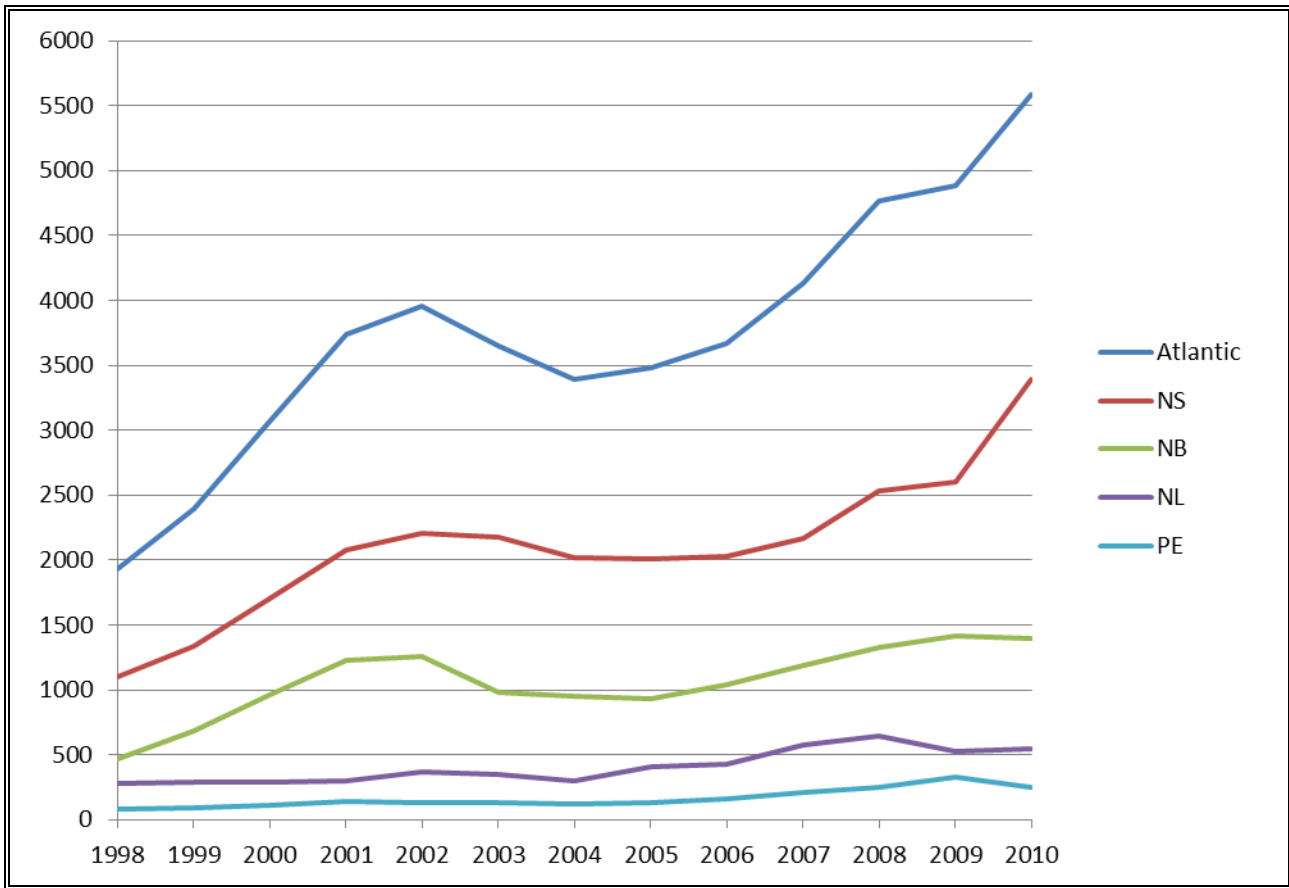
Attracting international students and retaining them at graduation is one goal of immigration strategies adopted by provincial governments in Atlantic Canada. The province of Nova Scotia has an International Graduate Stream to its Provincial Nominee Program, which fast tracks the landing process for those international students who wish to stay in the province after finishing their studies and who have obtained full-time permanent employment. In addition, the federal government also allows international students to apply for a Post-Graduation Work Permit, valid for up to three years following graduation from an eligible post-secondary institution in Canada.⁹

Chart 17: Total entries of international students into Atlantic provinces, 1998-2010

⁷ Hawthorne, L.2005. “Picking Winners: The Recent Transformation of Australia’s Skill Migration Policy.” *International Migration Review*, 39(2).

⁸ Maritime Provinces Higher Education Commission (MPHEC). 2012. *Trends in Maritime Higher Education*, February.

⁹ Details available on <http://www.cic.gc.ca/english/study/work-postgrad.asp>

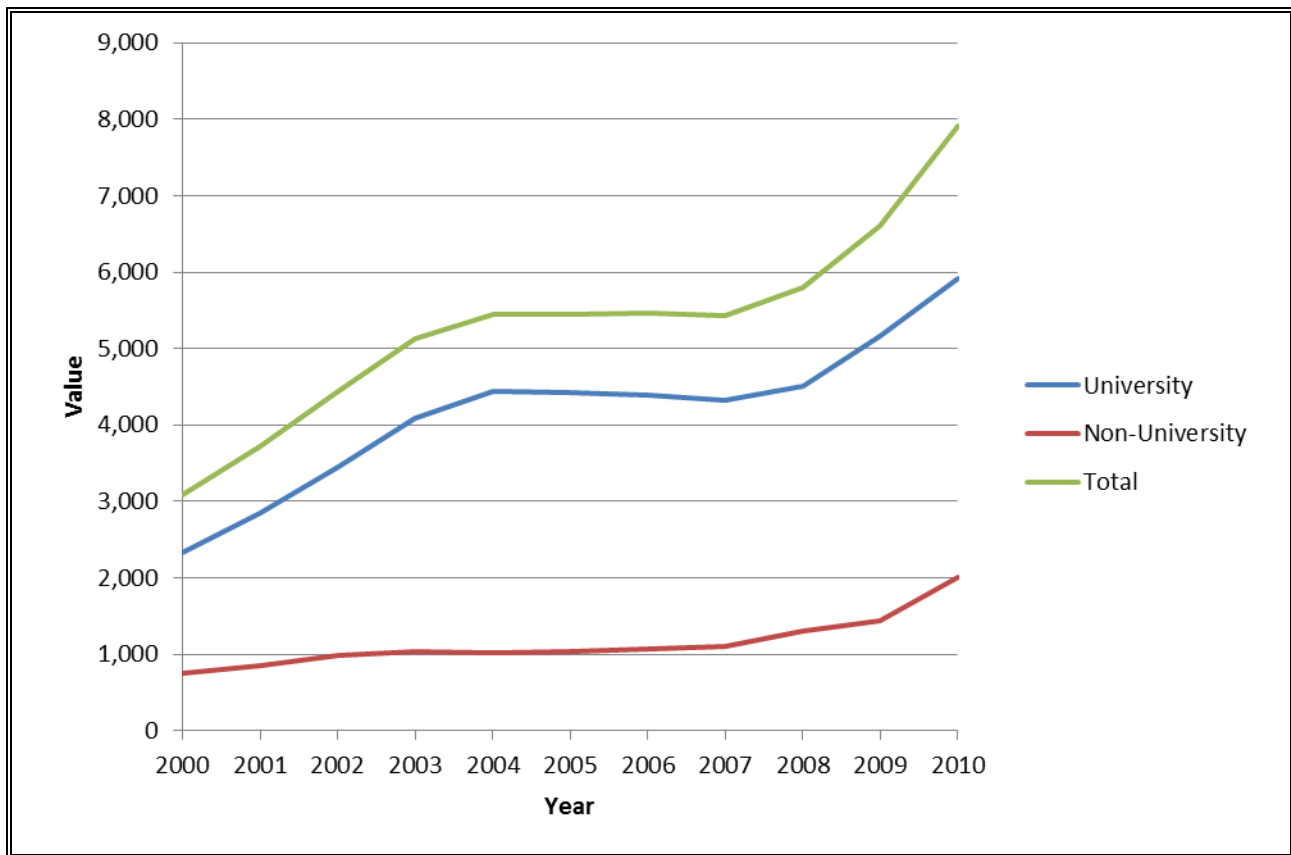


Source: CIC, special tabulations.

As Chart 17 shows, Nova Scotia receives the highest number of international students arriving each year in Atlantic Canada. The province experienced an accelerated growth in its international student inflow during 1997-2001, after which it stabilized. A similar trend is evident in New Brunswick, which is the second largest recipient of international students in Atlantic Canada. The other two provinces experienced minimal growth. As a result, Nova Scotia's share of the total regional inflow of international students has stayed in the range of 57-60 percent over the period.

Most international students studying in Canada are enrolled in a university degree program, which is also true in Nova Scotia (Chart 18). Their enrolment in university-level education grew at a faster rate than at the non-university level during 1996-2005 and then during 2007-2010. At the non-university level, their enrolment accounted for about 24 percent of all international students in 2010, so international students may represent a potential supply of highly skilled, as well as of medium- and low-skilled, workers in the province (according to the definitions of skill levels provided in Tables A5 and A6). A typical international student takes about four years to finish his / her education in Nova Scotia, while in 2005, he/she took only 2.7 years to finish. This shows that a typical international student is staying longer in the province.

Chart 18: International students studying in Nova Scotia by level of study, 2000-2010



Source: CIC, special tabulations.

Table 18 provides data on international students according to the top five source countries for the years 2001, 2005 and 2010. China has been the largest supplier of international students to Nova Scotia since the middle of the last decade, taking the place of the United States, which now ranks fourth. The higher numbers of Chinese and South Korean students in recent years are attributable to two major factors: 1) expedited medical procedures for international students beginning in 1997, and 2) establishment of Canadian Education Centres in the capital cities of China and South Korea. A decade earlier (1996), the United States, China, Bermuda, Malaysia and Hong Kong were among the top five source countries of international students in Nova Scotia.

Saudi Arabia has now become the second largest supplier of international students in the province. This rise has resulted from special attempts by Nova Scotian universities to recruit students from the Middle East. For example, Dalhousie University has entered an agreement with Saudi Arabia that brings 10 students to the university's medical school each year. The university has also signed an agreement with King Saud University to allow for fully funded students from Saudi Arabia to study computer science (especially Health Informatics) at Dalhousie.

Table 18: Top five source countries of international students studying in Nova Scotia, 2001, 2005 and 2010.

Country	Year	Country	Year	Country	Year
	2001		2005		2010
United States	390	China, PR	1452	China, PR	2661
China, PR	318	United States	561	Saudi Arabia	1166
Bermuda	270	Korea, R	314	Korea, R.	393
Korea, R	191	Bermuda	313	United States	389
Japan	159	Japan	207	India	323
Total top five countries	1328	Total top five countries	2847	Total top five countries	4932
Other countries	2,392	Other countries	2,603	Other countries	2,979
Total	3,720	Total	5450	Total	7911

Source: CIC, Facts and Figures 2010 Digital Library.

VIII. MAJOR FINDINGS AND DIRECTIONS FOR FUTURE RESEARCH

Research presented in this report has used available published and unpublished data on Nova Scotia to 1) rationalize current policy attempts to attract and retain immigrants in Nova Scotia, 2) review immigration trends in the province over the past three decades, including their shifting source country mix, retention rates and labour market characteristics, 3) analyze labour market performance of immigrants living in Nova Scotia in comparison with that of non-immigrants, and 4) review trends in the entry of international students who represent a pool of potentially skilled immigrants in future.

While Nova Scotia is home to about 2.6 percent Canadians, an average of only about 1 percent of immigrants who arrive each year in Canada declare this province as their home. Immigrants comprise only 5 percent of Nova Scotia's population, well below the national average of 19 percent, making it an immigrant-scarce province in relation to provinces such as Alberta, British Columbia, Ontario and Quebec. Net out-migration from the Nova Scotia and falling fertility rates have raised questions about the adverse long-term implications for economic growth and development in the province and placed immigration at the centre of policy discussion. Many initiatives have been undertaken at government and community levels to attract to, and retain immigrants in, the province, and the research presented in this report shows that these initiatives are showing the desired results.

In 2010, about 71 percent more immigrants declared Nova Scotia as their intended destination than did in 1981 and about 50 percent more than did in 2001. Five-year immigrant retention rates have also increased from below 40 percent in the late-1990s to more than 70 percent in the latter half of the previous decade. With increased arrivals of immigrants, issues relating to their economic and social impacts that have often surfaced in the public circles of larger immigrant-receiving provinces are increasingly becoming the focus of public discussions in this province as well. As a result, research-

based knowledge about many economic and social issues that immigration raises is important for effective policy formulation and implementation, as well as for providing input to public discussions that often take place in the news media. This present study is an important step towards enhancing our understanding primarily of the economic dimensions of immigration to Nova Scotia. However, a number of information gaps need to be addressed, and the present report concludes by providing a sampling of those gaps that should form the basis for further research.

Our findings suggest that immigration inflows to Nova Scotia are heavily slanted in favour of urban areas. However, at the time of the 2006 census, about 38 percent of immigrants and 27 percent of recent immigrants lived outside Halifax, viewed as rural areas of the province. Some evidence indicates that these immigrants are involved in a variety of occupations, including private business and professional jobs. These findings therefore indicate that new immigrant destinations can be developed in rural areas. A systematic research study investigating the factors that determine provincial choices new immigrants make, as well as their destination choices within a province, should interest rural population planners such as the Rural Secretariat, for whom repopulation of rural areas is a priority. Such research could also be of interest to provincial immigration policymakers interested in attracting more immigrants to the province.

Although in Canada the source country mix of immigrants started to shift from western European countries toward those of Asia and Africa in the late 1970s, this shift occurred in Nova Scotia in the 1990s. The Middle East dominated the list of top five source countries of immigrants in that decade and the early half of the last decade. During 2005-10, the United Kingdom and the United States were the top two source countries of immigrants, followed by China, Iran and Philippines. However, close to half of all immigrants arrived from other countries.

The age profiles of previous and new immigrants to Nova Scotia indicate that greater proportions are in the lower age groups, thus confirming the economic theory prediction that the young are more likely to migrate. Due to the small inflows of immigrants each year, their age distribution would affect that of the Nova Scotian population as a whole only marginally. However, if their share increases, it could have a moderating effect on the aging trend in Nova Scotia directly and also indirectly over the longer term if immigrants have higher fertility rates. This would also increase the labour force participation and contribute positively to long-term economic growth in the province. An investigation into how much the current aging trend in Nova Scotia's population might be averted by the current immigration strategy over the next few decades, under different assumptions of fertility rates among immigrants, could provide useful information to population planners in the province.

If immigration is viewed as one means of reversing declining population trends and the aging of the province's population, then an investigation of the labour market effects of immigrants is also important because an increase of immigrant workers has certain wage and employment implications for the host population. In this regard, two important research questions are 1) How do immigrants affect the wages paid to workers in Nova Scotia? and 2) Do immigrants displace the non-immigrant Nova Scotian workers in the province's labour force. While these questions have been answered using Canada-wide

data, evidence for provincial labour markets and also for labour markets in less populated areas is lacking. These questions form the federal government's priority research areas identified for Metropolis research centres and will provide 1) useful input for the debate on the role of immigration in the economic development of Nova Scotia, and 2) useful information if public policy is to encourage immigrant workers to settle in rural areas.

One common notion among the public, which also has often appeared in the media, is that immigrants are a drain on the public purse because they tend to consume more public transfers than the host population. Some also believe that immigrants pay lower taxes than the amount of public transfers they consume. Data on receipts of government transfer payments by immigrants and non-immigrants, as reported in the present study, do not support this view. A more detailed study could also analyze immigrants' payment of taxes and their use of health care and educational services in the province. Such a study will enable a full assessment of the fiscal impact of immigration in Nova Scotia.

The study also found that after a surge during the first part of the 1990s, skilled immigrant (managers and professionals) inflows declined in the province. Current data based on the labour force surveys do not allow a detailed analysis of industrial distribution of skilled immigrants or how occupation shortages are met through immigration. A separate survey should be conducted to collect this information. The role of entry barriers into certain regulated professions, such as health care and law, in preventing immigrants from practicing in those professions also should be investigated.

Our analysis of data on the labour market performance of immigrants in Nova Scotia indicates that they perform better than non-immigrants among both men and women. Even recent immigrants face a narrower gap between themselves and non-immigrants in their earnings performance and catch up to them within five years of arrival. This finding is contrary to that found in national studies, which have shown that immigrants perform poorly compared to non-immigrants. Possible explanations for this could be because 1) a smaller province has fewer university degree holders and immigrant professionals face less competition and fewer problems of credential recognition, 2) a smaller immigrant community faces a greater need to learn and speak the official languages and interact with non-immigrant residents (previous research has shown that immigrants' ability to speak the official languages affects their labour market performance positively), 3) the Provincial Nominee Program has attracted a select group of immigrants to fill certain specific job vacancies, and 4) the presence of fewer immigrant workers in Nova Scotia has resulted in their higher marginal product than in larger provinces. All these possibilities could be addressed in separate research projects. As the Longitudinal Immigration Data Base (IMDB) permits an analysis of the incomes of different entry classes of immigrants, these data may be analyzed to provide a more direct economic outcome of immigration policy.

The evidence gathered in this project also tells us that Nova Scotia fared poorly in retaining its immigrants during the 1990s; however, immigrant retention rates rose in the last decade. Net out-migration is the highest among refugees and the lowest among family class and skilled immigrants. Such rising retention rates may be attributed to aggressive attraction and retention initiatives adopted at government and community

levels; however, a systematic research study should investigate the quantitative impacts of such initiatives. Based on these findings, at least six important research questions emerge: 1) Do immigrants from countries other than the United States and United Kingdom face a lack of their credential recognition due to discrimination, which could have resulted in lower retention rates in the 1990s when more such immigrants arrived? 2) Why does the rate of out-migration vary among immigrant classes? 3) Do immigrants out-migrate from the province at a different rate than non-immigrants? 4) How much human capital is lost due to out-migration of skilled immigrants from the province? 5) What factors motivate immigrants to leave the province? and 6) What factors motivate immigrants living in other provinces to move to Nova Scotia?

International students offer a potential pool of highly skilled immigrants and also help fulfill the enrolment deficiency created by the decline in the university-aged population in the province. Attracting more international students may result from a greater focus on students from the countries that have existing communities in Atlantic Canada. The United States is among the top five immigrant source countries in the province, and a large immigrant population from the United States lives here. Its proximity to Nova Scotia may make it easier to attract more students from the United States. China, Saudi Arabia and South Korea are also among the top five source countries of international students and are also among major sources of recent immigrants to the province. Another dominant immigrant community in the region includes immigrants who came from Middle Eastern countries, and members of these dominant communities can help attract students from their countries of former residence. Also noteworthy is that Middle Eastern countries have a large population of expatriates from Bangladesh, India, Pakistan and Sri Lanka, whose children are not permitted to attend local universities and therefore could be recruited by Nova Scotia universities. Two important factors that should be strongly promoted in these two countries about university education in Nova Scotia include highly competitive tuition fees (compared to those in the United States) and the high quality of education. Strengthening English as a Second Language (ESL) programs and industry-specific language training as part of the university curriculum will also attract students from non-English speaking countries.

The federal government should also review the rules to help ease the landing process for international students and the procedures for obtaining a work permit after graduation. Finally, the provincial government could also allow universities to participate in the PNP in collaboration with private employers.

A comparative analysis of socioeconomic and demographic profiles of immigrants in Nova Scotia and in other provinces also would help determine whether the patterns and changes observed in this study are unique to this province or rather common to those in all smaller provinces.

Finally, data on labour market indicators for the Canadian population must be collected consistently according to immigrant status, province of residence, country of origin, ethnicity and gender because such an analysis will help in evaluating changing policy initiatives being adopted in smaller provinces like Nova Scotia to attract and retain immigrants.

APPENDIX

A Note on Estimates of Population Published by Statistics Canada

Charts 1 and 2 of this report are based on population estimates published by the Demography Division of Statistics Canada. These data are different from the more accurate census data used elsewhere in the report.

To explain the discrepancy, the following information is reproduced from Statistics Canada's website (August 12, 2007) under the title *Estimates of Population by Age and Sex for Canada, Provinces and Territories*.

“The estimates program of Statistics Canada provides annual estimates of population by age and sex for Canada, the provinces and territories. Demographic estimates can be categorized as either intercensal or postcensal. Intercensal estimates correspond to estimates between censuses, whereas postcensal estimates correspond to non-census years after the most recent census. In producing up-to-date figures, postcensal estimates are obviously more timely, albeit less accurate. The production of intercensal estimates involves the retrospective adjustment of past figures with the availability of new census data.”

Postcensal Estimation

Postcensal estimates are obtained by adding the number of births, subtracting the number of deaths, and adding or subtracting the net impact of international and internal migration on the most recent census population adjusted for census coverage error (i.e., both census undercount and overcount). The inclusion of non-permanent residents in the target population dictates that any net change in the size of this sub-population in Canada should be added or subtracted from the base period.

Quality evaluation of Postcensal Estimates

The census is considered a reliable benchmark for validating postcensal population estimates. The error of closure (the difference between the postcensal estimate and the enumerated census population, adjusted for net undercoverage) provides a measure of accuracy for the postcensal estimates. It should be noted that the error of disclosure accumulates over the five-year period between census years.

At the national level, the differences are small (0.32% for 1986, 0.15% for 1991 and 0.61% for 1996). At the provincial/territorial level, however, the differences are understandably larger because the provincial/territorial estimates are affected by errors in estimating interprovincial migration, in addition to the other components that affect total population estimates. Nevertheless, excluding the territories, the provincial postcensal estimates fall within 1% of the census counts with few exceptions (Newfoundland and Labrador in 1986, 1991 and 1996; Alberta in 1986; Prince Edward Island and Saskatchewan in 1991; and Quebec in 1996).

Data accuracy of Population Estimates

The estimates of population by age and sex contain certain inaccuracies stemming from 1) errors in corrections for net census undercoverage, and 2)

imperfections in other data sources and the methods used to estimate the components. Errors due to estimation methodologies and data sources other than censuses are difficult to quantify but not insignificant. The more detailed the breakdown of the data, the larger the inaccuracy coefficient becomes. The component totals contain a certain amount of initial error, and the methodology used to classify them by sex and age produces additional error in the figures at each stage. Nevertheless, the components can be divided into two categories according to the quality of their data sources: 1) births, deaths, immigration and non-permanent residents, for which the sources of final data may be considered very good; and 2) emigrants, returning emigrants, net temporary emigrants and interprovincial migration, for which the methods used may be a more substantial source of error. Lastly, the size of the error due to component estimation may vary by province, sex and age, and errors in some components (births and emigration) may have a greater impact on a given age group or sex. Intercensal estimates contain the same types of errors as do postcensal estimates, as well as errors resulting from the way in which the errors present at the end of the period were distributed, that is, on the basis of the time elapsed since the past census.