

Immigrants in demand: Staying or leaving?

by Heather Dryburgh and Jason Hamel

Since the 1990s, one objective of Canada's immigration program for landed immigrants¹ has targeted economic immigrants with skills and credentials that are in demand in Canada. The gain in skilled immigrants to Canada is clear: the number of skilled immigrants gaining permanent residency in Canada has increased significantly during this period.² In addition, many immigrants in the family reunification and refugee protection programs come to Canada highly skilled.

Although immigrants came to Canada with a wide range of occupations and skills, this article focuses on three in-demand occupation groups:³ workers in information technology (IT), physicians and health care managers, and trades workers. These in-demand groups were selected for this study because of their significant contribution to the Canadian economy, and the health and well-being of Canadians, and because they all depend to some extent on migrants from other parts of the world to augment the pool of workers.⁴

The high demand for workers in information technology, physicians and health care managers and trades occupations through the 1990s suggests that new immigrants intending to work in these occupations should have fared well in Canada.⁵ However, growing evidence indicates that even some highly skilled workers are facing

employment barriers, which may increase their likelihood of emigrating.⁶ Despite positive Canadian experiences, those with strong marketable skills and who meet the criteria of immigrant selection of other countries may be enticed to return to their country of origin or to go to other countries.

This article uses longitudinal data on landed immigrants to Canada from the Longitudinal Immigration Database (IMDB). It looks at what happens to landed immigrants who arrived between 1990 and 1998 and who were intending to work in in-demand occupations as IT workers, physicians and health care managers or trades workers. Their labour market experiences are examined between the time they started filing taxes and 2000. The number of in-demand immigrants who eventually leave is

estimated using taxfiler information. Possible reasons why they emigrate are explored by looking at the demographic characteristics of immigrants, the resources they bring to Canada, and their Canadian experiences.

Only a small percentage of immigrants emigrate

It is a life-changing decision to immigrate to another country, and in some cases, the move may not work out well. For many different reasons, some immigrants may decide to return to their home country, while others may decide to move to a different country. When in-demand immigrants emigrate, there is a real loss of needed skills to Canada.

According to the IMDB, 4.3% of all immigrants who landed during the study period and who filed taxes during the 1990s had emigrated by 2000.

1. The term "landed immigrant" refers to immigrants who have been granted permanent residency in Canada. These terms are used interchangeably in this article.
2. Citizenship and Immigration Canada. 2003. *Facts & Figures 2002: Immigration Overview* (Catalogue no. MP43-333/2003E).
3. There are certainly other occupation groups in high demand, but this article focuses on these three. Other in-demand occupations are grouped with the "all others" group for comparison.
4. In-demand occupations not among the three groups above as well as those not in demand are included in the "all others" group.
5. Statistics Canada. 2003. "The changing profile of Canada's labour force." *2001 Census: Analysis Series* (Statistics Canada Catalogue no. 96F0030XIE2001009).
6. Najm, N.A. 2001. *The Devaluation of Foreign Credentials in Canada*. Strategic Research and Analysis, Canadian Heritage. Reference: SRA-625; Boyd, M. and D. Thomas. 2001. "Match or mismatch? The employment of immigrant engineers in Canada's labour force." *Population Research and Policy Review*, 20, 1/2: 107-133.

The Longitudinal Immigration Database (IMDB) is a database combining immigration and taxation records. This study looks at immigration landing years 1990 to 1998 and tax-filing behaviour from 1990 to 2000. Statistics Canada manages the IMDB on behalf of a federal-provincial consortium led by Citizenship and Immigration Canada. Only landed immigrants over age 17 who filed at least one tax return between 1990 and 1998 and who stated an intended occupation are included in this article, except where otherwise noted.

The IMDB only includes information on intended occupations at landing in Canada and not upon the actual occupation immigrants are employed in. Intended occupation is usually the occupation the immigrant practised before coming to Canada. Although a mismatch between the intended and the actual occupation may be one of the reasons why some immigrants emigrate, this cannot be determined from the IMDB. While the majority of immigrants have declared an intended occupation (74%), 84% of the rest (homemakers, retirees, students) were admitted through the family and other economic classes.

Measuring emigration

In this article, the emigration of immigrant taxfilers is measured. Another study estimated that about 10% of immigrants who entered Canada between 1991 and 1996 emigrated from Canada during those years.¹ Emigration reported in this article is lower because only emigrant taxfilers are included, and those who may have emigrated before filing a tax return (non-taxfilers) are excluded, so total emigration of all immigrants would be higher. Higher numbers are found in a study of the emigration of immigrants from the United States.² From the IMDB, it is not possible to determine whether emigration is return migration to the immigrant's country of origin or to a third country.

Many immigrants who emigrate report doing so on their tax return. However, others who emigrate simply stop filing tax returns in Canada and don't indicate that they have emigrated. Emigrants may stop filing taxes because of death or because of low income. These cases are not included in the counts of emigrants. For the remainder of those who have stopped filing taxes for at least two years by 2000, they are identified as emigrants if all of their landing

group (family or extended family) have stopped filing taxes at the same time. Emigration is expressed as the percentage of all immigrant taxfilers in the period of interest who emigrated.

Found employment quickly: indicates how many immigrants filed a tax return with employment earnings or self-employment income by a year after they landed in Canada.

Stability of earnings: indicates those who filed taxes with employment earnings or self-employment income for each consecutive year from the year they first filed until 1998.

Employment insurance benefits and social assistance benefits: indicates whether, at any time since landing, the immigrant has claimed these benefits or not.

Immigrant classes

Family: applicants landing to reunify their family.

Economic

- Business:* principal applicants who are entrepreneurs, self-employed or investors.
- Skilled worker:* principal applicants who landed in Canada based on their education, work experience, knowledge of official languages and other criteria.
- Other economic:* spouses or dependents of skilled workers or business class applicants and assisted relatives not entering in the family class.

Refugees: sponsored refugees, or refugee claimants from abroad or in Canada.

Other: primarily retired immigrants and those in the live-in caregiver program.

1. Michalowski, M. and C. Grenier. 2002. *Who Is Staying and for How Long: Re-migration of Canada's Immigrants in the 1990s*. Paper presented at the Canadian Population Society Annual Meeting, May 30-June 1, 2002, Toronto.

2. Warren, R. and E. Percy Kraly. 1985. "The elusive exodus: Emigration from the United States." *Population Trends and Public Policy Occasional Paper*, no. 8. Population Reference Bureau: Washington, D.C.

Emigration was highest for immigrant physicians and health care managers and IT workers

Immigrant physicians and health managers were the most likely of the in-demand immigrants to emigrate (11.7%), followed by immigrant IT workers (6.9%). Those immigrants

who were not in one of the three in-demand occupation groups were less likely to emigrate (4.1%). Immigrant trades workers were even less likely to emigrate, with only 3.0% doing so. These differences between in-demand occupation groups suggests that other characteristics of in-demand

immigrants may also play a role in emigration decisions.

Trades workers have quite different education and official language proficiency than IT workers or physicians and health care managers. IT workers and physicians and health care managers were highly educated

Information technology (IT) occupations¹

IT workers are crucial in the shift towards the new economy.² Some argue that these highly skilled workers are the artisans of the emerging technology-based information society.³ In 2000, the contribution to the Gross Domestic Product of the Information and Communications Technologies (ICT) sector in Canada was 6%, a significant increase from 4% in 1997.⁴ The 2001 Census showed that almost 3% of total employment in Canada was in IT-related occupations and, of those 387,500 IT workers, about 15%, or over 60,000, arrived in Canada in the 1990s.⁵

During the 1990s, there was strong international competition for IT workers. Many Organisation for Economic Co-operation and Development (OECD) member countries had active recruitment programs for IT workers. The Canadian government developed an Innovation Strategy that identifies the need to strengthen the IT labour force in Canada in part through attracting immigrants with IT qualifications and intentions to work in IT occupations. Between 1990 and 1998, 60,900 immigrants, primarily from Asia and Europe, landed in Canada with the intention of working in IT occupations. More came in the latter half of this period than in the first half.

Physicians and health care managers^{6,7}

Health is a top concern for Canadians, as recent polls have indicated. Shortages of physicians and other health professionals have prompted negotiations with professional associations to expedite the accrediting of immigrant physicians. To take one example, Quebec recently has made efforts to facilitate accreditation of new immigrants with degrees and experience in health-related domains from abroad into health occupations in the province. In the period 1990 to 1998, 3,965 family physicians, physician specialists and health managers became permanent residents in Canada. Unlike IT workers, a larger percentage of these immigrants landed in Canada in the early nineties than the mid- to late nineties.

Trades occupations⁸

Construction activity in Canada has increased over the last few years, and, in certain trades, shortages of workers are commonplace. Historically, the construction trades relied on immigrants for workers, notably immigrants from Portugal and Italy. More recently, the majority of trade workers came from Europe, primarily from Poland and Portugal. Between 1990 and 1998, 17,995 immigrants landed in Canada intending to work in the trades. Over one quarter of these immigrants landed in 1990, with declining proportions over recent years. Relatively few trades workers landed in 1997 and 1998.

Regulated occupations

In Canada, provincial and territorial legislation regulate some occupations to protect public health and safety. Regulated occupations make up 20% of the workforce. Before a person can work in one of those regulated occupations, a provincial or territorial body must recognize that person's qualification. The regulatory bodies determine the conditions for admittance to those occupations, evaluate applicants' qualifications and issue licences to practice. The process varies among provinces and territories and among occupations. Typically, persons must wait until they arrive in Canada to have their qualifications recognized and receive a licence. Many of the in-demand occupations are regulated.

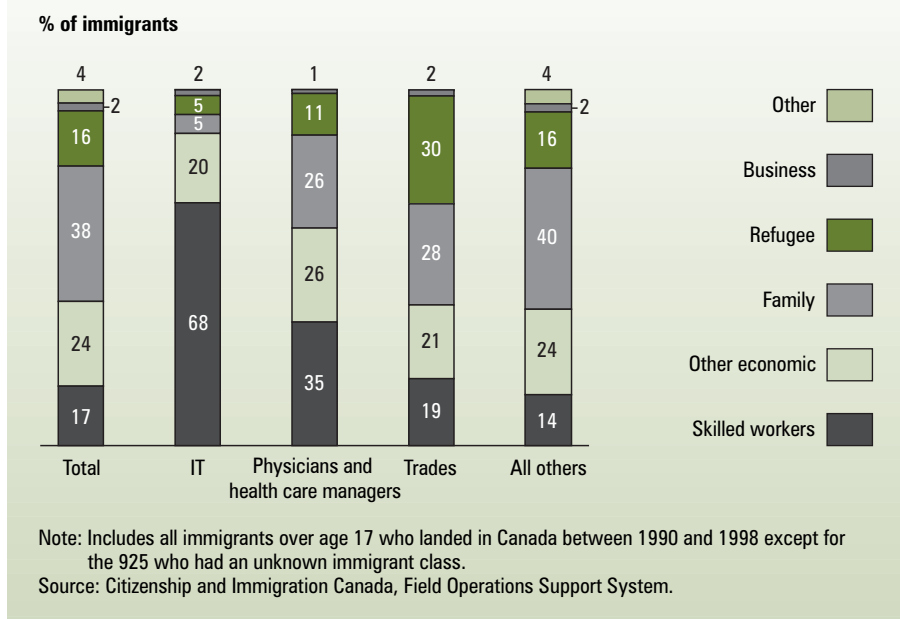
1. Information technology (IT) workers include: computer engineers, computer programmers, computer systems analysts, electrical and electronics engineering technologists and technicians, electrical and electronics engineers, electronic service technicians and graphic designers and illustrators.
2. Downie, R., H. Dryburgh, J. McMullin and G. Ranson. 2004. "A profile of information technology employment in Canada." *Workforce Aging in the New Economy (WANE) International Report*, no. 1. www.wane.ca/PDF/IR1.pdf (accessed June 16, 2004).
3. Castells, M. 2000. *The Rise of the Network Society*. Blackwell Publishers: Oxford.
4. Statistics Canada. 2003. *Innovation Analysis Bulletin* (Statistics Canada Catalogue no. 88-003-XIE, vol. 4, no. 3).
5. Habtu, R. 2003. "Information technology workers." *Perspectives on Labour and Income* (Statistics Canada Catalogue no. 75-001-XIE, vol. 4, no. 7).
6. Physicians and health care managers include general practitioners and family physicians, specialists and health care managers.
7. Health care managers include occupations primarily concerned with planning, organizing, directing and controlling the delivery of health care services, such as chief of anaesthesia, chief of medical staff, home care program co-ordinator, medical clinic director, nursing director, radiotherapy services manager and speech language pathology director. Excluded are senior administrators in medicine and health, which are included in other occupations.
8. Trades occupations include: blacksmiths and die setters, boilermakers, bricklayers, cabinetmakers, carpenters, electricians, floor covering installers, gas fitters, glaziers, insulators, ironworkers, painters and decorators, plasterers, drywall installers and finishers and lathers, plumbers, roofers and shinglers, sheet metal workers, steam fitters, pipefitters and sprinkler system installers, structural metal and platework fabricators and fitters, tilers, welder and related machine operators.

	Intended occupation group									
	Total		IT		Physicians and health care managers		Trades		All others	
	Number of immigrant taxfilers	% of taxfilers who emigrated	Number of immigrant taxfilers	% of taxfilers who emigrated	Number of immigrant taxfilers	% of taxfilers who emigrated	Number of immigrant taxfilers	% of taxfilers who emigrated	Number of immigrant taxfilers	% of taxfilers who emigrated
Total	1,100,160	4.3	47,645	6.9	3,160	11.7	15,640	3.0	1,000,725	4.1
Landing year										
1990	113,790	7.0	2,540	10.4	405	18.0	4,160	4.2	104,380	6.8
1991	132,865	5.6	2,380	12.5	445	10.2	3,285	3.2	124,650	5.4
1992	142,740	5.2	2,750	12.7	400	16.5	2,110	3.1	134,640	4.9
1993	143,020	5.1	4,150	12.3	465	15.9	1,605	2.7	133,560	4.7
1994	119,425	5.7	5,000	12.7	310	13.8	1,090	2.8	110,305	5.2
1995	113,910	4.1	6,020	9.3	310	10.5	1,015	1.8	104,275	3.7
1996	117,190	2.8	7,380	5.1	310	5.1	855	1.2	106,315	2.6
1997	118,345	1.7	8,865	2.2	285	5.2	830	1.3	102,580	1.6
1998	98,880	0.8	8,555	1.1	225	2.7	695	1.3	80,005	0.8
Age										
18-24	190,980	3.2	1,890	5.5	--	--	1,730	1.5	186,645	3.2
25-34	440,005	4.6	27,560	7.7	1,310	13.2	7,710	3.2	396,830	4.3
35-44	278,995	4.8	14,965	6.0	1,365	11.6	4,540	3.0	244,615	4.6
45-54	111,840	4.4	3,010	4.5	370	7.9	1,260	3.7	97,565	4.1
55-64	72,755	4.3	220	--	95	--	385	--	69,580	4.2
65+	5,585	4.3	--	--	--	--	--	--	5,490	4.3
Sex										
Men	558,530	4.5	39,050	6.9	2,060	12.2	15,385	3.0	483,000	4.2
Women	541,630	4.1	8,595	6.8	1,100	10.9	255	--	517,725	4.1
Education										
0-9 years	197,325	2.5	225	--	--	--	4,675	3.8	185,870	2.4
10-12 years	304,630	3.0	1,470	3.5	--	--	3,715	2.1	290,085	2.9
13 or more years	114,830	4.7	2,830	6.3	85	--	955	2.8	108,535	4.7
Trade certificate	119,640	3.8	3,045	5.1	--	--	4,180	3.0	109,405	3.7
Non-university diploma	90,050	4.5	4,640	5.3	60	--	1,400	2.6	81,385	4.4
Bachelor's degree	211,980	6.0	26,355	5.7	1,550	11.9	650	2.9	175,625	6.0
Master's degree	47,515	10.4	7,400	11.9	855	12.4	60	--	38,035	10.2
Doctorate	14,185	13.3	1,685	14.7	525	12.2	--	--	11,780	13.2
Last permanent residence										
North America	27,435	14.1	830	17.4	135	25.2	230	7.3	25,885	13.9
Europe	220,430	4.6	16,575	6.2	1,125	13.1	8,690	3.8	190,750	4.5
Asia	564,785	4.3	19,600	7.4	705	9.0	1,905	1.0	519,710	4.1
Middle East	73,060	5.7	4,450	5.7	250	11.2	1,550	2.6	63,260	5.6
Africa	82,585	2.7	3,730	5.7	765	10.2	580	2.7	75,945	2.4
Caribbean and Guyana	70,480	0.9	675	3.1	60	--	1,760	0.8	67,650	0.9
South and Central America	48,930	2.6	1,185	7.4	85	--	700	2.4	46,155	2.4
Oceania, Australia and other	12,455	6.5	590	11.7	40	--	220	--	11,365	6.1
Official language ability										
English only	615,145	5.0	33,805	7.4	2,415	12.7	6,705	3.0	557,545	4.8
French only	50,030	4.1	2,870	5.4	155	--	745	5.9	45,480	3.9
English and French	52,235	7.9	5,960	7.9	280	11.8	435	5.6	44,600	7.8
Neither	381,915	2.8	5,010	2.9	310	9.0	7,755	2.5	353,025	2.7
Immigrant class¹										
Family	399,495	2.2	2,390	5.2	685	8.4	4,385	1.5	389,495	2.2
Business	40,995	9.7	640	10.9	--	--	240	7.9	20,365	9.5
Skilled workers	188,985	6.6	32,735	7.2	1,235	13.8	2,900	5.1	151,910	6.4
Other economic	243,600	7.6	9,360	6.6	815	11.3	3,155	5.8	221,645	7.8
Refugee	187,710	1.0	2,475	3.6	380	12.4	4,905	1.0	178,455	0.9
Other	38,515	5.1	--	--	--	--	--	--	38,060	5.2

1. There are 860 taxfilers whose immigrant class is "unknown." These cases are not included in the counts for immigrant class.

-- Too few cases to report.

Source: Statistics Canada, Longitudinal Immigration Database.



and predominantly English-speaking. Trades workers, on the other hand, tended to have trade certificates or high school or less education, and almost half were not able to speak either of Canada’s official languages. Although all three in-demand occupational groups were male-dominated, immigrants intending to work in trades occupations far exceeded the others, being 98% men.

In all occupation groups, immigrants who had arrived in 1990 were more likely to have emigrated by 2000 than immigrants who had arrived in 1995. This pattern may reflect the fact that earlier immigrants have a longer period in which to assess their situation and choose to leave Canada than immigrants who have landed more recently.

Economic immigrants were most likely to emigrate

Immigrants to Canada in the 1990s had to meet certain criteria to be admitted in the skilled worker class. The points-based system used for skilled workers awarded points for education levels, official language ability and occupational skills, as well

as requiring funds for immigrants to establish themselves in Canada. Likewise, business class immigrants — entrepreneurs, investors and self-employed persons — were required to bring extensive business skills and capital to gain landed immigrant status in the country.

Many immigrants intending to work in IT or trades or in health care arrived in the skilled worker class of immigrants. But many also entered as family, other economic or refugee class intending to work in these in-demand occupations. Notably, about 30% of trades workers who landed in Canada between 1990 and 1998 did so as refugees, and a further 28% landed as family class immigrants. Only one fifth of trades workers landed in Canada under the skilled worker class, compared with two-thirds of IT workers and one third of physicians and health care managers.^{7,8}

Skilled workers and business class immigrants were the most likely to emigrate. This was true for each of the in-demand occupational groups. The relationship between high skill levels and emigration can be seen when

looking at emigrants’ education and language competencies. Those with higher education and official language ability were more likely to emigrate than those without. For example, since trades workers were less likely to have a university education, they were also less likely to emigrate than IT workers, physicians and health care managers.

Immigrants from the United States were most likely to emigrate

Immigrants who had last resided in the United States were the most likely to emigrate compared with immigrants from other parts of the world. This tendency was equally true across both in-demand and other occupation groups. Immigrants who last resided in Oceania, Australia and Other were the second most likely to emigrate, regardless of occupation group.

In-demand immigrants who found work quickly were more likely to emigrate

In-demand immigrants who found employment quickly⁹ were more likely to emigrate than the average for their occupation group. In contrast, among immigrants in the other occupational group, those who found work quickly were less likely to emigrate than those who did not. This suggests that finding work early was a good reason for staying in Canada for immigrants, but may not have been enough for in-demand immigrants.

7. This paragraph refers to all immigrants over age 17 that landed in Canada between 1990 and 1998 and is not restricted to taxfilers.

8. Physicians were barred from entering under the skilled worker program until 2002. They could have applied using another intended occupation such as medical technologist or another science occupation.

9. Filing a tax return with employment earnings or self-employed income by the first year after landing is used as an indicator of finding employment quickly.

	Intended occupation group				
	Total	IT	Physicians and health care managers	Trades	All others
Total number of taxfilers	1,100,160	47,645	3,160	15,640	1,000,725
	% immigrant taxfilers who emigrated				
Total	4.3	6.9	11.7	3.0	4.1
Found employment quickly ¹	4.1	7.1	13.4	3.2	3.9
Received social assistance	1.3	4.2	8.0	1.7	1.2
Received employment insurance	2.4	6.2	8.8	2.4	2.2
Stable employment earnings ²	1.8	5.1	4.5	0.9	1.6

1. Filed taxes with employment earnings or self-employed income by the first year after landing.

2. Filed taxes with employment or self-employment earnings each year after first filing taxes up to 1998.

Source: Statistics Canada, Longitudinal Immigration Database.

Regardless of occupation group, immigrants who received social assistance or employment insurance were less likely to emigrate. In general, trades workers were more likely to have received social assistance or EI benefits than IT workers, physicians and health care managers and workers in other occupation groups. Over half of immigrant trades workers had received EI and about one third had received social assistance at some time. This may partly explain why they were less likely to emigrate than immigrants who intended to work in other in-demand occupations. As moving to another country is often an expensive proposition, those immigrants who have received social assistance or employment insurance may be less likely to have the financial resources for another international move.

Emigration of IT workers and physicians and health care managers were lower for those with stable earnings

IT workers were much more likely than all other occupational groups to have had stable employment. On the other hand, trades workers were much less likely to have experienced stable

employment, a fact which is also reflected by higher percentages of those who had received EI or social assistance benefits.

For all occupational groups, stable employment is clearly a factor in whether or not to emigrate. A smaller percentage of those with stable employment emigrated in all groups. Although trades workers were less likely to have stable employment, and were less likely to emigrate than the other in-demand occupations, those who did have stable employment were even less likely to emigrate than those who did not.

Summary

Canada has attracted high demand immigrants between 1990 and 1998, and only a small percentage of these immigrants decided to emigrate. Immigrants intending to work in trades tended to remain in Canada, whereas others intending to work as physicians, health care managers and IT workers were more likely to emigrate. For the small number who did emigrate, the decision appears to be related to the relative lack of stable employment, and having the resources to facilitate moving again. There was also a relationship between higher resources —

skills and education — and emigration: those who were skilled and highly educated were more likely to emigrate. Those intending to work as physicians and health care managers and IT workers predominantly landed in Canada as skilled workers or other economic class immigrants, both immigrant classes requiring high resource levels and with a high likelihood of emigration. In comparison, a large proportion of trades workers landed as refugees, the immigrant class least likely to emigrate.



Heather Dryburgh is a senior analyst and **Jason Hamel** is a subject matter specialist with Housing, Family and Social Statistics Division, Statistics Canada.