Diane Galarneau and René Morissette

uring the 1990s, immigration policy favoured the admission of immigrants with higher education, leading to a significant increase in the education level of recent immigrants (see *Definitions*). In 2001, more than 40% of recent immigrants had at least a bachelor's degree, compared with 22% in 1991. As a consequence, they accounted for 6% of all persons in Canada with a university degree in 2001, up from 4% in 1991.

One of the first hurdles for immigrants is finding a job in an unfamiliar labour market. Among persons aged 25 to 54 with a university degree, unemployment for recent immigrants has consistently been at least triple the rate for the Canadian-born—in 2001, the rates were 7.4% versus 2.3% for men and 10.5% versus 2.7% for women. The difficulty recent immigrants face in finding a job has been attributed to several factors: non-recognition of credentials, education level or experience abroad (Green and Worswick 2002; Ferrer and Riddell 2003); poorer quality of education in some countries (Sweetman 2003); language disadvantage; weak social networks; and lack of information regarding the Canadian job market. These factors increase the probability that recent immigrants with a university degree will work in an occupation below their education level.

How has this phenomenon evolved over the past decade? How does the proportion of highly educated recent immigrants in low-education jobs compare with that of native-born Canadians? Which immigrants are most likely to be in these jobs and why? What are the earnings consequences? Drawing on the 1991, 1996 and 2001 censuses, this article examines recent immigrants aged 25 to 54 with a university degree who held jobs requiring no more than a high school education (see *Definitions*).

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Recent immigrants with a university degree

The profile of recent immigrants with a university degree has changed greatly in recent decades. In 2001, some 60% or more of those aged 25 to 54 held a bachelor's degree, belonged to a visible minority, or came from an Asian country—particularly South Asia¹ (Table 1). Some 21% of recent immigrant men with a degree in 2001 were from South Asia compared with only 11% in 1991.

Changes in the demographic profile of recent immigrants may have affected their representation in low-education jobs. For example, the proportion of highly educated recent immigrants with a mother tongue other than English or French increased 10 percentage points between 1991 and 2001. While mother tongue is an imperfect indicator of linguistic skills, this change may have increased the probability of recent immigrants working in an occupation requiring an education level lower than their own (the mismatch rate).²

Also, recent immigrants with a university degree tended to be older in 2001 than in 1991. For example, 64% of recent immigrant men were 35 or over in 2001, compared with only 56% in 1991. If it is increasingly difficult to gain recognition for work experience acquired abroad, the growing proportion of relatively older immigrants (with longer experience abroad) could have tended to increase their mismatch rate.

Lastly, the proportion of recent immigrants with a degree in engineering, mathematics or computer science increased during the last decade. Together, these fields of study accounted for 59% of recent immigrant men with degrees in 2001, compared with 44% in 1991. Among women, the proportions were more modest but also rose, from 15% in 1991 to 26% in 2001. Insofar as demand for the skills obtained in these fields of study is showing substantial growth, these changes could have tended to lower the mismatch rates of recent immigrants.

Table 1: Recent immigrant workers aged 25 to 54 with a university degree

	Men				Women	
	1991	1996	2001	1991	1996	2001
			Nui	mber		
Total 2	27,400	45,000	69,100	20,000	36,500	51,100
Mother tongue			(%		
English	22	16	12	26	21	15
French	4	4	4	3	3	4
Other	74	80	84	71	76	81
Age						
25 to 34	44	40	35	53	50	44
35 to 44	43	43	45	39	38	42
45 to 54	13	16	19	9	13	14
Education						
Bachelor's	66	66	63	76	77	74
Master's	25	24	27	21	20	22
Doctorate	9	10	9	4	3	4
Class of worker						
Self-employed	11	15	11	7	9	9
Employed	89	85	89	93	91	91
Field of study						
Arts and sciences	47	42	35	71	67	61
Teaching and fine arts	5	5	3	15	15	11
Humanities	8	6	5	12	12	12
Social sciences	11	10	7	15	13	12
Commerce	19	16	15	20	21	18
Other	5	5	5	7	6	6
Applied sciences	44	50	59	15	20	26
Engineering and						
applied sciences	31	33	38	6	9	13
Mathematics and computer science	14	17	20	9	11	14
•						
Health	9	8	6	14	13	13
Region of origin						
North America	6	3	2	10	6	3
Central and South America, and the Caribbean	8	_	4	6	6	5
Northern and Western Europe		5 7	5	8	6	6
Southern and Eastern Europe		18	19	14	18	20
Africa	10	10	10	6	5	6
South Asia	11	15	21	10	11	16
Southeast Asia	12	11	8	22	24	16
East Asia	21	22	23	17	20	22
West Asia	9	7	7	5	5	5
Oceania and other	1	1	0	1	1	0
Visible minority						
Yes	68	66	69	65	67	67
No	32	34	31	35	33	33

Education-job mismatch rate

In 2001, the proportion of recent immigrants with a university degree working in low-education jobs was 25% for men and 38% for women—a level comparable to 1991 (Table 2). However, the rate increased between 1991 and 1996, from 27% to 32% for men and from 41% to 47% for women. This rise coincided with a major influx of immigrants. From 1990 to 1994, Canada received an average of 237,000 immigrants annually, compared with 138,000 between 1985 and 1989 (Chart).

The comparability of recent immigrant mismatch rates in 1991 and 2001 might be explained by two factors with opposite effects. First, an increase in the proportion of recent immigrants among workers holding a bachelor's degree may have exerted upward pressure on the rate, since more skilled immigrants were entering the labour market to fill positions requiring the same skill level. At the same time, the increased demand for highly educated workers, often cited as a characteristic of the knowledgebased economy (Berman, Bound and Machin 1998) may have exerted downward pressure, since a sizeable share of these skilled workers could be absorbed.

A higher mismatch rate among immigrants

Whereas 25% of recent immigrant men with a university degree had low-education jobs in 2001, the percentage for their Canadian-born counterparts was only 12%. The corresponding figures for women were 38% and 13%. Recent immigrants were therefore at least twice as likely to be in low-education jobs, a phenomenon observed throughout the decade.

Definitions

Occupational classification and skill levels

The National Occupational Classification comprises more than 500 occupations. (The detailed occupations are available on request.) The Essential Skills Research Project (ESRP), by Human Resources Development Canada, made it possible to estimate the skill level of each occupation. This assigned code reflects both the education level usually required in the labour market and some criteria covering experience, specific training and responsibility related to health and safety (as in the case of police officers and nurses). The skill levels are:

- · some university education
- a college diploma, certificate, or apprenticeship training
- no more than a high school diploma.

Managers are not included, given the great diversity of their experience and education level. For more information, refer to www15.hrdc-drhc.gc.ca/english/general/esrp.asp.

The skill levels attributed to occupations date from the early 1990s, so the actual skill level of some occupations in 2001 may differ slightly. For example, some occupations requiring a college diploma (or certificate) in 1991 may have required a university degree in 2001. Similarly, some occupations that previously required high school graduation may now require a college diploma. If these changes are not taken into account, the mismatch rate of persons in low-education jobs in 2001 might be overestimated, biasing upward the change between 1991 and 2001.

For this reason, the focus is exclusively on employed persons who have at least a bachelor's degree but are working in an occupation that requires at most a high school education. This avoids overestimating changes in the rate. It is unlikely that occupations that required high school or less in 1991 now require a bachelor's degree or even more.

Sample selection

This study uses census information from the 20% of the population that provided employment and earnings details. The initial sample consisted of persons aged 25 to 54 with a university degree (bachelor's or above) who held a job (as an employee or self-employed) during the census reference week. This was used to calculate the **mismatch rate**:

In jobs requiring at most a high school education

Total sample

To analyze earnings, the sample was restricted to those of persons who held a paid job, and during the year preceding the census:

- received wages or salaries
- worked at least one week, primarily full time
- had no self-employment income.

To verify the pattern of change in rates over time, a different definition is used. The numerator is employed persons aged 25 to 54 with at least a bachelor's degree working in occupations requiring a college degree, apprenticeship training or high school education or less. The denominator is employed persons aged 25 to 54 with at least a bachelor's degree. While the incidence is greater using this definition, the trends in the two rates are comparable. For Canadian-born workers and recent immigrants, both rates rose between 1991 and 1996 and declined between 1996 and 2001, but the 2001 rate showed little change from the 1991 rate.

	1991	1996	2001
University graduate, in job requiring less than university		%	
Men			
Canadian-born	30	34	33
Recent immigrants	50	54	47
Other immigrants	32	38	39
Women			
Canadian-born	30	34	33
Recent immigrants	64	67	61
Other immigrants	42	45	47
University graduate, in job requiring secondary school or less			
Men			
Canadian-born	11	14	12
Recent immigrants	27	32	25
Other immigrants	13	17	18
Women			
Canadian-born	13	17	13
Recent immigrants	41	47	38
Other immigrants	21	25	24

Source: Census of Population

Recent immigrants: For the 1991 census, recent immigrants are people who entered Canada between 1985 and 1989. For 1996, they entered between 1990 and 1994, and for 2001, between 1995 and 1999. Immigrants who entered during the census year or the year immediately preceding were excluded to facilitate comparison with earlier studies (Grant 1999; Frenette and Morissette 2003).

Unemployment rate: Proportion of the labour force unemployed during the census reference week.

Mother tongue: First language learned at home in childhood and still understood.

Average weekly earnings: The sum of wages and salaries reported for the calendar year preceding the census (excluding any income from self-employment or agricultural work), divided by the number of weeks worked during the year.

Table 2: University graduate visible minorities in low-education jobs

		Men			Women		
	1991	1996	2001	1991	1996	2001	
Recent immigrants 25 to 54	27	32	25	% 41	47	38	
Visible minority	32	39	29	49	53	45	
Other	17	19	16	25	33	25	
25 to 34	28	34	22	41	47	37	
Visible minority	32	40	26	48	54	43	
Other	20	21	12	25	31	23	
35 to 44 Visible minority Other	25	30	24	41	45	39	
	31	38	28	50	51	46	
	14	16	16	27	34	25	
45 to 54 Visible minority Other	28	35	33	40	50	43	
	34	41	38	55	57	50	
	16	24	23	20	37	30	
Canadian-born 25 to 54 Visible minority Other	11 14 11	14 21 14	12 14 12	13 20 13	17 24 17	13 18 13	
25 to 34	15	20	15	17	23	16	
Visible minority	16	26	15	23	27	20	
Other	15	20	15	17	22	16	
35 to 44 Visible minority Other	10	12	11	11	14	13	
	12	13	13	14	18	16	
	10	12	11	11	14	13	
45 to 54 Visible minority Other	6	9	10	8	11	11	
	9	14	13	9	14	11	
	6	9	10	8	11	11	

Source: Census of Population

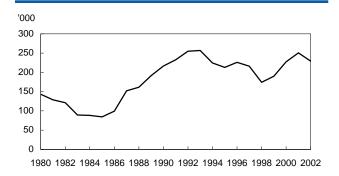
In 2001, the rate for immigrant men was 29% if they were a member of a visible minority and 16% otherwise. For women, the rates were 45% and 25% respectively. Furthermore, the observed gaps largely persist even after taking account of education level, language, experience, field of study, country of origin and region of residence.³

If the high rate for visible-minority recent immigrants depended solely on their belonging to a visibleminority group, Canadian-born visible minorities should also display high rates. This is not always the case; the rate varies by sex and age. For example, in 2001, visibleminority male workers born in Canada and aged 25 to 34 had the same rate (15%) as their nonvisible-minority counterparts. The same was true for women aged 45 to 54, whose mismatch rate was 11%. And the gap separating the rates for visible-minority men aged 45 to 54 and their non-visibleminority counterparts (13% and 10% respectively) disappeared after controlling for education level, language, experience, field of study, country of origin and region

This gap might be due to several factors: professional and social networks and institutional barriers; difficulty expressing oneself in one of the official languages; problems getting foreign credentials and experience recognized; the quality of education in the country of origin (Sweetman 2003); and various non-observable characteristics such as the quality of the applicant, motivation, and the discrimination that some immigrants may encounter.

On this latter point, several studies have shown the double disadvantage of recent immigrants who are members of visible minorities (De Jong and Madamba 2001; Li 2001). The mismatch rate appears to go in the same direction, since there is a sizeable gap between the rate for recent immigrants who are members of visible minorities and the rate for those who are not.

Chart: Number of immigrants



Source: Citizenship and Immigration Canada, 2003

of residence. However, for men aged 35 to 44 and women under 45 born in Canada, the mismatch rates in 2001 were slightly higher for those who belonged to a visible minority than for those who did not.⁴

Field of study and region of origin

Given the current importance of the new information technologies and the increased demand for trained workers, one might expect that recent immigrants with a degree in engineering, computer science or mathematics would find it easier to land a job that matched their skills than those in education, the humanities, or the social sciences (Table 3). This was indeed the case. Mismatch rates for the former group were 17% for men and 26% for women in 2001, compared with 39% and 45% for the latter group.5 The lower rate observed for these fields of study is robust. When education level, language, experience, region of origin, visible minority status, and region of residence are taken into account, much of the gap remains.6

Despite the relative stability of mismatch rates over the decade, some fields of study showed major changes. For example, the rate for recent immigrants holding degrees in the social sciences increased significantly for men (from 33% to 43%), while the rate for computer science and mathematics fell 7 percentage points for men and 6 for women.

Region of origin also appears to influence the mismatch rate. In 2001, immigrants from South Asia and Southeast Asia⁷ posted disproportionately high rates. Some 37%

Table 3: University graduate recent immigrants in low-education jobs

	Men			١	Nomen	
	1991	1996	2001	1991	1996	2001
				%		
Total	27	32	25	41	47	38
Mother tongue						
English	18	27	23	30	41	34
French	16	21	16	24	23	21
Other	30	34	26	46	49	40
Age						
25 to 34	28	34	22	41	47	37
35 to 44 45 to 54	25 28	30 35	24 33	41 40	45 50	39 43
45 10 54	20	33	33	40	30	43
Education		40	0.4	40		
Bachelor's Master's	32 21	40 23	31 18	46 29	52 33	44 25
Doctorate	3	4	7	9	9	11
	-		-		_	
Class of worker	0.5	07	00	00	00	00
Self-employed Employed	25 27	27 33	22 26	26 42	30 48	22 40
Employed	21	33	20	72	40	40
Field of study						
Arts and sciences	37	45	39	47	52	45
Teaching and fine arts	34	32	34	41	45	38
Humanities	31	43	39	46 47	49	47
Social sciences Commerce	33 42	48 51	43 39	51	49 62	43 49
Other	36	37	33	44	48	41
Applied sciences	19	24	17	27	37	26
Engineering and	13	24	17	21	37	20
applied sciences	19	25	20	25	39	28
Mathematics and	20	21	13	20	25	22
computer science	20	21	13	29	35	23
Health	16	22	26	28	33	36
Region of origin						
North America	11	15	12	15	21	20
Central and South America,	24	25	0.5	45	45	20
and the Caribbean Northern and Western Europe	31 8	35 12	25 10	45 20	45 19	38 18
Southern and Eastern Europe	24	22	18	36	41	29
Africa	24	31	21	28	36	28
South Asia	40	51	37	63	60	55
Southeast Asia	45 22	59	48	59 35	72 34	61
East Asia West Asia	33	23 37	18 28	35 44	34 43	30 38
Oceania and other	14	14	10	18	22	17
Visible minority						
Yes	32	39	29	49	53	45
No	17	19	16	25	33	25

Source: Census of Population

to 48% of men from these regions held at least a university degree but worked in an occupation requiring at most a high school education. The corresponding proportions for women were 55% and 61%. Here again, much of the observed gap remained, even after controlling for between-group differences in work experience, language, education, field of study, and region of residence.⁸

While coming from South or Southeast Asia increases the probability that a recent immigrant will hold a loweducation job, coming from North America, Northern or Western Europe or Oceania reduces this risk considerably. Immigrants from the latter regions exhibited the lowest mismatch rates, with the men having rates very comparable to native-born Canadians.

As expected, higher education appears to protect a sizeable proportion of job-seekers against falling into low-education jobs. Compared with bachelor's degree holders, recent immigrants with a master's or doctorate were much less likely to hold jobs requiring no more than high school education in 2001. Recent immigrants of either sex with a doctorate were one-quarter as likely as those with a bachelor's degree to hold such jobs.

Linguistic differences

Given the importance of written and oral communication in an economy increasingly based on knowledge, ease of expression in one of the official languages should enhance the access of immigrants to jobs corresponding with their education level. Indeed, recent immigrants whose mother tongue was one of the official languages were less likely to hold loweducation jobs.

The disparities observed between recent immigrants whose mother tongue was English and those with another mother tongue remained when region of origin, experience, education level, field of study, and visible minority status were taken into account. However, the gaps between those whose mother tongue was French and those with another mother tongue did not hold up to multivariate analysis.⁹

Being able to converse in English or French also appears to enhance access to the same occupation held prior to immigration. Some 40% of recent immigrants who could converse in one of the official languages had similar jobs before and after immigrating, compared with only 25% of those who could not converse in either language (Statistics Canada 2003).

Possibly, the effect of language is hard to dissociate from the effect of region of origin, since nearly two-thirds of persons from Anglo-Saxon countries such as the United States, New Zealand and Australia kept the same occupation after immigrating, compared with only a third of immigrants from Asia and the Middle East. In addition to having English as their official language, immigrants from Anglo-Saxon countries also have had the best chance of having their credentials recognized.

High mismatch rate for women

At 38% in 2001, the rate for immigrant women was one and a half times the 25% registered for men. Nearly half of the gap arises because women less often have a higher degree (master's or doctorate), and their degree is seldom in an applied field, such as engineering, computer science or mathematics.¹⁰

Another factor, which cannot be measured by the census, may be that women less often than men enter Canada as economic immigrants, coming instead as the spouse or dependant of an economic immigrant or for reasons of family reunification (Statistics Canada 2003).¹¹ Since economic immigrants usually perform better in the labour market than other immigrants, the low proportion of women entering with this status may partially explain their high rate.¹²

Institutional barriers

Some occupations are regulated by professional associations. To be certified, applicants must often undergo examinations and show that they have a certain number of years of work experience in Canada and a good knowledge of English or French (Boyd 2000). Such requirements, which regulate access to some occupations (such as in the health, engineering and legal fields as well as some specialized trades), may affect chances of finding a job that matches education level.

Despite current pressure on the health professions, and more pressure expected because of population aging, the health field posted an increase in the mismatch rate between 1991 and 2001, from 16% to 26% for men and from 28% to 36% for women. For recent immigrant men who had studied to be doctors, it more than doubled—from 11% to 23% (Table 4). For recent immigrant women who had studied nursing, it increased from 30% to 47%. Taking age, language, country of origin, and region of residence into account had almost no effect on these rates. 13 By comparison,

Table 4: University graduate recent immigrants in selected fields of study

	Men				Women		
	1991	1996	2001	1991	1996	2001	
				%			
Law Recent immigrants Canadian-born	31 2	47 3	44* 3	50 4	44 6	37 6	
Psychology Recent immigrants Canadian-born	40 11	48 15	38 9	54 17	63 21	48 11	
Architecture Recent immigrants Canadian-born	15 3	32 6	18 3	9	43 10	24* 7	
Engineering Recent immigrants Canadian-born	19 5	24 5	20 5	27 6	38 11	28 7	
Medicine** Recent immigrants Canadian-born	11 1	17 2	23* 1	15 1	27 4	18 1	
Nursing Recent immigrants Canadian-born	F 6	F 10	F 7	30 4	37 5	47* 4	

Source: Census of Population

** At least 6 years of university education.

transferable (Canada Gazette 2002). Initiatives designed to accelerate the accreditation process are also underway in some provinces, ¹⁴ and at the federal level, various task forces have been created to shed light on the issue (FPTAC 2004). ¹⁵

Earnings differences

Having a low-education job greatly affects the employment income of recent immigrants with university degrees (see *Definitions* regarding sample selection). Compared with their counterparts in jobs requiring a university degree, recent immigrant men employed full time in jobs requiring no more than high school education earned 42% less per week in 2000 (Table 5). For women, the gap was 39%. Young men registered a gap of 47%, up sharply from the 29% observed in 1990.

the rates of native-born Canadians remained stable at approximately 1% and 4% respectively for men in medicine and women in nursing.

Other occupations also showed an increase in rates—law, from 31% to 44% for men; architecture, from 9% to 24% for women. However, rates in some occupations remained relatively stable; for example, engineering, which accounted for more than a third of recent immigrant men with a degree in 2001, had a rate of about 20% throughout the decade.

With the latest changes to immigration policy, the Canadian government intends to distance itself from the model favouring immigrants with degrees in specific occupations and to put more emphasis on skills that are flexible and easily

Table 5: Average weekly wages* of recent immigrants with a degree, by educational requirements of their job

	Men			Women		
	1990	1995	2000	1990	1995	2000
25 to 54 Secondary school			200	0 \$		
diploma or less	682	561	684	545	480	555
University degree	1,043	992	1,186	869	875	911
Gap (%)	-35	-43	-42	-37	-45	-39
25 to 34 Secondary school diploma or less University degree Gap (%)	696 978 -29	562 923 -39	626 1,184 -47	550 843 -35	444 854 -48	537 904 -41
35 to 54 Secondary school diploma or less	669	560	714	540	518	568
University degree Gap (%)	1,095 -39	1,045 -46	1,188 -40	901 -40	899 -42	918 -38

Source: Census of Population, 1991, 1996, 2001

See Definitions for restrictions that apply to the sample used in this table.

^{*} The gap between rates in 1991 and 2001 is statistically significant at the 5% threshold.

^{*} Working mostly full time during the census reference year.

It is not surprising that recent immigrants in low-education jobs have lower earnings than those in jobs requiring university education. What is surprising, however, is that they also earn less than those born in Canada who work in the same situation (Table 6). In 2000, regardless of age group, recent immigrants employed full time in low-education jobs had weekly earnings at least 20% lower than their Canadian-born counterparts. Indeed, the gap reached 30% among 35 to 54 year-olds.

The earnings gap could simply be caused by the difficulty new labourmarket entrants experience in finding well-paying jobs. If so, the gap between recent immigrants and the Canadian-born holding low-education jobs should narrow over the years. In these jobs, immigrant women aged 25 to 44 who entered Canada between 1985 and 1989 earned, in 1990, 20% less than their Canadian-born counterparts when employed full time (Table 7). Ten years later, in 2000, the earnings gap between these two groups of women (now aged 35 to 54) remained unchanged.

Table 6: Average weekly wages of employees* in low-education jobs, by immigrant status and age

		Men			Women		
	1990	1995	2000	•	1990	1995	2000
				2000 \$			
25 to 54 Canadian-born Recent immigrants Gap (%)	863 682 -21	841 561 -33	953 684 -28		694 545 -21	675 480 -29	740 555 -25
25 to 34 Canadian-born Recent immigrants Gap (%)	772 696 -10	704 562 -20	789 626 -21		660 550 -17	615 444 -28	682 537 -21
35 to 54 Canadian-born Recent immigrants Gap (%)	982 669 -32	998 560 -44	1,079 714 -34		760 540 -29	776 518 -33	806 568 -30

Source: Census of Population, 1991, 1996, 2001

* Working mostly full time.

See Definitions for restrictions that apply to the sample used in this table.

Similarly, no narrowing of the earnings gap was observed for men.¹⁶

For all years examined, the gap among women working full time remained above 20%, even after accounting for mother tongue, education level, field of study, visible minority status, and region of

residence (Table 8). Moreover, when control variables were added for occupation, the gap did not narrow appreciably.¹⁷ For men, the 26% earnings gap in 2000 fell to 11% when the first factors were taken into account. The gap was no longer statistically significant when differences in occupation were taken into account. Hence, the lower earnings of recent immigrant men in low-education jobs seem to be in part attributable to their concentration in low-paying occupations.¹⁸

In light of the crucial role of language skills in our increasingly knowledge-based economy, it is worth noting that the earnings gap for this group of men working full time differs depending on mother tongue, especially for earnings in 1990 and 1995. For example, for Canadian-born and recent immigrant men with English as their mother tongue, the earnings gaps were only 3% and 6% respectively in those years, compared with 15%

Table 7: Trends in earnings of immigrants and the Canadian-born

	1990	1995	2000
Women, university degree* Average weekly earnings		\$	
Immigrated 1985-1989**	550	571	639
Canadian-born**	692	739	806
Gap (%)	-21	-23	-21
Men, university degree* Average weekly earnings Immigrated 1985-1989** Canadian-born** Gap (%)	692	729	801
	840	931	1,079
	-18	-22	-26

Source: Census of Population, 1991, 1996, 2001

See Definitions for restrictions that apply to the sample used in this table.

^{*} Working mostly full time during the census reference year.

^{**} Aged 25 to 44 in 1991.

Table 8: Adjusted wage gap** between immigrants and the Canadian-born

	1990	1995	2000
		%	
Women***			
Unadjusted	-21	-23	-21
Adjusted (1) [†]	-28	-24	-28
Adjusted (2) ^{††}	-25	-21	-26
Men			
Unadjusted	-18	-22	-26
English mother tongue	-3	-6	-23
Other mother tongue	-15	-23	-23
Wage gap (1)†	-24	-21	-11
English mother tongue	-10	-12*	-15*
Other mother tongue	-32	-27	-14*
Wage gap (2)††	-22	-17	-7*
English mother tongue	-8*	-9*	-9*
Other mother tongue	-29	-23	-9*

Source: Census of Population, 1991, 1996, 2001

and 23% for those with a mother tongue other than English or French. However, in 2000, more than 10 years after the arrival of this cohort, the effect of language was no longer significant. For women, multivariate analysis did not reveal any significant difference in this regard.

For immigrant women working full time in low-education jobs and belonging to the 1985 to 1989 cohort, the earnings gap is long-lasting: nearly 30% of those holding a job were in low-education positions in 2001, more than 10 years after their arrival in Canada (Table 9). Even so, this group's rate declined, falling from 41% in 1991 to 29% in 2001. Similarly, 21% of immigrant men belonging to the 1985 to 1989 cohort held low-education jobs in 2001, a rate fairly close to 1991 (27%). Thus, even though the members of this cohort arrived during the economic boom of the second half of the 1980s, and even though the unemployment rate in 2001 was a relatively low 7.2%, at least 21% of them held low-education jobs more than 10 years after their arrival in Canada.

Summary

Among recent immigrants with a university degree and employed between 1991 and 2001, at least one in four had a job requiring no more than a high school education.

The recent immigrants most likely to have such jobs in 2001 came from South or Southeast Asia, had a mother tongue other than English or French, were members of a visible minority, and were women. Those least likely to have such jobs were from North America, Northern or Western Europe or Oceania; had a master's degree or doctorate; were trained in applied sciences (engineering, computer science or mathematics); and had English as their mother tongue.

While the proportion of recent immigrants holding low-education jobs changed little between 1991 and 2001, it increased for those with an education in health or the social sciences. On the other hand, graduates in computer science or mathematics saw their mismatch rate decline.

Table 9: University graduates 25 to 44 in low-education jobs in 1991, by subsequent status

	1991	1996	2001
Women		%	
Recent immigrants Canadian-born	41 14	36 15	29 12
Men			
Recent immigrants Canadian-born	27 12	25 13	21 11

Source: Census of Population

^{*} Not significant at the 5% threshold.

^{**} Wage gap (%) between immigrants who arrived between 1985 and 1989, were 25 to 44 in 1991, had a university degree and were in a low-education job, and their Canadian-born counterparts.

^{***} For immigrant women, controlling for language in a logistic regression did not result in a significant difference. Therefore, an adjustment was not done for women.

[†] Adjusted wage gap, taking into account education level, field of study, mother tongue, region of residence, visible minority status, age and age squared.

^{††} Adjusted wage gap, taking into account the above factors as well as job type.

For the three years studied, recent immigrant men from North America, Northern or Western Europe and Oceania had rates very similar to those of their Canadianborn counterparts.

The strong propensity of young immigrant men with visible minority status to hold low-education jobs does not appear to be attributable solely to their visible minority status, at least in 2001. In that year, Canadianborn men aged 25 to 34 with visible minority status had the same probability as others born in Canada of holding a job requiring no more than a high school education. The same trend was observed for women aged 45 to 54.¹⁹

There was no trend toward a decrease in the earnings gap between immigrant women who arrived between 1985 and 1989 and Canadian-born women holding low-education jobs. The earnings gap was 20% not only in 1990 but also in 2000, more than 10 years after their arrival in Canada. While these results concern a specific subset of the recent-immigrant population, they contrast strikingly with the findings of some earlier studies (Bloom, Grenier and Gunderson 1995; Grant 1999; Frenette and Morissette 2003). These studies, which looked at all recent immigrants, regardless of education level, show that the earnings gap between them and Canadian-born workers generally tends to diminish over the years.²⁰

Even after spending more than 10 years in Canada, at least 21% of employed, degree-holding immigrants who arrived between 1985 and 1989 had a low-education job in 2001. This suggests that their difficulty in obtaining university-level jobs is not necessarily a short-term phenomenon. Whether low-education jobs are held on a temporary or long-term basis is important, since advanced skills could erode over the long run.

Perspectives

■ Notes

- 1 India, Bangladesh, Bhutan, Maldives, Nepal, Pakistan, Sri Lanka and East Timor.
- 2 Unless the ease of immigrants to express themselves in one of the two official languages is tested, this factor is not easy to capture. In addition to mother tongue, the census includes a question on the ability to carry on a conversation in English or French as well as the language spoken at home. The ability to carry on

Low-education jobs and underemployment

Between 1991 and 2001, the unemployment rate declined for persons aged 25 to 54, but for recent immigrants it fell more markedly, going from 9.6% to 7.4% for men and from 12.5% to 10.5% for women. However, their presence in low-education jobs may be considered as a form of underemployment since those affected do not achieve their full potential in the labour market, thus depriving the Canadian economy of their skills. If the number of workers in such jobs is added to the number of unemployed, the resulting underemployment rate²¹ in 2001 for recent immigrant men was 27.4%, more than double the rate for their Canadian-born counterparts. For immigrant women, the underemployment rate was nearly 42%, three times that of their Canadian-born counterparts.

Age 25 to 54	1991	1996	2001
		%	
Unemployment rate			
Men			
Canadian-born	2.9	2.4	2.3
Recent immigrants	9.6	9.5	7.4
Other immigrants*	3.8	3.9	3.4
Women			
Canadian-born	4.3	3.3	2.7
Recent immigrants	12.5	11.9	10.5
Other immigrants*	5.3	4.6	4.0
Underemployment rate**			
Men			
Canadian-born	11.0	13.3	11.5
Recent immigrants	29.4	34.5	27.4
Other immigrants*	13.3	17.2	16.8
Women			
Canadian-born	15.8	18.0	14.1
Recent immigrants	45.3	50.2	41.9
Other immigrants*	22.6	25.6	24.3

Source: Census of Population

- Immigrants who arrived during the year and a half preceding each census have been excluded.
- ** Number of unemployed workers plus those in jobs requiring less than their education level as a percentage of the labour force.

a conversation seems to often be overestimated by respondents speaking neither language. Both in 1991 and 2001, 99% of recent immigrants aged 25 to 54 with a university degree reported that they were able to express themselves in English or French. As for the question on language spoken at home, this does not necessarily measure ease in expressing oneself in English or French. Accordingly, mother tongue is used to reflect the linguistic ability of immigrants.

3 These results come from separate logistic regressions for men and women that included the variables cited. The results are available on request.

- 4 These results are based on several logistic regressions including independent variables such as age, education level, field of study, mother tongue and region of residence, in addition to the variable of belonging to a visible minority. Regressions were carried out for men and for women aged 25 to 34, 35 to 44, and 45 to 54. Results are available on request.
- 5 Recent immigrants holding degrees in the health sciences are excluded from these rates. This field of study is covered in the section on institutional barriers.
- 6 These results are obtained from a logistic regression. The dependent variable 'holding a job requiring a high school education or less' was regressed on the variable 'studied or did not study applied sciences' along with the above-mentioned variables. The adjusted rate calculated using the results of this multivariate analysis was 18% for men in applied sciences compared with the 17% indicated by the raw data. For women, the adjusted rate was 30% instead of 26%. Recent immigrants with an education in health sciences were excluded.
- 7 Southeast Asia comprises Brunei, Darussalam, Cambodia, Indonesia, Laos, Malaysia, Myanmar, the Philippines, Singapore, Thailand and Vietnam. See Note 1 for the countries that make up South Asia.
- 8 These results are obtained from separate logistic regressions for men and women, with the following independent variables: originating or not originating from South or Southeast Asia, age, education level, field of study, language and region of residence. The mismatch rate adjusted on the basis of these variables for immigrants from South and Southeast Asia combined was 32% for men and 52% for women, compared with the unadjusted rates of 40% and 58%.
- 9 The multivariate analysis involved here is a logistic regression in which the dependent variable 'having a job requiring high school education or less' was explained by the mentioned variables. The differences in rates between those with French as their mother tongue and those with another mother tongue are entirely explained by differences with respect to the independent variables included in the logistic model.
- 10 These results were obtained from a Oaxaca decomposition based on age, education level, region of origin, field of study, region of residence, mother tongue and visible minority status. When these factors are taken into account, between 40% and 60% of the difference in rates between recently immigrated men and women remains unexplained.

- 11 Immigrants are admitted to Canada under three broad categories: *economic* (including spouses and dependants), *family reunification*, and *refugee*. According to the Longitudinal Survey of Immigrants, from October 2000 to September 2001, men accounted for 77% of the economic category. Women in this category were more likely to enter as a spouse or dependant, this being the case for 75% of them. Women accounted for 60% of immigrants admitted to Canada in the family reunification category.
- 12 Economic immigrants registered higher participation and employment rates than other categories of immigrants. "In general, immigrants admitted under the skilled worker category entered the labour market faster and had more years of earnings than those in other admission classes." (Chui and Zietsma 2003, 28).
- 13 The adjusted rate for men who had studied medicine went from 11% in 1991 to 21% in 2001. For women who had studied nursing, the adjusted rate went from 30% to 48%.
- 14 In Ontario, several programs exist for different occupations, such as the Care program for nurses, the IPG program for pharmacists and the Pathways program for engineers. In Quebec, a task force on the recognition of equivalences was formed in April 2004 to facilitate the integration of skilled immigrants (Cauchy 2004).
- 15 In February 2004, the Task Force on Licensure of International Medical Graduates made several recommendations regarding the situation of immigrants with medical degrees. Similar task forces have been formed to look at immigrants with nursing or engineering degrees. The Prime Minister has appointed a Parliamentary Secretary for Foreign Credential Recognition, and the budgets of 2003 and 2004 identified new resources for credential recognition (2002) and enhanced language training (2004).
- 16 The increase in the earnings gap between 1990 and 2000, from 18% to 26%, is not statistically significant at the 5% threshold.
- 17 The adjusted earnings gaps shown in Table 8 are based on multivariate analyses. The dependent variable is the natural logarithm of weekly earnings. The independent variables are described in Table 8. The region of residence is measured using a set of dichotomous variables for Montréal, Ottawa-Gatineau, Calgary, Toronto, and Vancouver and the other census metropolitan areas. Occupations are measured using 19 dichotomous variables representing different occupational categories.

18 In 2001, 21% of recent immigrant men with university degrees belonging to the cohort that arrived between 1985 and 1989 held low-paying jobs such as janitors or machine and equipment operators. Among their Canadian-born counterparts, the corresponding proportion was 11%.

19 This does not exclude the possibility that Canadianborn workers belonging to visible minorities earn lower wages than other native-born Canadians. For a more detailed analysis, see Pendakur and Pendakur (2002).

20 For example, Frenette and Morissette (2003) looked at individuals regardless of their education level who worked at least 40 weeks a year. For immigrant women who arrived between 1985 and 1989, the earnings gap in relation to the Canadian-born declined from 27% in 1990 to 21% in 2000.

21 The underemployment rate here refers solely to unemployment and presence in low-education jobs. It does not include other forms of underemployment, such as involuntary part-time work.

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