

Catalogue no. 75-001-XIE PEESPPECTIIVES

## ON LABOUR AND INCOME

JUNE 2004
Vol. 5, No. 6

- Immigrants:

Settling for less?

- SHIFTS IN CONSUMER SPENDING

UPDATE ON GAMGLING


## At Your Service...

## How to obtain more information

Specific inquiries about this product and related statistics or services should be directed to: Perspectives on Labour and Income, 9 A-6 Jean Talon, Statistics Canada, Ottawa, Ontario, K1A 0T6 (telephone: (613) 951-4608; e-mail: perspectives@statcan.ca).

For information on the wide range of data available from Statistics Canada, you can contact us by calling one of our toll-free numbers. You can also contact us by e-mail or by visiting our Web site.

| National inquiries line | 1800 | $263-1136$ |
| :--- | ---: | ---: |
| National telecommunications device <br> for the hearing impaired | 1800 | $363-7629$ |
| Depository Services Program inquiries | 1800 | $700-1033$ |
| Fax line for Depository Services |  | $1800889-9734$ |
| Program | infostats@statcan.ca |  |
| E-mail inquiries | www.statcan.ca |  |

## Standards of service to the public

Statistics Canada is committed to serving its clients in a prompt, reliable and courteous manner and in the official language of their choice. To this end, the agency has developed standards of service which its employees observe in serving its clients. To obtain a copy of these service standards, please contact Statistics Canada toll free at 1800 263-1136.

## Perspectives on Labour and Income

(Catalogue no. 75-001-XIE; aussi disponible en français: L'emploi et le revenu en perspective, $\mathrm{n}^{\circ}$ 75-001-XIF au catalogue) is published monthly by authority of the Minister responsible for Statistics Canada. ©Minister of Industry 2004.
ISSN: 1492-496X.

PRICE: CDN $\$ 6.00$ per issue, CDN $\$ 52.00$ for a one-year subscription, plus applicable taxes.

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system or transmitted in any form or by any other means, electronic, mechanical, photocopying, recording or otherwise, without prior written permission from Licence Services, Marketing Division, Statistics Canada, Ottawa, Ontario, Canada K1A 0T6.

## Symbols

The following standard symbols are used in Statistics Canada publications:
not available for any reference period
.. not available for a specific reference period
.. not applicable
p preliminary
r revised
confidential
E use with caution
F too unreliable to be published

## Highlights

In this issue

## Immigrants: Settling for less?

- At least one in four recent immigrants with a university degree, who were employed between 1991 and 2001, had a job requiring no more than a high school education. This was twice the proportion of only $12 \%$ among native-born Canadians.
- Recent immigrants most likely to have a job requiring no more than a high school education 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; and had English as their mother tongue.
- Not only do recent immigrants in low-education jobs have lower earnings than those in universitylevel jobs, but they also earn less than their Canadian-born counterparts working in the same situation. In 2000, recent immigrants employed full time in low-education jobs had weekly earnings at least $20 \%$ lower than their Canadian-born counterparts.
- The difficulty in obtaining university-level jobs is not necessarily a short-term phenomenon. Even after more than 10 years in Canada, at least $21 \%$ of employed, university-educated immigrants who arrived between 1985 and 1989 had a loweducation job in 2001.


## Shifts in consumer spending

- Consumer spending, which accounts for almost $60 \%$ of GDP, has shifted markedly over the last 20 years, reflecting changes in lifestyle and the economy.
- Between 1981 and 2000, consumer spending grew $2.6 \%$ annually, slightly less than GDP. Consumer spending remained strong even during the slowdown of 2001.
- Higher incomes and wealth have resulted in higher spending on discretionary items. Between 1981 and 2000 , much of the rise in discretionary spending was for financial services, with mutual funds becoming the fastest-growing item in the consumer household basket.
- Home ownership has also become more important, accounting for $47 \%$ of non-financial household assets in 2000 , up from $41 \%$ in 1981.
- Technological innovation has resulted in a plethora of new products and services whose share grew $6 \%$. Consumer spending on health and education also increased rapidly.
- These shifts in consumer spending were accompanied by a fall in the personal savings rate and a rise in consumer debt.


## Perspectives

# PEBSPPECTIVES 

## ON LABOUR AND INCOME

## THE COMPREHENSIVE JOURNAL

## on labour and income from Statistics Canada

- Yes, I want PERSPECTIVES ON LABOUR AND INCOME (Catalogue no. 75-001-XPE).




# Immigrants: Settling for less? 

Diane Galarneau and René Morissette

During 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).

[^0]
## 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 Asia ${ }^{1}$ (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 loweducation 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 |
|  | Number |  |  |  |  |  |
| Total 27 | 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 <br> Engineering and       |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
| Mathematics and |  |  |  |  |  |  |
| Health | 9 | 8 | 6 | 14 | 13 | 13 |
| Region of origin |  |  |  |  |  |  |
| Central and South America, and the Caribbean | 8 | 5 | 4 | 6 | 6 | 5 |
| Northern and Western Europe | e 9 | 7 | 5 | 8 | 6 | 6 |
| Southern and Eastern Europe | e 14 | 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 |

Source: Census of Population

## 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 Canadianborn 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 loweducation jobs, a phenomenon observed throughout the decade.

Immigrants: Settling for less?

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

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 | 25 | 30 | 24 | 41 | 45 | 39 |
| Visible minority | 31 | 38 | 28 | 50 | 51 | 46 |
| Other | 14 | 16 | 16 | 27 | 34 | 25 |
| 45 to 54 | 28 | 35 | 33 | 40 | 50 | 43 |
| Visible minority | 34 | 41 | 38 | 55 | 57 | 50 |
| Other | 16 | 24 | 23 | 20 | 37 | 30 |
| Canadian-born |  |  |  |  |  |  |
| 25 to 54 | 11 | 14 | 12 | 13 | 17 | 13 |
| Visible minority | 14 | 21 | 14 | 20 | 24 | 18 |
| Other | 11 | 14 | 12 | 13 | 17 | 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 | 10 | 12 | 11 | 11 | 14 | 13 |
| Visible minority | 12 | 13 | 13 | 14 | 18 | 16 |
| Other | 10 | 12 | 11 | 11 | 14 | 13 |
| 45 to 54 | 6 | 9 | 10 | 8 | 11 | 11 |
| Visible minority | 9 | 14 | 13 | 9 | 14 | 11 |
| Other | 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 non-visible-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 Asia ${ }^{7}$ posted disproportionately high rates. Some $37 \%$

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

|  | Men |  |  | Women |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 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 | 25 | 30 | 24 | 41 | 45 | 39 |
| 45 to 54 | 28 | 35 | 33 | 40 | 50 | 43 |
| Education |  |  |  |  |  |  |
| Bachelor's | 32 | 40 | 31 | 46 | 52 | 44 |
| Master's | 21 | 23 | 18 | 29 | 33 | 25 |
| Doctorate | 3 | 4 | 7 | 9 | 9 | 11 |
| Class of worker |  |  |  |  |  |  |
| Self-employed | 25 | 27 | 22 | 26 | 30 | 22 |
| Employed | 27 | 33 | 26 | 42 | 48 | 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 | 49 | 47 |
| Social sciences | 33 | 48 | 43 | 47 | 49 | 43 |
| Commerce | 42 | 51 | 39 | 51 | 62 | 49 |
| Other | 36 | 37 | 33 | 44 | 48 | 41 |
| Applied sciences | 19 | 24 | 17 | 27 | 37 | 26 |
| Engineering and applied sciences | 19 | 25 | 20 | 25 | 39 | 28 |
| Mathematics and |  | 21 | 13 | 29 | 35 | 23 |
| Health | 16 | 22 | 26 | 28 | 33 | 36 |
| Region of origin |  |  |  |  |  |  |
| Central and South America, and the Caribbean | 31 | 35 | 25 | 45 | 45 | 38 |
| Northern and Western Europe | 8 | 12 | 10 | 20 | 19 | 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 | 59 | 48 | 59 | 72 | 61 |
| East Asia | 22 | 23 | 18 | 35 | 34 | 30 |
| West Asia | 33 | 37 | 28 | 44 | 43 | 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 |

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 onequarter 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 twothirds 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 | 31 | 47 | 44* | 50 | 44 | 37 |
| Canadian-born | 2 | 3 | 3 | 4 | 6 | 6 |
| Psychology |  |  |  |  |  |  |
| Recent immigrants | 40 | 48 | 38 | 54 | 63 | 48 |
| Canadian-born | 11 | 15 | 9 | 17 | 21 | 11 |
| Architecture |  |  |  |  |  |  |
| Recent immigrants | 15 | 32 | 18 | 9 | 43 | $24 *$ |
| Canadian-born | 3 | 6 | 3 | 6 | 10 | 7 |
| Engineering |  |  |  |  |  |  |
| Recent immigrants | 19 | 24 | 20 | 27 | 38 | 28 |
| Canadian-born | 5 | 5 | 5 | 6 | 11 | 7 |
| Medicine** |  |  |  |  |  |  |
| Recent immigrants | 11 | 17 | $23^{*}$ | 15 | 27 | 18 |
| Canadian-born | 1 | 2 | 1 | 1 | 4 | 1 |
| Nursing |  |  |  |  |  |  |
| Recent immigrants | F | F | F | 30 | 37 | 47* |
| Canadian-born | 6 | 10 | 7 | 4 | 5 | 4 |

Source: Census of Population

* The gap between rates in 1991 and 2001 is statistically significant at the 5\% threshold.
** 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 | 2000 \$ |  |  |  |  |  |
| Secondary school 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 | 696 | 562 | 626 | 550 | 444 | 537 |
| University degree | 978 | 923 | 1,184 | 843 | 854 | 904 |
| Gap (\%) | -29 | -39 | -47 | -35 | -48 | -41 |
| 35 to 54 |  |  |  |  |  |  |
| Secondary school diploma or less | 669 | 560 | 714 | 540 | 518 | 568 |
| University degree | 1,095 | 1,045 | 1,188 | 901 | 899 | 918 |
| Gap (\%) | -39 | -46 | -40 | -40 | -42 | -38 |

Source: Census of Population, 1991, 1996, 2001

* Working mostly full time during the census reference year.

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

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

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** | 692 | 729 | 801 |
| Canadian-born** | 840 | 931 | 1,079 |
| Gap (\%) | -18 | -22 | -26 |

${ }_{\star}$ Source: Census of Population, 1991, 1996, 2001

* Working mostly full time during the census reference year.
** Aged 25 to 44 in 1991.
See Definitions for restrictions that apply to the sample used in this table.
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 8: Adjusted wage gap** between immigrants and the Canadian-born

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

Source: Census of Population, 1991, 1996, 2001

* 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.
$\dagger$ Adjusted wage gap, taking into account education level, field of study, mother tongue, region of residence, visible minority status, age and age squared.
$t \dagger$ Adjusted wage gap, taking into account the above factors as well as job type.
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.


## 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.

For immigrant women working full time in loweducation 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 1980 s, 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.

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

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

Source: Census of Population

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 loweducation 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 rate ${ }^{21}$ 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 | 2.9 | 2.4 | 2.3 |
| Canadian-born | 9.6 | 9.5 | 7.4 |
| Recent immigrants | 3.8 | 3.9 | 3.4 |
| Other immigrants* |  |  |  |
| Women | 4.3 | 3.3 | 2.7 |
| Canadian-born | 12.5 | 11.9 | 10.5 |
| Recent immigrants | 5.3 | 4.6 | 4.0 |
| Other immigrants* |  |  |  |
| Underemployment rate** | 11.0 | 13.3 | 11.5 |
| Men | 29.4 | 34.5 | 27.4 |
| Canadian-born | 13.3 | 17.2 | 16.8 |
| Recent immigrants |  |  |  |
| Other immigrants* | 15.8 | 18.0 | 14.1 |
| Women | 45.3 | 50.2 | 41.9 |
| Canadian-born | 22.6 | 25.6 | 24.3 |
| Recent immigrants |  |  |  |
| Other immigrants |  |  |  |
| Source: Census |  |  |  |

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.

## - References

Berman, Eli, John Bound and Stephen Machin. 1998. "Implications of skill-biased technological change: International evidence." Quarterly Journal of Economics 113, no. 4 (November): 1245-1279.

Bloom, David E., Gilles Grenier and Morley Gunderson. 1995. "The changing labour market position of Canadian immigrants." Canadian Journal of Economics 28, no. 4 (November): 987-1005.

Boyd, M. 2000. Matching worker to work: The case of Asian immigrants engineers in Canada. Working paper no. 14. University of California, San Diego.

Canada Gazette, Part II EXTRA Volume 136, no. 9 June 14, 2002: 214-234.

Cauchy, Clairandrée. 2004. "Quand l'Eldorado tourne au désenchantement." Le Devoir (May 1 ${ }^{\text {st }}$ and $2^{\text {nd }}$ ): A1 and A8.

Chui, Tina and Danielle Zietsma. 2003. "Earnings of immigrants in the 1990s." Canadian Social Trends (Statistics Canada, Catalogue no. 11-008-XIE) no. 70 (Autumn): 24-28.

De Jong, Gordon F. and Anna B. Madamba. 2001. "A double disadvantage? Minority group, immigrant status, and underemployment in the United States." Social Science Quarterly 82, no. 1 (March): 117-130.

Federal/Provincial/Territorial Advisory Committee on Health Delivery and Human Resources. 2004. Report of the Canadian task force on licensure of international medical graduates. Internet: www.aipso.ca/Task\ Force\  Final\%20Report.pdf.

Ferrer, Ana and Craig Riddell. 2003. "Education, credentials and immigrant earnings." University of British Columbia working paper. Internet: www.econ. ubc.ca/ ferrer/ferrer\&riddell(2).pdf.

Frenette, Marc and René Morissette. 2003. Will they ever converge? Earnings of immigrants and Canadian-born workers over the last two decades. Analytical Studies Branch research paper no. 215. Statistics Canada, Catalogue no. F0019MIE2003215. Ottawa.

Grant, Mary L. 1999. "Evidence of new immigrant assimilation in Canada." Canadian Journal of Economics 32, no. 4 (August): 930-955.

Green, David A. and Christopher Worswick. 2002. Earnings of immigrant men in Canada: The roles of labour market entry effects and returns to foreign experience. Paper prepared for Citizenship and Immigration Canada. Internet: www.cic.gc.ca/english/research/papers/earnings/ earnings-toc.html.

Li, Peter S. 2001."The market worth of immigrants' educational credentials." Canadian Public Policy 27, no. 1 (March): 23-38.

Pendakur, Krishna and Ravi Pendakur. 2002. "Colour my world: Have earnings gaps for Canadian-born ethnic minorities changed over time?" Canadian Public Policy 38, no. 4 (December): 489-512.

Statistics Canada. 2003. Longitudinal Survey of Immigrants to Canada: Process, progress and prospects. Catalogue no. 89-611-XIE. Ottawa.

Sweetman, Arthur. 2003. Immigrant source country education quality and Canadian labour market outcomes. Kingston, Ontario: Queen's University, School of Policy Studies.

# Shifts in consumer spending 

Tarek M. Harchaoui and Faouri Tarkhani

The boom in consumer spending, now in its 12th year, has weathered many adverse shocks to the economy, including terrorist attacks, a sharp decline in equity prices, SARS, and the closing of the American border to Canadian beef products. Throughout this time, resilient household demand, which accounts for almost $60 \%$ of the nation's gross domestic product (GDP), not only sustained growth but also played a key role in supporting the economy. Over the last 20 years, however, consumer spending and asset holdings have shifted dramatically reflecting changes in taste, lifestyle and the economy. Developments stem from many factors, including demographic change, technological and financial innovation, globalization of financial markets, rising household wealth, and women's increased participation in the labour market.

Twenty years ago, Canadian families tended to put their savings into personal deposits and fixed-term investments. Today, they are investing in mutual funds and other financial investments. An aging population is increasingly seeking retirement products and supplementary health-insurance coverage. The resulting emphasis on longer-term savings products has propelled the demand for financial planning and wealth management.
A more affluent and active population eats more meals away from home and buys vehicles such as minivans and sport utility vehicles that are more versatile than the traditional family car. Faster population and employment growth in suburban areas has also led to more spending on personal transportation services and less on mass transportation.

In recent years, Canadians have been affected more and more by the rapid advance in information and telecommunications technology. Personal computers

[^1]and the Internet are increasingly changing ways of communicating, acquiring information, and purchasing goods and services.

## A long-term perspective

Personal consumption expenditures reflect spending to acquire goods and services for the direct satisfaction of individual or collective wants. Attaining higher levels of consumption now or in the future is a major goal of most individuals and a widely accepted indicator of national economic activity. Accounting for $56.3 \%$ of GDP in 2003 and contributing more than half of the $2.8 \%$ average annual growth in GDP between 1981 and 2003, consumer spending is directly relevant to an assessment of Canada's long-term progress (Chart A).
From 1981 to 2000, the last year before the economy slowed down, real consumer spending grew $2.6 \%$ annually, slightly less than GDP. From 2000 to 2003, consumer spending contributed three-quarters of the

Chart A: Consumer spending accounted for more than half of GDP growth.


[^2]Shifts in consumer spending
2.3\% annual GDP growth-despite several events that adversely affected air transport, high-tech equipment, and new truck and van sales.

## The wealth effect

An increase in real incomes, the accumulation of household assets, and a willingness to take on more debt have resulted in higher consumer spending on discretionary items relative to basic necessities. Between 1981 and 2000, the net worth of households increased at an annual rate of almost $7 \%$, about double the increase in consumer expenditures ( $3 \%$ ). In 2000, life insurance and pensions plus stocks accounted for $68 \%$ of household financial assets, up from $47 \%$ in 1981 (Chart B). This came at the expense of interest-bearing asset holdings (down from $11 \%$ to $6 \%$ ), deposits ( $36 \%$ to $26 \%$ ), and other financial assets ( $6 \%$ to less than $1 \%$ ). The most significant change in the composition of assets occurred in RRSPs. The amount in RRSPs in the late 1990 s was 6 times larger than in the early 1980s, by far the largest increase of any single asset. This contrasts sharply with total assets, which grew 2 times over the same period. The proportion of families that had RRSPs doubled from $28 \%$ to $55 \%$.

Home ownership has also become more important. In 2000, housing accounted for $47 \%$ of non-financial household assets, up from $41 \%$ in 1981. Generally

## Chart B: Household financial asset holdings have shifted markedly.



Source: National Balance Sheet Accounts, 1981 and 2000

Over the period from 1981 to 2000, technological innovations resulted in a proliferation of new goods and services, including cable television, computers, electronic toys and games, cellular telephones, video equipment, and Internet services. Innovation also lowered the prices of many of these items, as well as those of more established goods and services such as audio equipment and long-distance telephone services. The new products increased their share from $1.5 \%$ to $3.6 \%$, one of the fastest growth rates within the consumer basket (Table). During this period, computer purchases experienced the second most rapid growth after mutual funds ( $21.8 \%$ compared with $23.5 \%$ ).

Table: Consumer spending by category

|  | Average annual growth rate (\%)* |  |  | Shares** |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{array}{r} 1981- \\ 2003 \end{array}$ | $\begin{array}{r} 1981- \\ 2000 \end{array}$ | $\begin{array}{r} 2000- \\ 2003 \end{array}$ | 1981 | 2000 |
|  | Chained Constant Prices |  |  | \% |  |
| Consumer spending | 2.7 | 2.6 | 3.1 | 100.0 | 100.0 |
| Food, beverages and tobacco | 0.8 | 0.8 | 1.2 | 18.4 | 13.0 |
| Clothing and footwear | 1.8 | 1.5 | 3.8 | 6.7 | 4.6 |
| Gross rent, fuel and power | 2.7 | 2.7 | 2.8 | 21.2 | 22.7 |
| Furniture, furnishings and household equipment and maintenance | 2.6 | 2.3 | 4.4 | 9.9 | 8.1 |
| TV sets, video equipment and accessories | 9.4 | 8.8 | 13.0 | 0.6 | 0.5 |
| Office machines and computer equipment | 18.6 | 21.8 | 0.4 | 0.1 | 0.5 |
| Medical care and health services | 3.9 | 3.8 | 4.6 | 3.3 | 4.9 |
| Medical care | 4.9 | 5.1 | 3.4 | 1.7 | 2.3 |
| Hospital care and the like | 1.8 | 1.4 | 3.9 | 0.2 | 0.2 |
| Other medical care expenses | 4.9 | 5.1 | 3.4 | 0.4 | 0.7 |
| Drugs and pharmaceutical products | 4.7 | 4.5 | 6.0 | 1.1 | 1.7 |
| Transportation and communications | 2.9 | 3.0 | 2.5 | 15.7 | 16.9 |
| New trucks and vans | 9.4 | 10.4 | 3.6 | 0.6 | 2.3 |
| Intercity and rural bus | -1.9 | -2.2 | 0.3 | 0.2 | 0.1 |
| Air transport | 0.8 | 1.8 | -5.3 | 1.2 | 1.2 |
| Telecommunications | 6.2 | 6.2 | 6.3 | 1.6 | 1.9 |
| Education, finance, recreation and culture | 4.7 | 4.7 | 4.5 | 8.4 | 11.1 |
| Universities | 2.9 | 2.6 | 5.2 | 0.2 | 0.5 |
| Private schools | 6.0 | 6.5 | 2.7 | 0.2 | 0.6 |
| Other educational and cultural services | -3.0 | -3.7 | 1.0 | 0.4 | 0.1 |
| Meals outside the home | 2.0 | 2.1 | 1.4 | 5.2 | 5.1 |
| Stock and bond commissions | 3.3 | 4.2 | -2.4 | 0.3 | 0.4 |
| Mutual funds | 20.3 | 23.5 | 1.7 | 0.0 | 1.4 |
| Legal, accounting and other services | 3.6 | 3.6 | 3.5 | 0.3 | 0.4 |
| Welfare and charitable organizations | 6.7 | 6.8 | 6.4 | 0.4 | 0.8 |
| Religious organizations | 2.7 | 2.8 | 1.9 | 0.7 | 0.7 |
| Cable and pay television | 5.7 | 5.4 | 7.2 | 0.2 | 0.7 |
| Miscellaneous goods and services | 3.2 | 3.3 | 2.4 | 16.2 | 19.0 |

Source: Income and Expenditures Accounts, 1981-2003

* Constant dollars.
** Current dollars.

Telecommunication products and services grew $6.2 \%$ annually over the last two decades, compared with $8.8 \%$ for television sets and $5.4 \%$ for cable TV. This largely reflected an increase in the average number of lines per household, cellular phones, long-distance services,
and new convenience services such as caller ID, call-forwarding, and call-waiting. The increased use of cellular phones reflected both increased availability of cellular services and sharply decreasing rates. The increased use of longdistance services was due partly to
much lower rates as a result of technological advances and the restructuring of long-distance service providers in the mid-1990s.
Canadians have often been quick to take up new consumer technologies. The number of households connected to the Internet grew rapidly between 1997 and 2002, jumping from $16 \%$ to $51 \%$. Over the same period, household ownership of computers also increased, although not as strongly as use of the Internet (Chart C).

## Health and education

Another important feature of consumer spending over the last 20 years has been the rapid increase in spending for health care ( $5 \%$ per year). This was primarily a result of increased third-party payments from private health insurance and public programs, reflecting both an aging population and the increased number of elderly.
While Canada's health care system provides universal medical care, not all expenses are covered by the various provincial plans. Most households make out-of-pocket expenditures for things such as health insurance, eye care, and prescription or non-prescription medications and pharmaceutical products. As a result, the share of consumer spending dedicated to health care increased from $3.3 \%$ to $4.9 \%$ between 1981 and 2000 (Table).
Although health care expenditures accounted for a relatively small share of the average household budget, almost every Canadian household $(98.2 \%)$ reported such spending in 2000. The average was close to $\$ 1,400$, with the largest shares going to health insurance premiums and dental care. By contrast, 20 years earlier, the figure was about $\$ 900$ (1997 dollars).

Chart C: Internet use has expanded dramatically in recent years.


The share for educational services advanced from $0.8 \%$ to $1.4 \%$, reflecting the combination of the increased value placed on college education and rising tuition fees. College enrolment increased at an annual rate of $3.7 \%$ between 1981 and 2000, more than triple the $1.1 \%$ increase in the population.

Household spending for private schools experienced a rapid $6.5 \%$ annual growth during the period. Some $5.6 \%$ of children in the late 1990s attended a private elementary or secondary school, up from $4.6 \%$ a decade earlier. In contrast, despite a sharp increase in university tuition fees over the last two decades, household spending for university education advanced at only $2.6 \%$. This may reflect an increase in the contribution of students to the expenses related to their postsecondary education.

## Transportation

The movement of people from home to work depends on the availability of efficient and affordable public transportation as well as a road network for private vehicles.
Household spending on transportation in 2000 rose to an estimated $\$ 7,000$ (in 1997 prices), up $7 \%$ from 1981. This was due largely to a $10 \%$ annual
increase in the purchase of cars and trucks (which includes vans and sport utility vehicles). In 2000, the proportion of households purchasing trucks and vans reached $8 \%$, up from $7 \%$ in 1997. In contrast, the proportion purchasing cars remained at $14 \%$. Levels of car ownership are affected by many factors, including income, interest rates, car prices, and demographic trends. As cars are often shared within a household, a trend to more single-person households is likely to boost car numbers.

In 2000, households spent an average of $\$ 350$ on air transport, the largest component of public transportation. This was a $3 \%$ increase from 1997, after adjusting for inflation. The increase largely reflected more purchasing of airline services as consumers took advantage of discount fares after the restructuring of the airline industry, as well as greater use of travel agency services.

## Recent years

The slowdown of the economy in 2001 was marked by a major correction of corporate-sector investment demand, while household-sector spending (consumption and housing investment) remained unusually strong. As the bull market of the 1990s turned into the bear market of the early 2000s, households reallocated their assets.

Although consumer spending generated much of GDP growth during the 2000-2003 period, GDP grew more slowly than during the 1995-2000 period ( $3.1 \%$ annually compared with $3.6 \%$ ). This slower growth in recent years is mainly attributable to slower growth or pullbacks in a number of industries: air transport ( $-5.3 \%$ ), new trucks and vans ( $3.6 \%$ compared with $10.4 \%$ during the 1981-2000 period), financial services ( $1.7 \%$ for mutual funds compared with $23.5 \% ;-2.4 \%$ for stocks and bond commissions compared with $4.2 \%$ ), and office machines and computer equipment ( $0.4 \%$ compared with $21.8 \%$ ).

In addition, consumer spending has been supported by a reduction in personal taxes between 1999 and 2000 (from $21.7 \%$ of total expenditures to $20.0 \%$ ) and low central bank interest rates over the past three years. The Bank of Canada's lowering of the prime rate from $5.74 \%$ in 2000 to $3.18 \%$ in 2003-a $45 \%$ decline in three years-has spurred successive waves of mortgage refinancing and borrowing based on home equity, thus releasing substantial financial resources to fund consumer spending. In addition, households have increased their borrowing through use of credit cards

Chart D: In 2003, households had \$103 of debt to every $\$ 100$ of disposable income.


Source: National Balance Sheet Accounts; Income and Expenditures Accounts, 1981-2003
and short-term personal loans, particularly lines of credit. A steady increase in household debt since the mid-1990s combined with a marked slowdown in disposable income resulted in households in 2003 having $\$ 103$ in debt (consumer credit and mortgages) for every $\$ 100$ of disposable income (Chart D). However, low interest rates since 2000 would have moderated the increase in the debt burden.

During the current bear market, households have sharply reversed the more than decade-long trend of increasing their holdings of financial assets. During the period from 2000 to 2003, the share of financial assets experienced a decline-the first since the late 1970s. On balance, households have reallocated their assets away from stocks and investment vehicles toward tangible assets, such as housing and durable goods (Chart E).

## Conclusion

Changes in household consumption patterns reflect tastes, preferences, technological development, and the structure of the economy. In Canada, as in many other industrialized economies, consumer spending accounts for about $60 \%$ of GDP. Understanding consumer behaviour is therefore paramount in analyzing the determinants of aggregate demand.

The strength of consumer spending is closely related to increases in personal incomes and wealth. Households have benefited from the rise in housing and stock markets over the past decade, with housing and equity share wealth rising by $\$ 307$ billion and $\$ 330$ billion respectively between the end of 1995 and 2003. These two assets alone contributed to slightly more than $20 \%$ of household wealth increase during this period.

Some observers, however, have viewed the surge in consumer spending with apprehension. The personal savings rate has fallen to historic lows, consumer debt levels have risen, and the household home equity ratio has dropped to an all-time low. This has led to concern that the rise in private consumption may not be sustainable and that a subsequent weakening could throw the recovery off track. Fears have especially been expressed that consumers could be exposed to a collapse of what many view as a housing 'bubble', given the spectacular increase in real estate prices in some markets.

Perspectives
This study does not incorporate the May 2004 revision to the System of National Accouts data.

Chart E: In recent years, households have shifted to tangible assets.


[^3]
[^0]:    Diane Galarneau is with the Labour and Household Surveys Analysis Division. René Morissette is with the Business and Labour Market Analysis Division. Diane Galarneau can be reached at (613) 951-4626, René Morissette at (613) 951-3608, or both at perspectives@statcan.ca

[^1]:    The authors are with the Micro-Economic Studies and Analysis Division. Tarek Harchaoui can be reached at (613) 951-9856 and Faouri Tarkhani at (613)951-5314, or both at perspectives@s.statan.ca.

[^2]:    Source: Income and Expenditures Accounts, 1981-2003

    * The rate of growth multiplied by the value share.

[^3]:    Source: National Balance Sheet Accounts, 1981-2003

