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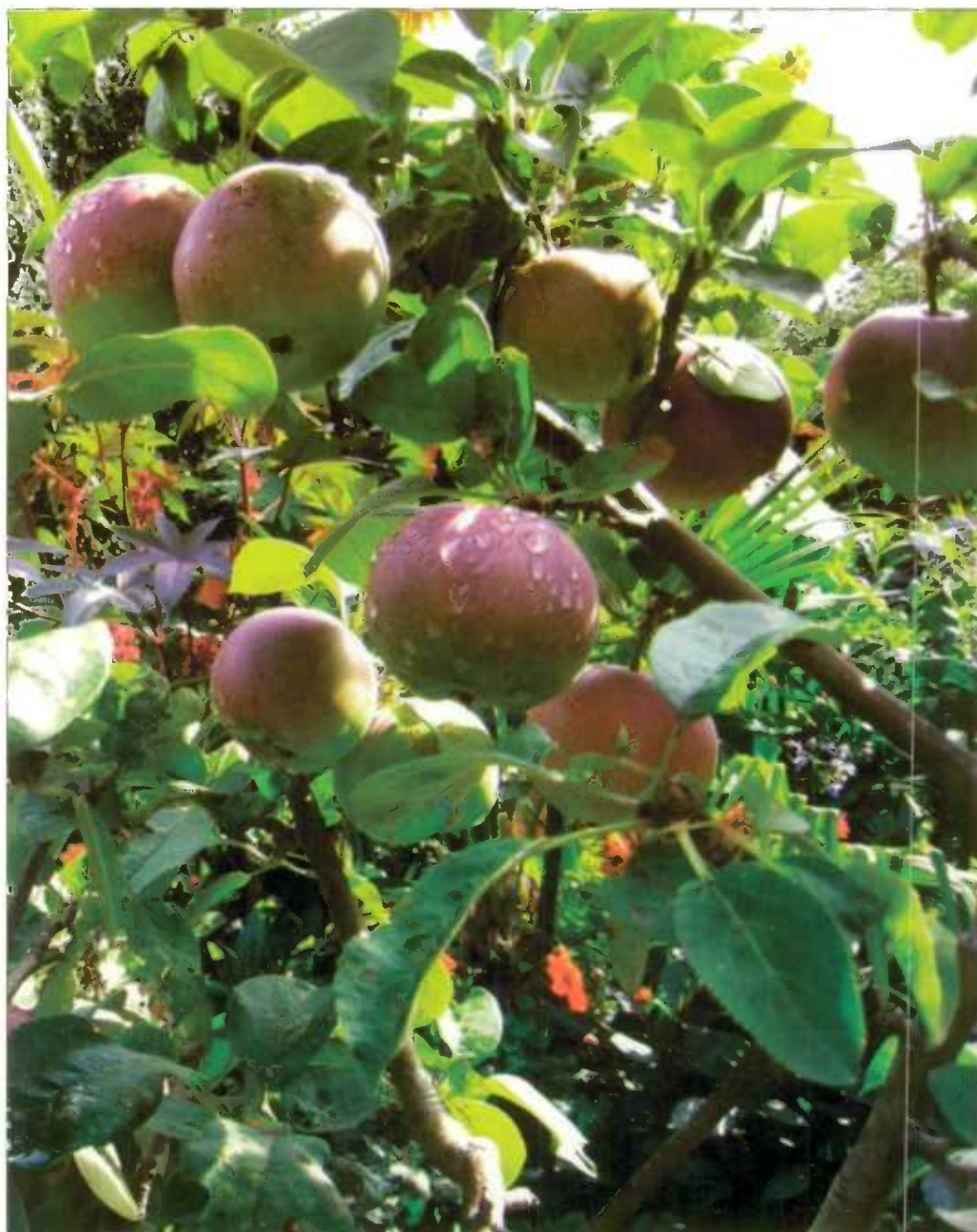
# PERSPECTIVES

## ON LABOUR AND INCOME

**AUTUMN 2011**

Vol. 23, No. 3

- Immigrants in self-employment
- The income of immigrants who pursue postsecondary education in Canada
- The wealth and finances of employed low-income families
- Job-related training of immigrants



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*Feng Hou and Shunji Wang*

Self-employment is an important source of jobs for immigrants, more so than for non-immigrants. This article uses data from the Labour Force Survey to examine how self-employed immigrants differ from their non-immigrant counterparts across a number of personal and job characteristics. It also compares the reasons immigrants and non-immigrants report for entering and staying in self-employment, based on data from the Survey of Self-Employment.

## 17 The income of immigrants who pursue postsecondary education in Canada

*Anne-Marie Rollin*

Even though immigrants who arrived in Canada in recent decades are more educated than other Canadians, they enrol in postsecondary educational institutions in proportionally greater numbers after their arrival. This article examines a cohort of immigrants who were between 25 and 44 years of age when they arrived in Canada in 1998 and 1999. Using data from the Longitudinal Administrative Databank (LAD), changes in immigrants' employment income over an eight-year period are studied based on whether these individuals pursued postsecondary education in Canada.

## 29 The wealth and finances of employed low-income families

*May Luong*

This study examines the financial situation of individuals living in low-income families with at least one employed family member compared to low-income families with no employed family members and employed non-low-income families. It presents new findings from the Canadian Financial Capability Survey on the level of net worth, assets and debts, financial security and retirement preparation for these groups.



# PERSPECTIVES

ON LABOUR AND INCOME

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- E use with caution
- F too unreliable to be published

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## 39 Job-related training of immigrants

Jungwee Park

This study investigates job-related training taken by immigrant employees in Canada. Using the Access and Support to Education and Training Survey (ASETS), it examines the incidence, subject and objectives of, and satisfaction with, job-related training of immigrant and Canadian-born employees. Differences among sub-groups of immigrants are compared, as well as other characteristics related to the incidence of training. Perceptions of barriers to training among immigrants and the Canadian-born are also explored.

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## Perspectives on Labour and Income

*The quarterly for labour market and income information*

# Highlights

## *In this issue*

### ■ Immigrants in self-employment

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- In 2010, about 19% of immigrant workers were self-employed, compared with 15% of their Canadian-born counterparts. About one-half of the difference in the self-employment rate was related to the higher average age of immigrants.
- Self-employed immigrants and non-immigrants were similar in average age, marital status, and presence of children at home. They also shared similarities in working hours, the proportion with paid help, and incorporated business status.
- Although business and professional services was the most frequent industry for both groups, the Canadian-born self-employed were more concentrated in agriculture and other goods-producing industries, while immigrants were more concentrated in trade and transportation industries.
- Immigrants—especially recent immigrants—were more likely than the Canadian-born to report that they had entered self-employment because of a lack of suitable paid jobs. Still, the majority of self-employed immigrants (67%) and non-immigrants (80%) entered self-employment for reasons other than labour market difficulties.
- The majority of both immigrant and Canadian-born self-employed workers would prefer to stay in self-employment even if a paid job at the going wage or salary rate were available for them. The share was lower among immigrants (65%) than the Canadian-born (73%).

### ■ The income of immigrants who pursue postsecondary education in Canada

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- After eight years in Canada, male and female immigrants who began postsecondary education (PSE) in Canada in the second or third year after their arrival were more likely to have employment income than their counterparts who did not have PSE. However, the gap is much wider for women (more than 15 percentage points) than men (1 to 5 percentage points).
- Among female immigrants with no employment income in the first year after their arrival, those who pursued postsecondary education in Canada had a higher probability of having employment income in the eighth year. Among female immigrants who had employment income in the first year, those who pursued PSE had a lower probability of having no employment income in the eighth year. The differences in probability exist even when controls for differences in individual characteristics at the time of immigration such as age, education level upon arrival, country of origin and immigrant class are taken into account.
- Both immigrant men and women who pursue postsecondary education in Canada experience greater growth in their employment income. For women who begin postsecondary education, the growth rate of employment income over eight years is more than 125%, compared to 61% for women who do not pursue PSE. The employment income of men who begin postsecondary education increases by more than 80%, while that of men who do not do so increases by 50%.

- In most cases, differences in income growth between immigrants with and without postsecondary education in Canada remain when controls for the effect of individual characteristics at the time of immigration are taken into account.
- Also, differences in the growth of employment income related to pursuing postsecondary education in Canada do not differ significantly depending on whether immigrants were with or without a university degree when they arrived.

### ■ The wealth and finances of employed low-income families

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- The average wealth of low-income families with at least one employed family member (\$60,000) is higher than that of low-income families without an employed family member (\$3,000) but is significantly lower than that of non-low-income families with at least one employed family member (\$389,200).
- While 69% of employed low-income families carry debt compared to 44% of other low-income families, a large proportion is in the form of residential mortgages.
- Compared to not-employed low-income families, a larger proportion of employed low-income families report that they are able to pay for unexpected expenses and are not falling behind on bill payments.
- A larger proportion of employed low-income families are making retirement preparations and anticipate having more diverse sources of retirement income than not-employed low-income families.

### ■ Job-related training of immigrants

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- Canadian-born employees were more likely to receive job-related training than their immigrant counterparts: 35% versus 31% for men and 37% versus 33% for women.
- Among female workers, family-class immigrants had significantly lower rates of job-related training than Canadian-born workers.

- Male employees who immigrated as adults were 25% less likely to receive job training than their Canadian-born counterparts.
- There were no significant differences in the number of training hours and courses between immigrant and Canadian-born trainees.
- Within the immigrant population, workers with the lowest personal income, in occupations requiring a high school education or less, and in smaller firms were less likely to receive training.
- Major barriers to job-related training perceived by immigrants include family responsibilities and financial constraints.

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Income management strategies of older couples  
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## Perspectives



# Immigrants in self-employment

*Feng Hou and Shunji Wang*

**S**elf-employment is an important source of employment and job creation in Canada. New entrepreneurs start businesses for a variety of reasons that tend to cluster around two poles. On the one hand, some are attracted or 'pulled' into self-employment to develop a business idea, gain more flexibility, or because their profession requires them to do so. On the other hand, others are 'pushed' into self-employment because paid job opportunities may be lacking. As a result of these differing motivations and available resources, some will set up and operate businesses that create jobs for themselves and others, while many others will concentrate on their own situation as sole proprietors.<sup>1</sup> The diversification of the self-employed population has been identified as a key feature of labour market developments in developed countries (Arum and Muller 2004).

Self-employment diversity is particularly relevant in the case of immigrants. Some immigrants are selected specifically for their entrepreneurial attributes—Canada's business immigration program seeks to attract investors, entrepreneurs and the self-employed as a means to support economic development. Other immigrants—especially those who arrived recently—may face barriers to finding and keeping jobs or may have jobs for which they are overqualified or receive low earnings, and thus may be pushed into self-employment. As a result, studying the factors that motivate self-employment is a key component of understanding the labour market integration of many Canadian immigrants.

That immigrants are more likely to be self-employed than non-immigrants has been documented in several studies (Frenette 2002 and Li 2001). In 2006, about 17% of immigrant working men age 20 to 64 were self-employed, compared with 12% of Canadian-born

men (Hou et al. forthcoming). Such differences may arise if immigrant and Canadian-born workers have different demographic characteristics or are concentrated in industries and occupations that have higher rates of self-employment. On the other hand, they may also be related to different motivations to enter and remain in self-employment—a possibility that has not been well-examined in Canada (Li 2001 and Schuetze 2010).

This article thus has two major objectives. The first is to examine how self-employed immigrants differ from their Canadian-born counterparts across a number of personal and job characteristics. The second is to determine whether immigrants report different reasons for entering and staying in self-employment. The article begins with a look at the long-term and recent trends in immigrant and non-immigrant self-employment using the census and Labour Force Survey (LFS). It then examines the characteristics of the self-employed compared to paid employees among immigrants and non-immigrants. Finally, it uses the Survey of Self-Employment (SSE) to examine whether immigrants and non-immigrants express different reasons for entering, remaining in and exiting self-employment.

## Long-term trends in self-employment

In Canada, the number of self-employed workers increased significantly in the 1980s and 1990s (Picot and Heisz 2000; Gauthier and Roy 1997; Kuhn and Schuetze 2001). The self-employment rate increased steadily from the mid-1970s to the late 1990s, dipped slightly in the early 2000s and stabilized in the late 2000s (LaRochelle-Côté 2010). The upward trend in self-employment has been linked to a variety of factors, including the aging of the labour force, technological

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changes and government policies (Lin et al. 1999). The aging of the labour force should contribute to the rise in self-employment because older workers are more likely to be self-employed (Kamhi and Leung 2005); the availability and affordability of technologies like personal computers and the Internet reduce the operating costs of small businesses; and some industries and occupations with higher rates of self-employment have increased their share in the economy (Gauthier and Roy 1997; Kamhi and Leung 2005; Statistics Canada 1997). Kuhn and Schuetze (2001) suggest that, from the 1980s to 1990s, the rise in self-employment among men is mostly attributable to declining opportunities in paid employment for men. For women, however, most of the rise in self-employment is associated with improved opportunities and attractiveness of self-employment to them.

In addition, past changes in government policies regarding marginal personal income taxes and programs assisting self-employment and small businesses have also been found to be related to the rise in self-employment (Lin et al. 1999 and Schuetze 2000). Finally, self-employment increased during periods of economic downturns and did not immediately decline afterwards, except in the most recent downturn (LaRochelle-Côté 2010).

Both immigrants and the Canadian-born have contributed to the increase in self-employment since the early 1980s (Chart A). The long-term trends were estimated with census data from 1981 to 2006, and recent LFS trends from 2006 to 2010.<sup>2</sup> Due to conceptual differences, the LFS data produce higher self-employment rates than the census (see *Data sources and definitions*).<sup>3</sup> Self-employment grew faster among immigrants between 1981

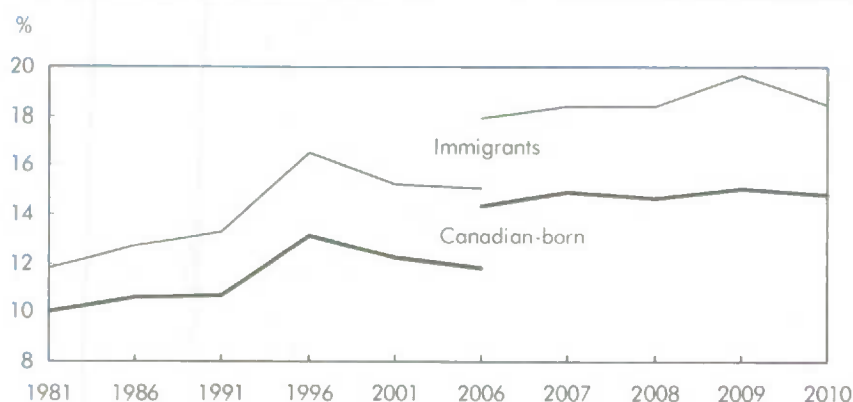
and 1996, and, in the late 1990s and 2000s, self-employment rates fell slightly and subsequently stabilized for both groups.

Throughout the study period, immigrants were consistently more likely to be self-employed than non-immigrants. In 1981, about 12% of immigrants were self-employed, compared with 10% of the Canadian-born. By 1996, the self-employment rate had increased to 17% for immigrants and 13% for non-immigrants. By the late 2000s, about 19% of immigrant workers were self-employed, compared with 15% of the Canadian-born. The higher average age of immigrants accounted for about one-half of the difference in self-employment rates between immigrants and the Canadian-born.<sup>4</sup>

The difference between immigrants and non-immigrants also tended to be greater during periods of labour market slack. This suggests that immigrants are more likely than non-immigrants to seek self-employment during periods of economic stagnation. In 2009—during the recent labour market downturn—the gap in self-employment rates between immigrants and non-immigrants was 4.6 percentage points, compared with a gap of 3.8 percentage points in 2008. Between 2008 and 2009, the self-employment rate rose by 1.3 percentage points among immigrants and by 0.5 percentage points among the Canadian-born.

Immigrants who had been in Canada for more than 10 years had a higher self-employment rate than those who arrived during the past 10 years (Chart B). From 1981 to 2006, the difference in self-employment rates between these two groups was in the range of 5 to 6

**Chart A Self-employment as a percentage of total employed individuals by immigration status**



Sources: Statistics Canada, Census of Population, 1981 to 2006; Labour Force Survey, 2006 to 2010.



## Data sources and definitions

This study uses the 20% sample files of the 1981, 1986, 1991, 1996, 2001 and 2006 censuses, and the combined May and November files of the 2006 to 2010 Labour Force Survey (LFS) to calculate the share of the self-employed among all employed workers. The selected sample consists of individuals who were employed in the week prior to the census or in the LFS reference week. Institutional residents and persons living in the Northwest Territories, Yukon and Nunavut were excluded. Immigrants who arrived in the census or survey year and individuals whose immigration status were not identified in the LFS were also excluded.

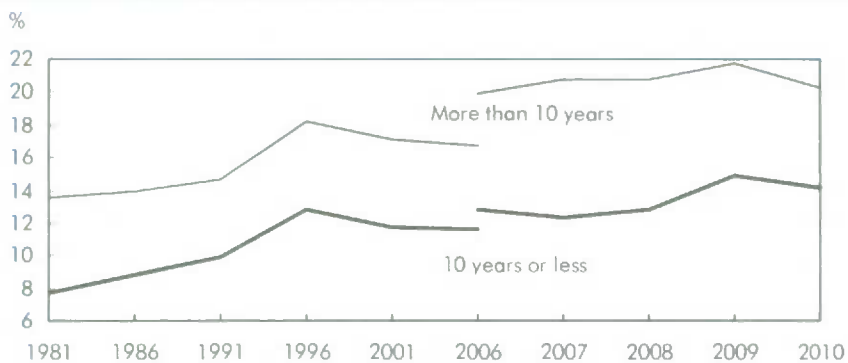
In both data sources, self-employed workers are defined as employed individuals who work for themselves (including owners of incorporated or unincorporated businesses) or work without pay for family members. The self-employment rate estimated from the census tends to be lower than that from the LFS. In the census, self-employed workers who have no work during the reference week and do not report working any hours or being absent from work would be classified as "unemployed" or "not in the labour force." The same self-employed workers may be coded as "employed" in the LFS if they attributed their absence to not having any work

during the reference week. Some persons who are considered paid workers in the census are considered self-employed persons in the LFS, including those who work at jobs like babysitting and cleaning for private households, and as newspaper carriers.

To examine the reasons for entering and staying in self-employment, this study used data from the Survey of Self-Employment (SSE), which was conducted by Statistics Canada for Human Resources Development Canada in 2000. The main objective of the survey was to provide a profile of self-employed workers in Canada. The survey content covered many aspects of self-employment, including reasons for entering self-employment, perceptions about self-employment, work arrangements, training, income insurance and other insurance coverage, and retirement preparation. The survey sample was restricted to those who were age 15 to 69 and self-employed in the main job. The final sample included 4,015 self-employed people. In the analysis, 30 observations whose immigration status was not stated were excluded. Among the remaining 3,985 respondents, 470 were immigrants.

percentage points. More recent data from the LFS suggest that this difference could be even larger (6 to 8 percentage points). About two-thirds of the difference in self-employment rates between recent and more established immigrants is due to the higher average age of established immigrants.<sup>5</sup>

**Chart B Self-employment as a percentage of total employed immigrants by years in Canada, 1981 to 2010**



Sources: Statistics Canada, Census of Population, 1981 to 2006; Labour Force Survey, 2006 to 2010.

Recent immigrants also tended to have lower self-employment rates than the Canadian-born.<sup>6</sup> Again, this was related to the fact that recent immigrants are younger on average. After controls were put in place for age differences, recent immigrants and the Canadian-born were found to have similar self-employment rates.

## Characteristics of self-employed workers

Both immigrant and non-immigrant men were more likely to be self-employed than their female counterparts. The self-employed, whether immigrants or non-immigrants, also tended to be older, more likely to be married and have children at home than paid workers (Table 1).

Educational attainment also differed between paid and self-employed workers. Self-employed workers were more likely to have

**Table 1 Sociodemographic characteristics of self-employed and paid workers**

	Canadian-born		Immigrants	
	Paid workers	Self-employed	Paid workers	Self-employed
	%			
<b>Sex</b>				
Men	50.1	64.3	50.3	67.0
Women	49.9	35.7	49.7	33.0
<b>Age</b>				
Under 35	42.2	19.0	27.5	12.5
35 to 54	45.5	54.2	53.5	55.4
55 and over	12.2	26.9	19.0	32.2
<b>Marital status</b>				
Married	58.8	75.3	70.0	80.8
Other	41.2	24.7	30.0	19.2
<b>Presence of children</b>				
No children	63.1	56.0	53.1	50.4
0 to 12 years	17.6	19.0	20.8	19.3
13 to 24 years	19.3	25.0	26.1	30.3
<b>Education</b>				
Less than high school	12.7	14.1	10.2	9.8
High school	20.7	19.5	18.6	18.2
Some postsecondary	46.0	42.8	36.3	34.6
Postsecondary	20.6	23.6	35.0	37.5

Source: Statistics Canada, Labour Force Survey, 2006 to 2010.

a university degree than paid employees, regardless of whether they were immigrants. Immigrants who were both self-employed and in paid employment were much more likely to have a university degree, but much less likely to have non-university postsecondary education than their Canadian-born counterparts.

The distribution of self-employment by industry differed for immigrants and the Canadian-born. Although business and professional services was the most frequent industry for both groups, the Canadian-born self-employed were more concentrated in agriculture and other goods-producing

industries, while immigrants were more concentrated in trade and transportation industries (Table 2). To some extent, these differences can be linked to the strong geographical concentration of immigrants in major metropolitan areas. Outside Canada's census metropolitan areas,<sup>7</sup> immigrants and non-immigrants had similar industrial distributions, however, in census metropolitan areas, about 55% of self-employed non-immigrants worked in business and professional service industries, compared with 45% of immigrants.

Differences were also noticeable across occupations. As might be expected from the industrial differ-

ences, self-employed immigrants were more concentrated in occupations related to management, sales and services, and trade and transportation than their Canadian-born counterparts. These differences became even larger after controls for geographical and educational differences were put in place. For instance, 72% of non-immigrants who had a university degree and resided in metropolitan areas worked in professional occupations, compared with 53% of immigrants. Conversely, about 25% of immigrants and 15% of non-immigrants worked in sales, services, trades and transportation occupations.

Self-employed immigrants and non-immigrants also shared some similarities. About two-thirds of self-employed immigrants and non-immigrants did not have employees. In terms of business structure, more than one-half of the self-employed were not incorporated, although that share was slightly higher among the Canadian-born. Self-employed immigrants and non-immigrants also worked a similar number of hours.

### Reasons for entering self-employment

Do immigrants and the Canadian-born enter self-employment for different reasons? Are immigrants more likely to enter self-employment due to difficulties in the paid labour market? The 2000 Survey of Self-Employment can shed some light on these issues: in this survey, respondents were asked directly whether they became self-employed because they could not find suitable paid employment. Respondents also reported on their previous labour market activities—

**Table 2 Selected attributes of self-employment by immigration status**

	Canadian-born	Immigrants
	%	
<b>Incorporated</b>		
Yes	39.5	42.9
No	60.5	57.1
<b>With employees</b>		
Yes	32.7	32.9
No	67.3	67.1
<b>Usual hours</b>		
Less than 40 hours	37.8	34.7
40 to 56 hours	44.6	48.5
More than 56 hours	17.7	16.9
<b>Industries</b>		
Agriculture	9.3	3.0
Other goods-producing industries	20.1	16.8
Trade and transportation	14.8	22.5
Business and professional services	44.4	43.5
Other services	11.3	14.2
<b>Occupation</b>		
Management	18.0	23.6
Professionals	36.0	34.6
Sales and service	15.4	17.5
Trades and transportation	16.4	18.7
Other	14.2	5.7

Source: Statistics Canada, Labour Force Survey, 2006 to 2010.

making it possible to identify whether respondents entered self-employment after leaving another job, or following a stretch of unemployment.

In 2000, the majority of immigrants and non-immigrants who were self-employed had not entered self-employment because of labour market difficulties. However, immigrants (33%) were more likely than non-immigrants (20%) to report that they entered self-employment due to a lack of job opportunities in the paid labour market. Among immigrants, those who had been in Canada for 10 years or less were more likely (40%) than more established immigrants (31%) to report that they became self-employed because of labour market difficulties.

Previous labour market activities did not differ greatly between those who entered self-employment voluntarily and those who reported a lack of paid jobs (Chart C). Prior to becoming self-employed, more than one-half of the self-employed (at least 55% for

each subgroup) were paid employees, and about one-third reported that they were both self-employed and paid employees—suggesting that some might have become self-employed by focusing on a business they already had, or by using another self-employment experience as a stepping stone. Very few (about 2% to 4%) had never worked prior to self-employment. Similar results were obtained for both immigrants and non-immigrants, except immigrants were more likely to report that they became self-employed immediately after ending a previous self-employed job. The preceding results were based on data collected in 2000 when the economy was expanding and the labour market was relatively tight—they may differ under other economic conditions.

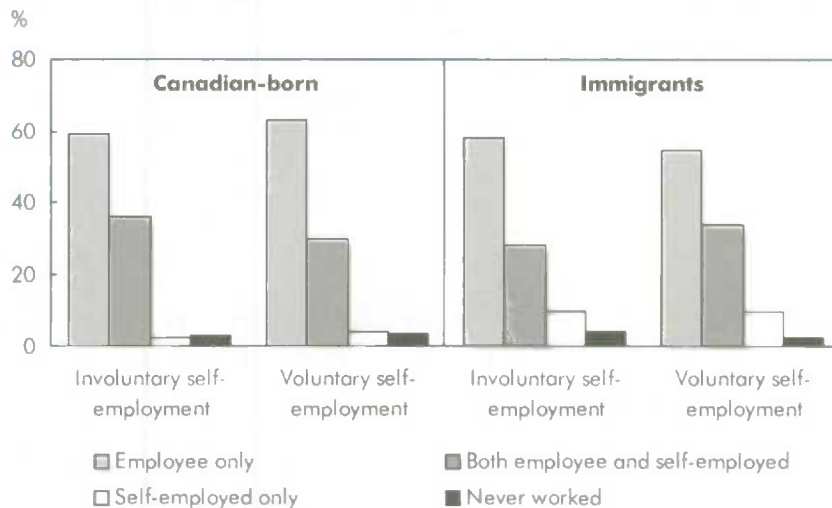
Even though most of the self-employed previously worked as paid employees, the involuntarily self-employed were more likely than the voluntarily self-employed to have lost a paid job prior to entering self-employment (Chart D). These differences were even larger among non-immigrants. Among immigrants, 39% of the involuntarily self-employed had lost their previous job, compared with only 16% of the voluntarily self-employed. The corresponding numbers were 56% and 23% for non-immigrants.

Among the voluntarily self-employed, immigrants and non-immigrants entered self-employment for different reasons. The 2000 Survey of Self-Employment asked the voluntarily self-employed to report why they became self-employed instead of working for an employer. The reasons identified can be grouped into four broad categories:

- entrepreneurial values, including independence, freedom, own boss; control, responsibility, decision making; challenge, creativity, success, satisfaction; and more money
- flexible work arrangements, including flexible hours; balance of work and family; and work from home
- pre-existing opportunities, including “had to be self-employed” because of the nature of the job; joined or took over family business; and other opportunities
- other reasons, including lower taxes, deductions; less stress; and other unspecified reasons (Delage 2002).

Immigrants who entered self-employment voluntarily were more likely to be motivated by entrepreneurial values (71%) than their Canadian-born peers (59%) (Chart E). In contrast, immigrants were less likely than non-immigrants to report that they had become self-



**Chart C Previous labour market activities of involuntarily and voluntarily self-employed workers**

Note: The difference in the distribution of previous labour market activities of involuntarily and voluntarily self-employed workers was statistically significant among the Canadian-born at  $p < 0.01$ , but not significant among immigrants at  $p = 0.05$ .

Source: Statistics Canada, Survey of Self-Employment, 2000.

to report "independence, freedom, own boss," "control, responsibility, decision making" and "challenge, creativity, success, satisfaction" as self-employment advantages. They were also less likely than the involuntary group to report "flexible hours," "lower taxes/deductions" and "less stress" as advantages.

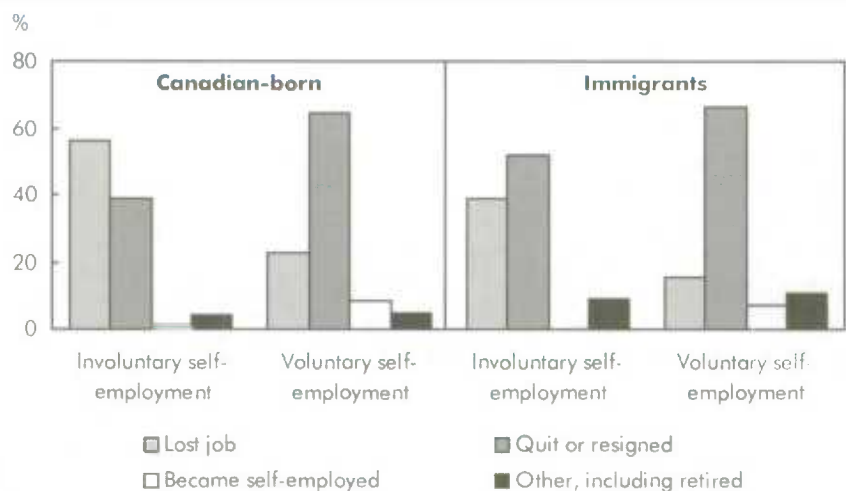
In general, the differences between the voluntary and involuntary groups were similar for the immigrant and non-immigrant populations. Involuntarily self-employed immigrants, however, were more likely than the Canadian-born to report flexibility as an advantage, while non-immigrants were more likely to report that they appreciated working from home.

Among the involuntarily self-employed, at least 40% of immigrants and non-immigrants

employed because of flexible work arrangements (10% versus 16% for non-immigrants). Finally, almost one-fifth of non-immigrants entered self-employment because of pre-existing opportunities, whereas 11% of immigrants did so.

### Advantages and disadvantages of self-employment

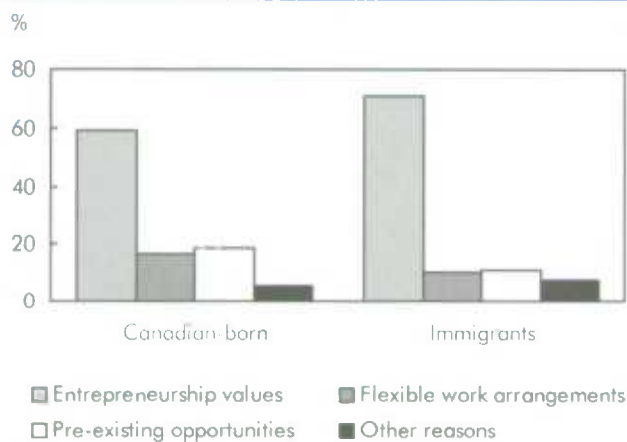
The Survey of Self-Employment also asked respondents to report what they believed were the advantages and disadvantages of being self-employed. As might be expected, those who became self-employed on a voluntary basis differed from the 'involuntary' self-employed group (Table 3). Those who voluntarily became self-employed were more likely

**Chart D How previous paid employment ended**

Note: Included only those whose work for employer ended when they became self-employed. The difference in the distribution of how previous paid employment ended between involuntarily and voluntarily self-employed workers was statistically significant among the Canadian-born and among immigrants at  $p < 0.001$ .

Source: Statistics Canada, Survey of Self-Employment, 2000.

**Chart E Main reasons for entering self-employment among the voluntarily self-employed**



Note: Includes respondents who did not become self-employed for lack of suitable paid employment. The difference in the distribution of main reasons for entering self-employment between immigrants and the Canadian-born was statistically significant at  $p < 0.001$ .

Source: Statistics Canada, Survey of Self-Employment, 2000.

Interestingly, the involuntarily self-employed Canadian-born were more likely than immigrants to mention "tax burden" (8% versus 3%) and "tasks related to running a business" (12% versus 6%) as disadvantages to being self-employed, while immigrants expressed more concerns about "lack of benefits" than the Canadian-born (31% versus 19%).

### Preference for paid employment

In the 2000 Survey of Self-Employment, respondents were asked the following question: "If instead of self-employment, you could get a paid-job, at the going wage or salary rate for someone with your experience and education, would you accept it?" Overall, 29% of survey respondents answered "yes" to this question. Immigrants (35%) and, in particular, recent immigrants (41%) were more likely to prefer paid employment.

The difference between responses for immigrants and non-immigrants was mostly attributable to the fact that more immigrants entered self-employment involuntarily than the Canadian-born. After controls were put in place for differences in the voluntary nature of self-employment, it was found that the proportion of

reported that one disadvantage of being self-employed was the "uncertainty, insecurity, risk, lack of stability" that came with the job (Table 4). The "lack of benefits" and "fluctuations of income and cash flow problems" were also reported by a larger portion of the involuntarily self-employed, although the latter difference was significant only among the Canadian-born.

"Uncertainty, insecurity, risk and lack of stability" were also reported as issues by about 30% of those who were self-employed on a voluntary basis. However, the voluntarily self-employed—especially immigrants—were also more likely to report "long hours" as a problem. Less than 10% mentioned "tax burden," "interference in family life" and "working alone, isolation."

**Table 3 Self-reported advantages of self-employment**

	Canadian-born		Immigrants	
	Involuntary self-employment	Voluntary self-employment	Involuntary self-employment	Voluntary self-employment
<b>What do you like about being self-employed?</b>	% answering yes			
Flexible hours	42	33*	53	32*
Family and work-life balance	15	13	18	12
Work from home	18	11*	12	9
Independence, freedom, own boss	57	63*	54	64*
Control, responsibility, decision-making	23	29*	24	41*
Challenge, creativity, success, satisfaction	22	27*	26	32
More money, unlimited income	12	13	11	16
Lower taxes/deductions	9	4*	6	1*
Less stress	7	4*	8	3*

\* significantly different between involuntarily and voluntarily self-employed workers at  $p < 0.05$

Source: Statistics Canada, Survey of Self-Employment, 2000.

**Table 4 Self-reported disadvantages of self-employment**

	Canadian-born		Immigrants	
	Involuntary self-employment	Voluntary self-employment	Involuntary self-employment	Voluntary self-employment
<b>What do you dislike about being self-employed?</b>	% answering yes			
Uncertainty, insecurity, risk, lack of stability	43	30*	48	29*
Income fluctuations, cash-flow problems	29	21*	26	23
Difficulties obtaining financing, with banks	11	7*	11	6*
Tax burden	8	9	3	7*
Low income	10	7	12	6*
Lack of benefits	19	15*	31	15*
Too much responsibility	7	7	9	12
Long hours, no time off	20	26*	19	31*
Interference in family life	4	5	4	7
Working alone, isolation	5	4	5	6
Tasks related to running a business	12	9	6	9
Stress	10	15*	14	15

\* significantly different between involuntarily and voluntarily self-employed workers at  $p < 0.05$   
 Source: Statistics Canada, Survey of Self-Employment, 2000.

people answering "yes" to the above question was the same for immigrants and non-immigrants.

In order to determine which factors were associated with the probability of preferring paid employment, two logistic regressions were estimated for immigrants and non-immigrants.<sup>8</sup> The models include demographic variables, self-reported reasons for entering self-employment, self-employment advantages and disadvantages reported by survey respondents, and other self-employment characteristics.<sup>9</sup> Table 5 reports the predicted probabilities of preferring paid employment across several factors, based on the logistic regression estimates.<sup>10</sup>

The factors associated with the probability of preferring paid employment were similar for immigrants and non-immigrants. In both cases, the preference for paid employment was strongly related to the reasons for entering self-employment. More specifically, those who entered self-employment due to a lack of suitable paid employment had a much higher tendency to report that they would leave self-employment if given the opportunity. Using immigrants as an example, close to one-half (49%) of the involuntarily self-employed expressed a desire to leave self-employment, compared with 27% of those who entered self-employment on a voluntary basis. On the other hand, these

results also suggest that about one-half of involuntarily self-employed immigrants expressed no preference for a paid job, and that one-quarter of voluntarily self-employed immigrants expressed a willingness to leave self-employment for a paid job. Similar results were found for the Canadian-born.

Those who valued the entrepreneurial aspects of self-employment were much less likely to state a preference for paid employment, especially among immigrants. Indeed, just one-third of self-employed immigrants who indicated entrepreneurial values in the survey reported that they would leave self-employment if they were offered a similar paid job, compared with 55% for other self-employed immigrants. The corresponding figures were 26% and 35% for the Canadian-born.

Similarly, individuals who noted that self-employment had the advantage of flexible hours were less likely to say that they would prefer a paid job. In contrast, instability was related to a higher preference for paid employment. The effects of these two factors tended to be stronger for immigrants than the Canadian-born.

For the Canadian-born, several other variables were also significantly associated with a higher preference for paid employment: dislike of self-employment due to low income or lack of benefits, unincorporated status, and having experienced financial difficulties. While those who reported that they disliked self-employment for the long working hours had a higher preference for paid employment, individuals who usually worked over 56 hours per week (i.e., at least



**Table 5 Predicted percentage reporting possible exit from self-employment**

	Canadian-born	Immigrants
	%	
<b>Education</b>		
With university degree	29*	34
Without university degree (ref.)	23	35
<b>Geographic distribution</b>		
Three largest census metropolitan areas	28	38
Other locations (ref.)	28	29
<b>Reasons for entering self-employment</b>		
Lack of suitable employment	45*	49*
Other reasons (ref.)	24	27
<b>Like self-employment for entrepreneurship values</b>		
Yes	26*	30*
No (ref.)	35	55
<b>Like self-employment for flexibility</b>		
Yes	26*	30*
No (ref.)	31	40
<b>Dislike self-employment for instability</b>		
Yes	31*	44*
No (ref.)	25	26
<b>Dislike self-employment for long working time</b>		
Yes	31*	36
No (ref.)	27	34
<b>Dislike self-employment for low income or lack of benefits</b>		
Yes	33*	38
No (ref.)	26	33
<b>Tenure (self-employment)</b>		
4 years or less (ref.)	29	38
Over 4 years	28	32
<b>Incorporated</b>		
Yes	22*	30
No (ref.)	31	38
<b>With employees</b>		
Yes	27	32
No (ref.)	29	36
<b>Multiple job holders</b>		
Single job	28	34
Multiple job holders (ref.)	24	40
<b>Weekly working hours</b>		
Less than 40 hours	31*	35
40 to 56 hours	28	35
More than 56 hours (ref.)	24	34
<b>Experienced financial difficulties</b>		
Yes	35*	38
No (ref.)	23	32

\* the difference from the reference group (ref.) is statistically significant at  $p < 0.05$

Note: The values in this table are estimated based on a logistic regression model for immigrants and the Canadian-born respectively. The model includes independent variables presented in the table, as well as sex, age, marital status, and age of children.

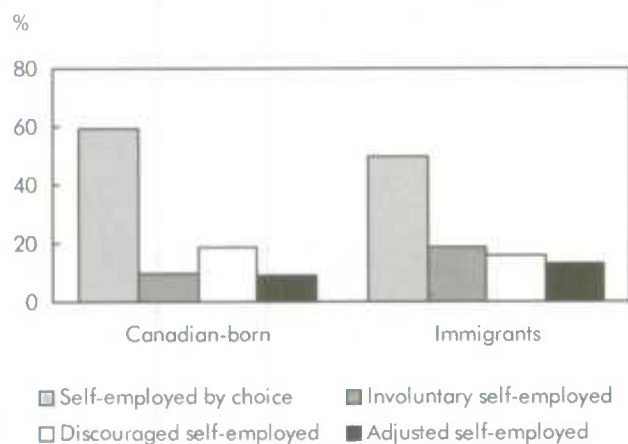
Source: Statistics Canada, Survey of Self-Employment, 2000.

8 hours per day for 7 days or 11 hours per day for 5 days) had a lower preference for paid employment than those who usually worked less than 40 hours per week. There are two possible explanations for these seemingly contradictory results. First, disliking long working hours, which was reported not just by those who worked long hours, may reflect a preference for a regular work schedule often associated with paid employment. Indeed, even among those who usually worked less than 40 hours per week, about 15% reported disliking long working hours. In comparison, the majority (57%) of those who worked over 56 hours per week did not mind long working hours. Second, for some self-employed workers, working less than regular hours may be the result of weak demand for their business, thereby providing insufficient income.

### Self-employed categories

As suggested in Delage (2002), the voluntary or involuntary nature of self-employment activities can be combined with information on whether survey respondents would leave self-employment for a suitable paid job to generate four categories of self-employed workers:

- “self-employed by choice” (voluntarily self-employed, would not accept a suitable paid job)
- “involuntary self-employed” (involuntarily self-employed, would accept a suitable paid job)
- “discouraged self-employed” (voluntarily self-employed, would accept a suitable paid job)
- “adjusted self-employed” (involuntarily self-employed, would not accept a suitable paid job).

**Chart F Four types of self-employment**

Note: The difference in the distribution between immigrants and the Canadian-born is statistically significant at  $p < 0.001$ .  
 Source: Statistics Canada, Survey of Self-Employment, 2000.

Immigrants were less likely to be self-employed by choice than the Canadian-born (Chart F). Just under one-half of self-employed immigrants were in this category, compared with about 60% of the Canadian-born. Among immigrants, the other categories had similar shares: 18% were self-employed by necessity, 16% were in the discouraged category, and 13% were adjusted. Among the Canadian-born, close to one-fifth were in the discouraged category and about 1 in 10 were in each of the remaining two categories ("involuntary" and "adjusted").

However, the distributional differences between immigrants and non-immigrants across these four categories were due to the fact that more immigrants generally entered self-employment because of a lack of paid employment opportunities. As shown in the previous section, once entry status is taken into account, both immigrants and the Canadian-born are equally likely to report that they would pick a suitable paid job if given the opportunity. Hence, among those who are self-employed on a voluntary basis, a similar portion of immigrants and non-immigrants fell in the discouraged category. Also, similar shares of involuntarily self-employed immigrants and the Canadian-born would not prefer a similar paid job.

## Summary

Self-employment is an important source of labour market opportunities for immigrants. By the end of the 2000s, about 19% of immigrant workers were self-employed, compared with 15% of their Canadian-born counterparts. Recent immigrants (those who had been in Canada for 10 years or less) were less likely to be self-employed than more established immigrants but had similar rates of self-employment to the Canadian-born after controls for age differences were put in place.

The various motivations for entering self-employment tend to group around two poles: those associated with the entrepreneurial opportunities of self-employment and those related to a lack of opportunity in paid jobs. Immigrants—especially recent immigrants—were more likely than the Canadian-born to report that they had entered self-employment because of a lack of suitable paid jobs. The majority of self-employed immigrants (67%) and non-immigrants (80%) were nonetheless attracted to various aspects of self-employment rather than pushed by labour market difficulties. Among these voluntarily self-employed workers, immigrants were more likely than non-immigrants to be motivated for reasons related to entrepreneurial values, including independence, freedom, being one's own boss; control, responsibility, decision making; and challenge, creativity, success and satisfaction.

The majority of both immigrant and Canadian-born self-employed workers would prefer to stay in self-employment even if a paid job at the market wage or salary rate were available for them. The share was lower for immigrants (65%) than the Canadian-born (73%). This difference was mostly attributable to the fact that more immigrants entered self-employment involuntarily than the Canadian-born. Within the immigrant population, voluntary self-employment, entrepreneurial values, flexible work time and fewer concerns about instability were all associated with a lower preference for paid employment. These factors were also associated with a lower preference for paid employment among the Canadian-born, although the relationships were not all significant.

## Perspectives

## ■ Notes

1. See Bögenhold and Fachinger (2010) for a full discussion on the heterogeneity of self-employment.
2. The Labour Force Survey began collecting information on immigration status in 2006.
3. Despite the conceptual differences, the two data sources showed similar trends for all workers (i.e., not by immigrant status) for the period from 1981 to 2006 (see LaRochelle-Côté 2010).
4. Based on the 2006 to 2010 Labour Force Survey, the average age for employed immigrants was 43.7 years and 39.5 years for Canadian-born workers. In a simple regression model controlling for age and age squared, the difference in self-employment rates was reduced to 1.6 percentage points (significant at  $p < 0.001$ ) from an unadjusted difference of 3.9 percentage points.
5. Based on data from the pooled 2006 to 2010 Labour Force Survey, the average age was 46.6 years for established immigrant workers and 36.8 for recent immigrant workers. In a regression model controlling for age and age squared, the difference in self-employment rates between the two groups was reduced to 1.7 percentage points (significant at  $p < 0.001$ ) from an unadjusted difference of 7.3 percentage points.
6. Other studies show that the self-employment rate among immigrants increases with length of residence in Canada, with most of the increase occurring in the first 10 to 15 years after immigration (Hou et al. forthcoming and Schuetze 2010).
7. A census metropolitan area consists of one or more adjacent municipalities situated around a major urban core. It must have a total population of at least 100,000, of which 50,000 or more live in the urban core. There were 33 census metropolitan areas in the 2006 Census.
8. Because of the cross-sectional nature of the survey data, it was not possible to determine the causal relationship between the self-reported preference for paid employment and perceptions of self-employment advantages/disadvantages. Therefore the results should be interpreted as correlations at best.
9. To reduce the number of parameters to be estimated and possible collinearity among variables, the main items of self-reported advantages and disadvantages (Table 3 and Table 4) are combined into five factors: (1) Like self-employment for entrepreneurship values, including independence, freedom, own boss; control, responsibility, decision making; and challenge, creativity, success, satisfaction; (2) Like self-employment for flexibility, including flexible hours, balance of work and family; and work from home; (3) Dislike self-employment for instability, including uncertainty, insecurity, risk, lack of stability, and

fluctuation of income cash-flow problems; (4) Dislike self-employment for long working time, including long hours, no time off, and interference in family life; (5) Dislike self-employment for low income, lack of benefits or tax burden.

10. These predicted probabilities are estimated by holding other variables at their respective means. For example, when all other variables are held at their means for the Canadian-born sample as a whole, the probability of preferring paid employment for Canadian-born self-employed workers with a university degree is 29%.

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# The income of immigrants who pursue postsecondary education in Canada

Anne-Marie Rollin

Immigrants admitted to Canada since the start of the 21st century are more educated on arrival than immigrants in earlier cohorts. They are also more educated than the Canadian-born. In the 2006 Census, 51% of immigrants age 25 to 64 who had been in Canada for five years or less had a university degree, compared to 28% of immigrants who arrived earlier and 20% of the Canadian-born (Statistics Canada 2008).

And yet, among university graduates age 25 to 54, the enrolment rate in postsecondary education is higher among recent immigrants than the Canadian-born (14% versus 6% in 2007) (Gilmore and Le Petit 2008). Moreover, immigrants who pursue postsecondary education (PSE) use the Canada Student Loans Program more often than the Canadian-born (Kapsalis 2006).

What motivates immigrants to invest time and money, and sometimes even to go into debt, to pursue PSE in Canada? While the motives differ from one individual to another, they are often not unrelated to problems associated with recent immigrants' integration into the labour market: partial or no recognition of experience and credentials acquired abroad, lack of local experience, language barrier, weak social networks and differences in the quality of education depending on country of origin (Statistics Canada 2005, Houle and Yssaad 2010, Sweetman 2004, and Anisef et al. 2010).

Despite the increase in their education level, a deterioration in recent immigrants' labour market outcomes has been observed in recent decades.<sup>1</sup> However, recent studies have indicated better outcomes for immigrants who pursue PSE in Canada. Immigrants who arrived more than five years ago and obtained their highest postsecondary degree in Canada have an employment rate comparable to the Canadian-born (Gilmore and Le Petit 2008). Moreover, labour market participation is higher for immigrants

*The author wishes to thank René Morissette for his assistance, especially in developing the regression models.*

who completed their postsecondary education in Canada rather than abroad (Mata 2008). Finally, a recent study compared the employment rate of immigrants six months after their arrival in Canada and then after four years. One finding of this study was that among those who already had a university degree on arrival, the group that pursued PSE in Canada saw its employment rate rise more rapidly than the group that did not (Anisef et al. 2010).<sup>2</sup> Up to now, no long-term longitudinal study has been conducted on how the employment income of immigrants pursuing PSE in Canada evolves over time.

This study uses Statistics Canada's Longitudinal Administrative Databank (LAD) (see *Data sources and definitions*) to compare the evolution, over an eight-year period, of the employment income of immigrants with and without PSE in Canada. The sample consists of immigrants who arrived in 1998 and 1999 when they were age 25 to 44. Immigrants who undertook no PSE in the eight years following their arrival are compared to those who began their PSE in the second or third year after their arrival.

First, the extent to which immigrants who pursue PSE in Canada experience different employment income trajectories compared to immigrants who do not is determined. It is then determined whether this difference remains after controlling for a set of individual characteristics observed at the time of settlement that are likely to influence how employment income evolves. This set of characteristics includes education level on arrival, prior knowledge of an official language, immigrant class and country of origin.

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### Men are more likely than women to belong to the skilled-worker category

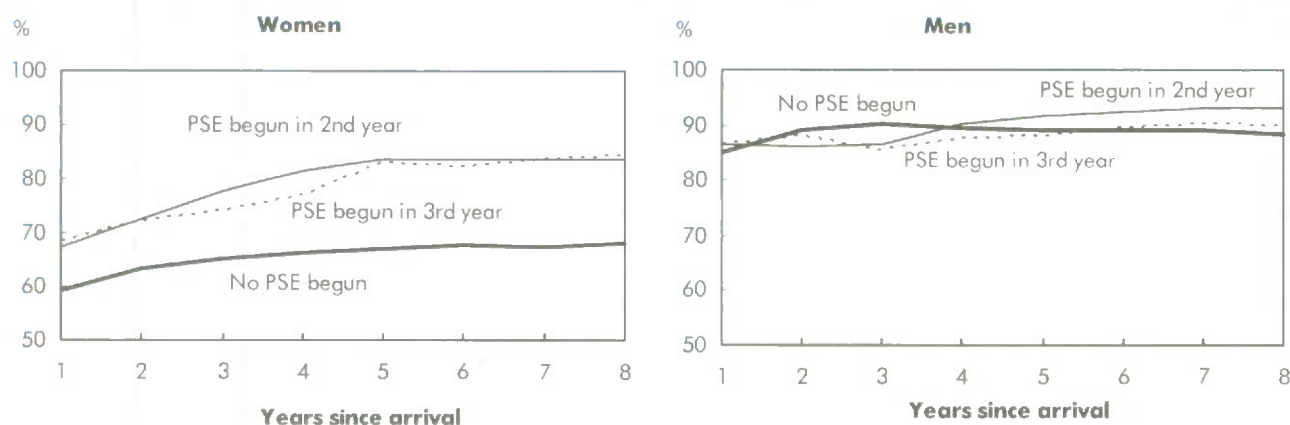
Of the male and female immigrants who arrived in 1998 and 1999 included in this study, 52% had a university degree at the time of immigration and 72% knew an official language when they arrived (Table 1). Immigrants from the four leading regions—Eastern Asia, Southern Asia, Eastern and Southern Europe and Southeast Asia—accounted for more than two-thirds of the total.

The main difference between men and women was the much larger proportion of principal applicants for immigration in the skilled-worker category for men (57%) than women (19%), who mainly belong to the skilled-worker spouse and dependent category or the family reunification category. Since only the principal applicant in the skilled-worker category is evaluated according to a point system, labour market characteristics were more favourable for male than female immigrants. Men who arrived in 1998 and 1999 tended to be slightly older than their female counterparts and have more years of work experience. They were also more educated and proportionally more likely to know English or French.

### Immigrants who begin PSE are different from those who do not pursue PSE

There are differences between the characteristics of immigrants who begin PSE during the second or third year following their arrival and those who do not pursue PSE in Canada. Immigrants who begin PSE tend to be younger and more educated when they arrive, and a larger proportion of them know an official language. For example, 70% of male immigrants who undertook PSE had a university degree when they arrived, while 50% of men who did not undertake PSE had such a degree at the time of immigration. Also, immigrants who pursue PSE are more likely to belong to the skilled-worker category, whether as the principal applicant or as a spouse or dependent of the principal applicant. The distribution of newcomers by country of origin is also different for the sub-groups who do and do not undertake PSE in Canada. For example, immigrants of both sexes who begin PSE are more likely to come from Eastern Asia, and female immigrants who begin PSE are more likely to come from Eastern or Southern Europe.

**Chart A Proportion of immigrants with employment income**



Note: PSE = postsecondary education  
Source: Statistics Canada, Longitudinal Administrative Databank, 1999 to 2007.



**Table 1 Characteristics of immigrants who came to Canada in 1998 and 1999, age 25 to 44, with at least 10 years of education on arrival**

	Women				Men			
	All	No PSE begun	PSE begun in 2nd year	PSE begun in 3rd year	All	No PSE begun	PSE begun in 2nd year	PSE begun in 3rd year
<b>Total</b>	<b>56,195</b>	<b>33,165</b>	<b>4,945</b>	<b>3,185</b>	<b>51,985</b>	<b>31,975</b>	<b>4,365</b>	<b>2,455</b>
	%							
<b>Age on arrival</b>								
25 to 29	30.0	27.6	31.3	27.2	24.7	23.2	26.4	25.2
30 to 34	31.6	29.7	32.6	39.4	30.3	28.0	34.8	33.7
35 to 39	24.5	26.1	24.1	23.8	26.0	26.6	26.4	25.1
40 to 44	13.9	16.6	12.0	9.6	18.9	22.2	12.3	16.0
<b>Education level on arrival</b>								
10 to 12 years of schooling	19.7	26.4	9.3	13.9	13.5	18.3	5.6	7.0
13 or more years of schooling, without diploma/degree/certificate	9.3	9.4	9.2	6.9	8.1	8.6	8.1	6.0
Qualification certificate	10.4	11.1	8.8	10.0	9.5	11.4	6.7	6.6
Non-university diploma	13.9	13.7	16.0	14.2	11.0	11.4	10.0	8.7
Bachelor's	38.2	32.0	47.4	45.3	42.7	37.0	54.9	52.0
Master's	7.6	6.3	8.1	8.9	12.2	10.3	13.1	15.3
Doctorate	1.0	1.1	1.3	0.8	3.1	3.0	1.6	4.5
<b>Knowledge of an official language on arrival</b>								
Yes	67.1	63.9	72.3	64.7	77.7	75.0	80.9	82.3
No	32.9	36.1	27.7	35.3	22.3	25.0	19.1	17.7
<b>Immigrant class</b>								
Skilled worker, principal applicant	18.9	14.7	25.2	18.1	56.6	50.7	67.2	62.4
Skilled worker, spouse and dependants	37.5	35.2	42.2	44.8	8.3	7.1	10.9	9.4
Family reunification	21.9	24.7	15.9	17.1	16.9	20.0	10.6	13.3
Businessperson	4.8	6.5	2.1	3.6	3.8	5.4	1.6	1.9
Refugee	4.9	5.4	4.6	6.5	6.3	7.1	5.1	6.5
Other	12.0	13.5	10.0	9.9	8.0	9.6	4.6	6.5
<b>Country of origin<sup>1</sup></b>								
Eastern Asia	28.9	25.5	33.5	30.1	24.9	22.4	27.8	27.7
Southern Asia	13.2	16.5	6.7	9.4	16.9	18.3	15.0	13.2
Southeast Asia	9.4	10.0	8.5	8.1	6.3	6.8	4.6	6.4
West Central Asia and the Middle East	11.4	11.8	12.3	12.8	10.9	10.6	13.3	12.0
Eastern and Southern Europe	15.1	13.2	19.2	22.2	15.4	16.1	14.8	15.3
Western and Northern Europe	6.3	7.0	3.9	5.0	9.1	10.5	7.1	8.4
Africa	8.6	7.7	8.0	7.0	8.6	7.2	9.0	9.4
Latin America	5.5	5.4	6.6	3.8	5.6	5.3	6.9	5.4
North America	1.7	2.1	0.9	1.3	1.5	1.9	0.9	1.2
Oceania and other	0.6	0.6	0.4	0.4	0.9	1.0	0.5	1.1

1. The classification of countries of origin is the same as the classification of places of birth used in the 2006 Census (Statistics Canada 2010, Appendix J). However, some regions in the census classification were combined. Africa includes Western, Eastern, Northern, Central and Southern Africa. Latin America includes Central America, South America, the Caribbean and Bermuda. The 'other' category contains a limited number of immigrants for whom the region of origin is unknown.

Notes: For women, 16% began PSE in the 1st year and 11% began between the 4th and 8th years. For men, the corresponding proportions are 17% and 8%.

PSE = postsecondary education

Source: Statistics Canada, Longitudinal Administrative Databank, 1999 to 2007.

## Data sources and definitions

Statistics Canada's **Longitudinal Administrative Databank** (LAD) is a longitudinal sample representing approximately 20% of Canadian tax filers (T1 income tax returns). LAD also contains variables from the **Longitudinal Immigration Database** (IMDB). It is therefore possible to identify immigrants and know some of their characteristics at the time they obtained their landed immigrant status, in particular their education level, their knowledge of the official languages, their immigrant class and their country of origin.

The target population consists of immigrants age 25 to 44 who arrived in 1998 and 1999 and had 10 or more years of education at that time.<sup>3</sup> Since information on postsecondary education is available in LAD only for individuals who complete their tax returns, the sample that was used contains only immigrants who completed their annual tax return during the eight years following their arrival. Therefore, immigrants who left Canada are not included.

Deductions for the amount relating to full-time and part-time education have been available in LAD since the 1983 and 1999 taxation years, respectively. Canadian filers who attend a recognized postsecondary educational institution and are enrolled in an eligible program can benefit by claiming this deduction, since it constitutes a non-refundable tax credit that can be claimed in the current year by the filer or a family member or can be carried forward to be claimed in a subsequent year.

In this study, **immigrants who did not begin any PSE** did not claim an education deduction from the first to the eighth year after their arrival. **Immigrants who began PSE during the second year** claimed, for the first time, a deduction for an amount relating to full-time or part-time education in the second year after their arrival. Finally, **immigrants who began PSE in the third year** claimed a deduction for the first time three years after their arrival.

As noted by Ashenfelter (1978), adults who take training sometimes experience a decrease in income in the year preceding the start of training. Therefore an analysis that considered only employment income in the year preceding the start of PSE might be biased. To guard against this possibility, this study focuses not only on immigrants who begin PSE during the second year, but also on those who do so in the third year following their arrival. Focusing on these two groups of immigrants who begin PSE also helps

to ensure that our findings are robust. Thus, to conclude that the change over time in employment income and the employment rate is different for immigrants who begin PSE in Canada compared to immigrants who do not, this study's results apply to both those who begin their education in the second year and those who do so in the third year.<sup>4</sup> Immigrants who began PSE in the first year following their arrival are not examined since it is essential to know employment income before the start of PSE.

LAD is beneficial for this analysis because of the large size of its longitudinal sample, its long period, the detailed income information that it contains and the richness of the characteristics regarding immigrants at the time of their settlement. However, this databank has some limitations, often inherent in the use of administrative data. Some immigrants who attend a postsecondary institution in the years after their arrival may not know about the education deduction. There is therefore a risk that some immigrants will be wrongly identified as non-students. Moreover, certain variables that could enhance this study are not available in LAD. The field of study of individuals pursuing PSE and whether they obtain a degree are unknown. For filers who report employment income, the number of hours worked during the year is unknown. Whether filers who report no employment income actively looked for work is unknown.

In this study, **employment income** is equal to the sum of income from employment entered on T4 slips, other income obtained from paid employment that does not appear on T4 slips, like tips and net income from self-employment (this net income can be negative). Newcomers **with employment income** in a given year are individuals who reported positive employment income that year.

Employment income is used to measure different facets of immigrants' economic integration. The extent to which immigrants have employment income at different times, which indicates that they have paid employment or are self-employed, is determined. The rate of growth of employment income between the first and eighth years is also studied. Since two individuals with the same growth rate can have a very different nominal increase in employment income, the dollar increase in employment income between the first and eighth years is also examined.

All amounts are expressed in 2007 constant dollars.

## Immigrants who undertake PSE in Canada are more likely to have employment income eight years after their arrival

The proportion of individuals with employment income is an indicator of their presence in the labour market. This proportion increases during immigrants' first years in Canada and then stabilizes as the newcomers integrate into the labour market.

After eight years in Canada, male and female immigrants who began PSE during the second or third year are more likely to have employment income than their counterparts who did not (Chart A). However, the gap between immigrants with and without PSE undertaken in Canada is much greater for women (more than 15 percentage points) than men (from 1 to 5 percentage points) after eight years.

## Effects of non-observable variables

In this study, characteristics observable at the time of immigration were taken into account by means of multivariate analyses. However, it is not possible to take non-observable characteristics generally valued on the labour market into account, such as motivation, talent, problem-solving ability, ability to synthesize and communication skills.<sup>9</sup> Immigrants who pursue postsecondary education (PSE) in Canada likely have more highly rewarded non-observable characteristics than immigrants who do not pursue PSE, which could explain in part why their employment income trajectories differed over time.<sup>10</sup>

Also, it is possible that immigrants who undertake PSE in Canada are more inclined to be in the labour market. For example, it may be that women who pursue PSE in Canada are more likely to have come to Canada with career plans

in mind, while women who do not are more likely to want to play a more traditional family role, either staying at home or holding an unspecialized job with little prospect of income growth.

To ensure that the results of this study are robust in relation to this specific phenomenon, an additional control variable was included in our models, namely the immigrant's intended occupation. This variable serves to distinguish between those who plan to work and others, in addition to providing the occupation code under the 1992 National Occupational Classification (NOC) for workers. The inclusion of this variable produces results similar to those in appearing tables 2, 3 and 4 and do not alter the findings of this study.

There was a gap of 10 percentage points among female immigrants starting in the first year, which may indicate that women who do not begin PSE generally tend to be less present in the labour market than women who do begin PSE. This situation might be due in part to the effects of non-observable characteristics (see *Effects of non-observable variables*). This said, the increase in the proportion of women with employment income between the first and eighth years is much greater for those who undertook PSE (16 percentage points) than those who did not do so (9 percentage points).

The proportion of men with positive employment income in the first year was approximately 85%, for both those with and those without PSE begun in Canada. After the third year, an upward trend appeared for groups that began PSE, while the group that did not begin PSE exhibited a downward trend. After eight years, the proportion of PSE-pursuing men with employment income is similar to or slightly higher than the corresponding proportion of those who did not pursue PSE.

### Immigrant women who pursue PSE are more likely to transition from not having employment income to having employment income

The probabilities of transitioning from having no employment income in the first year after arrival to having such earnings in the eighth year, and vice versa, were estimated using logistic regressions (see *Regression*

*models*). This methodology serves to determine whether immigrants who pursue PSE in Canada have different probabilities of transitioning compared to those who do not, and, if so, to determine whether the discrepancy in probabilities is due to differences in immigrants' characteristics at the time of their settlement.

Table 2 shows the probability of having employment income in the eighth year after arrival for immigrants without employment income in the first year. Even with controls in place for individual characteristics, this probability is significantly greater for women who begin PSE (from 69% to 78%) than those who do not (49%). In contrast, the probability gap for men is significant only for those who begin PSE in the third year.

Table 3 shows the probability of immigrants with employment income in the first year no longer having such income in the eighth year.<sup>5</sup> For women who begin PSE in the second or third year, the probability of experiencing such a transition is 10% and 13%, respectively. These percentages are significantly lower than the 19% probability for women with no PSE. For men, there is a significant probability gap between those who began PSE in the second year and those who did not undertake PSE. However, no significant difference is observed between men who began PSE in the third year and those who did not begin PSE.

It can therefore be concluded that a correlation exists only for women between beginning PSE in Canada and an increased presence in the labour market. This increased presence of women in the labour market



## Regression models

Regression models were used to evaluate the probability of individuals with no employment income in the first year having such income in the eighth year, and conversely the probability of individuals with employment income in the first year not having such income in the eighth year. The model used is as follows:

$$Prob(\gamma_{i8}) = \alpha + \beta_1 PSE_{i2} + \beta_2 PSE_{i3} + \beta_3 C_i + \varepsilon_i$$

The dependent variable  $\gamma_{i8}$  is a binary variable that takes the value of 1 when individual  $i$  has employment income in the eighth year and 0 otherwise. The model was estimated separately for individuals with and without employment income in the first year. The term  $PSE_{i2}$  represents a binary variable that takes the value of 1 if individual  $i$  began postsecondary education (PSE) in the second year and 0 otherwise. In turn, the binary variable  $PSE_{i3}$  identifies immigrants who began PSE in the third year. Immigrants who did not pursue PSE comprise the reference group. The term  $C_i$  consists of individual characteristics on arrival in Canada: age, age squared (to take the decreasing marginal return on years of experience into account), education level, knowledge of an official language, immigrant class and country of origin. Apart from age and age squared, the other characteristics appear as binary variables and represent the different values appearing in Table 1. The probabilities in tables 2 and 3 correspond to the mean of the probabilities predicted by the model for the whole of the study sample (with or without employment income in the first year).

The descriptive analysis suggests greater income growth for immigrants who pursue PSE. To separate out the effect of PSE pursued in Canada from the effect of immigrants' individual characteristics on arrival in Canada, two linear regression models were specified which were estimated according to the ordinary least squares method:

$$\gamma_{i8} - \gamma_{i1} = \alpha + \beta_1 PSE_{i2} + \beta_2 PSE_{i3} + \beta_3 C_i + \varepsilon_i$$

and

$$\log(\gamma_{i8}) - \log(\gamma_{i1}) = \alpha + \beta_1 PSE_{i2} + \beta_2 PSE_{i3} + \beta_3 C_i + \varepsilon_i$$

In the first model, the dependent variable represents the difference in employment income between the eighth and first years. In the second model, the dependent variable corresponds to the difference between the logarithms for employment income in the eighth and first years. For low growth rates, the logarithmic difference is approximately equal to the growth rate. However, the descriptive analysis revealed that the growth rates for immigrants' employment income are high (Chart B). Therefore, in this study, the logarithmic difference underestimates the growth rate for employment income. The terms  $PSE_{i2}$ ,  $PSE_{i3}$  and  $C_i$  are exactly the same as in the logistic regression model.

All the regression models were evaluated separately for men and women. In addition to being evaluated as described above, the models were also evaluated without individual characteristics  $C_i$ . When the results are presented, there is a notation as to whether the model is with or without individual characteristics.

may reflect greater employability, a greater degree of labour force participation or a combination of the two. However, the probability of going from a

situation without employment income in the first year to a situation with employment income in the eighth year is lower for women than men in all cases. Simi-

**Table 2 Probability for individuals with no employment income in the first year of having employment income in the eighth year**

	Women		Men	
	Model excluding individual characteristics	Model including individual characteristics	Model excluding individual characteristics	Model including individual characteristics
	%			
No PSE begun (ref.)	48.3	48.5	67.4	68.4
PSE begun in 2nd year	71.0*	68.8*	80.0*	75.5
PSE begun in 3rd year	79.1*	77.5*	90.2*	87.5*

\* significant difference in relation to reference group (ref.) at the 0.05 level

Notes: Includes only immigrants with no employment income in the first year.

PSE = postsecondary education

Source: Statistics Canada, Longitudinal Administrative Databank, 1999 to 2007.

larly, the probability of going from a situation with employment income in the first year to a situation without employment income in the eighth year is higher for women than men. This is largely a reflection of the differences in characteristics between male and female immigrants described previously. In particular, since women are much less likely to belong to the skilled-worker category, they are less likely to have positive labour market outcomes.

### Both male and female immigrants who pursue PSE experience greater growth in their employment income

This paper's focus will now shift to the increase in immigrants' employment income between the first and eighth years, using only immigrants with employment income at both these times.<sup>6</sup>

Although women who begin PSE have a lower average income in the first year than those who do not begin PSE, by the eighth year the women who began PSE have the higher average income (Chart B). Men who pursue PSE in Canada also start out with a lower average income but after eight years they are close behind men who did not pursue PSE. Consequently, both women and men who pursue PSE see both stronger growth and a larger nominal increase in their employment income. The employment income growth

rate for women who do not begin PSE is 61%, compared to more than 125% for women who do. The employment income of men who do not pursue PSE increases by 50%, while that of men who do increases by more than 80%.<sup>7</sup>

Gaps between immigrants with and without PSE in Canada are still present in the majority of cases with controls in place for the effect of individual characteristics at the time of arrival, using linear regression models (see *Regression models*). However, the gaps are reduced by adding these variables to the models (Table 4). The decrease in the gaps is small for employment income growth.<sup>8</sup>

With regard to the nominal increase in employment income, more than three-quarters of the gap observed for women (without controls for individual characteristics) remains when differences in these characteristics among immigrants are taken into account. Immigrant women who begin PSE in the second or third year experience a greater increase in their employment income than those who do not begin PSE, at \$8,900 and \$5,500, respectively. For men who begin PSE in the second year, 60% of the difference remains when individual characteristics are taken into account, at \$3,800. However, for men who begin PSE in the third year, the gap in relation to the reference group with no PSE in Canada is not significant.

**Table 3 Probability for individuals with employment income in the first year of not having employment income in the eighth year**

	Women			Men	
	Model excluding individual characteristics	Model including individual characteristics		Model excluding individual characteristics	Model including individual characteristics
			%		
No PSE begun (ref.)	18.2	18.6		7.8	8.3
PSE begun in 2nd year	10.1*	10.3*		4.6*	5.2*
PSE begun in 3rd year	12.9*	12.9*		10.2	10.4

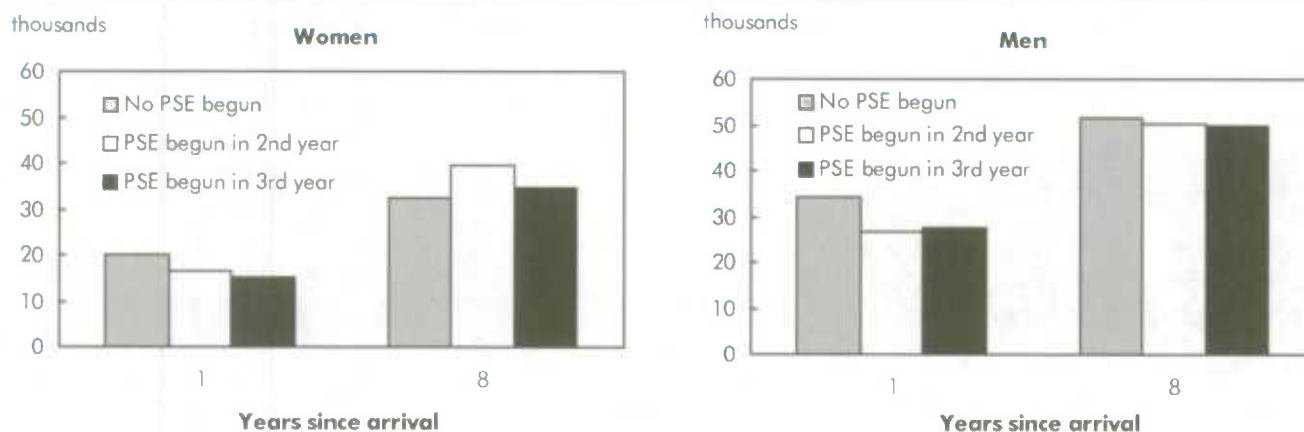
\* significant difference in relation to reference group (ref.) at the 0.05 level

Notes: Includes only immigrants with employment income in the first year.

PSE = postsecondary education

Source: Statistics Canada, Longitudinal Administrative Databank, 1999 to 2007.

**Chart B Average employment income in the first and eighth years**



Notes: Includes only individuals with positive employment income in the 1st and 8th years.

PSE = postsecondary education

Source: Statistics Canada, Longitudinal Administrative Databank, 1999 to 2007.

Thus, pursuing PSE in Canada seems to be correlated with stronger growth of employment income for both women and men, as well as with a larger nominal increase in employment income for women.

### Are the outcomes different for immigrants who arrived with and without a university degree?

The evolution of employment income in relation to pursuing PSE in Canada does not appear to be different for immigrants who arrived with and

**Table 4 Growth and nominal increase in employment income**

		Women		Men	
Dependent variable		Model excluding individual characteristics	Model including individual characteristics	Model excluding individual characteristics	Model including individual characteristics
Group compared to group with no PSE begun					
Value of coefficient of interest [and its standard error]					
PSE begun in 2nd year	$\log(Y_8) - \log(Y_1)$	0.56* [0.06]	0.51* [0.06]	0.36* [0.04]	0.32* [0.04]
PSE begun in 3rd year	$\log(Y_8) - \log(Y_1)$	0.46* [0.07]	0.38* [0.07]	0.27* [0.06]	0.23* [0.06]
PSE begun in 2nd year	$Y_8 - Y_1$	10,800* [1,200]	8,900* [1,200]	6,400* [1,700]	3,800* [1,700]
PSE begun in 3rd year	$Y_8 - Y_1$	7,200* [1,500]	5,500* [1,500]	5,000* [2,200]	2,400* [2,200]

\* significant difference in relation to reference group (no PSE begun) at the 0.05 level

Notes: Includes only individuals with positive employment income in the 1st and 8th years.

PSE = postsecondary education

Source: Statistics Canada, Longitudinal Administrative Databank, 1999 to 2007.



without a university degree.<sup>11</sup> The four measures of the change in employment income examined are different between immigrant women who begin PSE in Canada and those who do not, these findings applying both to those who arrived with and without a university degree. For men, the results are conclusive only with regard to the growth rate for employment income, as noted previously (Table 5).

The results of the logistic regressions do not indicate that the gaps previously observed between groups with PSE and the reference group without PSE regarding the probabilities of transitioning from having no employment income to having such earnings, and vice versa, are different for immigrants with and without a university degree on arrival.<sup>12</sup> Nor do the results of linear regressions indicate a significant difference in the growth rate and nominal increase in employment income.<sup>13</sup>

## Conclusion

This study compared the evolution, over an eight-year period, of the employment income of immigrants who began postsecondary education (PSE) in Canada in the second or third year after their arrival with that of immigrants who did not do so. Four measures were used: the probability of going from a situation with no employment income to one with employment income; the probability of going from a situation with employment income to one with no employment income; the rate of growth of employment income; and the nominal increase in employment income. The analysis was conducted for women and men separately.

According to the four measures, women who began PSE in Canada have better outcomes, even when individual characteristics known at the time of immigration are taken into account. For men, the differences

**Table 5 Employment income in the first and eighth years, by education level on arrival**

	Women				Men		
	No PSE begun	PSE begun in 2nd year	PSE begun in 3rd year		No PSE begun	PSE begun in 2nd year	PSE begun in 3rd year
<b>Arrived without university degree</b>							
Proportion with employment income				%			
1st year	57.0	66.5	67.2		84.5	83.9	86.3
8th year	66.7	82.9	81.2		88.5	92.0	92.1
				\$			
Average employment income <sup>1</sup>							
1st year	15,500	14,200	13,500		26,900	21,400	25,600
8th year	24,600	35,100	29,700		38,200	38,900	49,000
				%			
Growth of average employment income, <sup>1</sup> 1st to 8th year	58.7	147.2	120.0		42.0	81.8	91.4
<b>Arrived with university degree</b>							
Proportion with employment income				%			
1st year	62.7	68.3	69.6		86.1	87.6	86.5
8th year	70.5	84.5	87.4		88.6	93.9	89.0
				\$			
Average employment income <sup>1</sup>							
1st year	26,600	18,100	16,300		41,400	28,800	28,100
8th year	43,100	42,700	38,200		64,500	55,000	49,900
				%			
Growth of average employment income, <sup>1</sup> 1st to 8th year	62.0	135.9	134.4		55.8	91.0	77.6

1. Includes only individuals with positive employment income in 1st and 8th years.

Note: PSE = postsecondary education

Source: Statistics Canada, Longitudinal Administrative Databank, 1999 to 2007.

between those who began PSE and those who did not are significant only with respect to the growth rate for employment income. The evolution of employment income related to pursuing PSE in Canada does not differ significantly depending on whether immigrants were with or without a university degree on arrival.

There is therefore an association for both women and men between pursuing PSE in Canada and the growth of immigrants' employment income over an eight-year period. Also, for immigrant women, PSE pursued in Canada is associated with greater labour force participation eight years after their arrival.

Since it is impossible to take the effects of some non-observable variables into account, these results should be interpreted with caution. The gaps that remain between immigrants who undertake PSE in Canada and those who do not (after individual characteristics known at the time of immigration are taken into account) are caused by the combined effects of pursuing PSE in Canada and the non-observable characteristics mentioned previously. However, the relative importance of these two factors is unknown. Future research might shed light on this matter.

The administrative data used do not show whether immigrants who began PSE obtained a postsecondary degree in Canada. What this study establishes is that there are certain links between immigrants attending a postsecondary educational institution in Canada and how their employment income evolves. By attending such an institution, newcomers obtain not only education but also access to guidance and job search services, the opportunity to perfect their knowledge of the official languages, the possibility of expanding and diversifying their social networks and various other advantages. In the future, it would be useful to explore how each of these advantages contributes to improving immigrants' employment prospects. It would also be interesting to determine whether participation in PSE is more beneficial to immigrants than the Canadian-born.<sup>14</sup>

#### Perspectives

#### ■ Notes

1. The unemployment rate of very recent immigrants rose from 1981 to 2008, whereas it declined for the Canadian-born (Canadian Labour and Business Centre 2004, and Gilmore 2009). The gap in employment income between very recent immigrants and the Canadian-born has widened since the 1970s, even for bachelor's degree holders (Picot and Sweetman 2005). Moreover, the proportion of very recent immigrants having a university degree but holding a job requiring no more than a high school diploma increased by 5 percentage points from 1991 to 2006 (Galarneau and Morissette 2008).
2. Anisef et al. (2010) use the Longitudinal Survey of Immigrants to Canada and focus on immigrants who arrived during the period from October 2000 to September 2001 and had a university degree when they arrived. They separate their sample into four groups according to the type of postsecondary education (PSE) pursued in the first four years in Canada: no PSE, non-university PSE, university PSE in the same field as in the past, university PSE in another field than in the past. For each of these groups, they measure the employment rate six months after their arrival, then after four years. One of the main findings of the study is that the increase in the employment rate between these two periods is greater for immigrants who pursue university PSE in Canada than immigrants who do not pursue PSE and those who pursue non-university PSE. However, the employment rate after four years remains lower for immigrants who pursued university PSE in Canada than the other two groups.
3. To attend a Canadian postsecondary institution, it is generally necessary to have a high school diploma, which requires approximately 12 years of education. Immigrants with less than 10 years of education on arrival are therefore too unlikely to attend a postsecondary institution to be included in this study.
4. However, those who begin postsecondary education (PSE) in the third year have one less year between the start of their PSE and the point when their employment income is recorded in the eighth year.
5. According to Riddell and Song (2009), postsecondary education increases the probability of re-employment following a job loss.
6. Immigrants with employment income in both the first and eighth years represent 79% of the men and 51% of the women included in the sample. As noted earlier, the definition of employment income used in this study includes net income from self-employment, following the example of Frenette and Morissette (2003). Such income is likely to be more unstable than the earnings of salaried workers. To ensure that the inclusion of this income does not bias the results for growth in total employment income, tables 4 and 5 were redone excluding immigrants who reported such income in either the first or eighth year, or in both years. The results are similar to those appearing in this article.
7. The higher growth rates generally observed for women reflect in part the fact that their average income is much lower in the first year.

8. The dependent variable in the regression models is the logarithmic difference in income between the first and eighth years. This ensures that the results are not influenced by the fact that women's incomes are lower on average than men's.
9. The methods generally used to take the omitted heterogeneity into account cannot be used in the selected regression models. With fixed-effects models, the dependent variable must be observed several times for the same individual. In this study, income is observed in the first and eighth years only, which is insufficient. Random-effects models are useful when the non-observable characteristics are not correlated to the independent variables. This condition does not apply here because the non-observable characteristics are expected to be correlated to pursuing postsecondary education (PSE).
10. See, for example, Bonikowska et al. (2008) for details on the effect of cognitive ability on immigrants' earnings.
11. The findings of this study are also valid for both full-time and part-time postsecondary education (PSE) begun. Education deductions indicate how many months immigrants pursued full-time or part-time PSE in a given year. Beginning full-time PSE in a given year is defined as attending a postsecondary educational institution full-time for a minimum of four months that year. Immigrants who began part-time PSE did not meet this condition (either they studied part time only or they studied full time for less than four months in the first year of their PSE). When this distinction is made, the conclusions of this study are found to be adequate for all questions pertaining to women. Once again, the results for men are conclusive only with respect to the growth rate of employment income.
12. Logistic regressions were carried out using a model similar to the one described in *Regression models*. However, education level on arrival is included as a binary variable to distinguish between immigrants with and without a university degree on arrival. Also, two terms were added for the interaction between this binary variable on education on arrival and the two binary variables on PSE pursuit in Canada. The model was evaluated separately for the two sexes, as well as for individuals with and without employment income in the first year. The standard errors used are robust for heteroscedasticity. When individual characteristics are taken into account, the two interaction terms are not jointly different from zero at the 5% significance level.
13. The linear regression models used were similar to those described in *Regression models*. However, education level on arrival is included as a binary variable to distinguish between immigrants with and without a university degree on arrival. Also, two terms were added for the

interaction between this binary variable on education on arrival and the two binary variables on PSE pursuit in Canada. The two models were evaluated separately for the two sexes. When the effect of individual characteristics is taken into account, the two interaction terms are not jointly different from zero at the 5% significance level, with one exception: a slight difference is detected with respect to the nominal increase in employment income for men. This difference comes from men who began PSE in the third year, since no difference is detected for men who began PSE in the second year.

14. While Canadian-born persons who pursue postsecondary education (PSE) can be identified in the Longitudinal Administrative Databank (LAD), their prior education level is unknown.

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# The wealth and finances of employed low-income families

May Luong

In 2008, over 4.1 million individuals were living in low-income families.<sup>1</sup> While many people in low income relied on government transfers, 37% of these people were also part of a family in which someone was employed for at least one-half of the year.<sup>2</sup>

Employed low-income families have been the subject of several recent studies.<sup>3</sup> One study found the average income of individuals living in employed low-income families to be less than one-third of the income of individuals in other employed families (Fleury and Fortin 2004). Although fewer individuals in employed low-income families work full year, full time, their average hours worked are on par with other workers at around 2,000 hours (Fleury and Fortin 2006).

Low-paying jobs are often associated with employed low-income families. However, while low pay was found to be a significant risk factor, it was not the most important determinant of low-income status. Instead, the presence of one earner (compared to multiple earners) and other family characteristics were found to be more important than pay (Fleury and Fortin 2006). Fortin calculated that 3.4 million of the employed in 2002 would drop under the low-income line if they experienced a separation or divorce in the family, or if other earners in the family experienced unemployment (Fortin 2007). In addition, certain groups like immigrants were found to be more likely to be part of an employed low-income family (Fortin 2007).

Other studies compared spending in employed low-income families to other groups to assess their living standards. Results indicate that despite their stronger labour force attachment and slightly higher income than those in other low-income families, employed low-income families were more likely to borrow or liquidate assets to make ends meet, and they had more

work-related expenses and less access to subsidized housing (Fleury et al. 2005). Nevertheless, individuals in employed low-income families experience health outcomes comparable to the employed non-low-income and score higher than the not-employed low-income on a number of health measures, both in a given year and over the longer term (Fortin 2008).

Although these studies shed light on the current income and consumption of employed low-income families, there remains a research gap regarding their wealth and financial situation. Wealth studies typically treat low-income families as a single group, rather than separating the employed from other low-income families. For example, one study reported that while not all low-income families have low wealth, the vast majority of low-income families have very little financial wealth (Morissette 2002).

Wealth is a key aspect of long-term well-being since some assets can be converted into cash for consumption during periods of economic hardship (Wolff 1998). Other assets may be more difficult to liquidate in a short period of time but often can be used as security for loans. Studying the wealth and financial security of individuals in employed low-income families can provide a more complete picture of their long-term financial well-being and ability to weather short-term difficulties.

Using the 2009 Canadian Financial Capability Survey (CFCS), this study examines the financial situation of individuals living in employed low-income families compared to not-employed low-income families and employed families not in low income. The CFCS provides the unique opportunity to look at respondents' perceptions of their financial situation and their estimates of household assets and debts during a labour market downturn. Since the response rates for the asset and debt questions were relatively low,

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the tabulations were replicated using the 2005 Survey of Financial Security (SFS). The comparison validated the main conclusions of this study but also indicated that the CFCS measures of asset and debt levels should be interpreted with caution (see *Data sources and definitions*).<sup>4</sup>

Although CFCS data were collected and processed at the individual level, the primary groups of interest were defined based on family income and wealth. Thus 'families' is used synonymously with 'individuals in families' for brevity in this article.

### Profile of employed low-income families

In 2009, there were over 1.6 million people age 25 to 64 living in employed low-income families,<sup>5</sup> representing 9% of the population in this age group (Table 1). There were just fewer than 1.2 million people living in not-employed low-income families, which represented 7% of the target population. Individuals in employed non-low-income families were in the majority, accounting for 77% of the target population of 14 million. The remaining 8% is made up of those in not-employed non-low-income families and is excluded from subsequent analyses (see *Data sources and definitions*).

The average age of those in employed low-income families is younger than all other groups at 42.3 years. Almost 60% of those in this group are from age 25 to 44. This group also had the largest proportion of women (58%), the largest household size (3.6) and more children (1.4), on average, than all other groups. Almost one-half of employed low-income

**Table 1 Profile of individuals age 25 to 64 by employment and income group**

	Employed low-income	Not-employed low-income	Employed non-low-income	Not-employed non-low-income
<b>Population</b>	<b>1,632</b>	<b>1,187</b>	<b>13,999</b>	<b>1,434</b>
			'000	
			%	
Sample	9	7	77	8
Female	58	57	48*	51*
			years	
Mean age	42.3	47.7*	43.4*	53.2*
Age distribution			%	
25 to 34	28	19*	25*	11*
35 to 44	31	18*	28*	9*
45 to 54	26	27*	30*	17*
55 to 64	15	36*	17*	63*
			number	
Household size	3.6	2.6*	3.0*	2.3*
Number of children	1.4	0.7*	1.0*	0.3*
Family composition			%	
Unattached individuals	21	45*	16*	34*
Couples without children	17	19*	30*	45*
Couples with children	47	20*	50*	14*
Lone parent	15	17*	4*	6*
Highest education level				
Less than high school diploma	23	35*	7*	18*
High school diploma or equivalent	26	23*	19*	24*
Some college, trade, vocational or technical school, CEGEP, or university	10	9*	10	12*
College, trade, vocational or technical school, CEGEP, certificate or diploma	24	18*	29*	23*
University undergraduate degree	11	9*	23*	15*
University graduate degree	7	F	13*	9*
			\$	
Median household income	25,000	15,000*	90,000*	55,000*
Median adjusted household income	15,000	11,000*	52,500*	38,900*

\* significant difference from the employed low-income (reference group) at the 5% level  
Source: Statistics Canada, Canadian Financial Capability Survey, 2009.

families are couples with children and 15% are lone parents. Compared to those in low-income families with no one employed, those in employed low-income families are somewhat better-educated with 24% holding a college diploma and 18% holding a university degree (undergraduate and graduate).



## Data sources and definitions

The Canadian Financial Capability Survey (CFCS) is a voluntary survey conducted in 2009, targeting persons 18 years of age and over. Full-time residents of Yukon, the Northwest Territories and Nunavut were excluded. Since the survey was conducted using a sample of telephone numbers, the 8% of households without telephones or with cell phones only were excluded. One respondent was selected from each household. The CFCS sheds light on respondents' personal knowledge, abilities and behaviours concerning financial decision-making. Information on their families' assets, debts, and net worth is also available. Although family-level responses may not apply to all family units in the sampled household, the data are weighted to represent all individuals in the target population.

One limitation of the CFCS is that only about 50% of the respondents completely reported their assets and net worth. Given the high item non-response rate, biased estimates of wealth differences among groups were a possibility. Prior to 2009, asset and debt information was most recently collected in the 2005 Survey of Financial Security (SFS). Although the number of responses to the 2005 SFS was smaller than the number of responses to the CFCS (6,000 compared to 15,500), the item response rates for wealth items were higher and imputed if missing. The SFS thus provides a ready source for the validation of CFCS estimates even though its sample size limits the precision of estimates for smaller population groups. As such, the asset and debt tabulations were replicated using the 2005 SFS. The results presented in this article would be substantially the same for each survey even though many estimates differed in level. Thus the CFCS can identify statistically significant differences in assets and debts among groups, although the levels may be biased and should not be used to infer trends in relation to the 2005 (or 1999) SFS.

The target population for this study includes individuals from age 25 to 64. Students are excluded. The target population is divided into four groups:

- individuals in employed low-income families
- individuals in not-employed low-income families

- individuals in employed non-low-income families
- individuals in not-employed non-low-income families.

The target population included 10,875 respondents and represented over 18 million individuals in 2009. The sample of individuals living in employed low-income families was 1,010. Only the first three groups are examined in the main analysis.

The employed low-income group must be framed within the household and family contexts, as household income is used to determine the group's low-income status and the family is used to determine employed or not-employed status. An employed family is defined as a family with at least one employed individual. Therefore an individual living in an employed low-income family may not actually be employed himself or herself. Assets and debts are also reported at the family level in the CFCS. Thus, the major units of analysis in this report are defined along family concepts. On the other hand, the household reference person rather than the family is the unit of analysis in the CFCS, and questions relating to financial security are directed to that individual. Furthermore, LIM also uses adjusted household income observed at the person level.<sup>5</sup> Therefore, this study more accurately examines 'individuals living in employed low-income families' rather than 'employed low-income families' or 'employed low-income individuals.' However, for simplicity, this paper will refer to 'individuals living in employed-low-income families' as 'employed low-income families,' and similarly so for comparison groups.<sup>6</sup> See the appendix for a comparison of low income calculated using the CFCS and SLID.

**Wealth** (net worth) is defined as the difference between a family's assets and its total debts. Future entitlements to social security provided by the government such as Old Age Security, and Canada Pension Plan and Quebec Pension Plan benefits are not included as they were not available in the CFCS.

The median household income for employed low-income families was \$25,000 in 2009 compared to \$15,000 for low-income families with no one employed. Since the not-employed families were smaller, the difference between the two groups shrank after adjustments were made for family size: from \$10,000 to \$4,000. Similar to previous findings, the adjusted household income of employed low-income families was less than one-third of that of employed non-low-income families.

## Among low-income families, the employed have higher median wealth

Wealth or net worth is defined as the difference between a family's total assets and total debts.<sup>8</sup> Since wealth varies by age, the results are standardized to the age distribution of individuals in employed low-income families to counteract the effect of age differences among the groups.

On average, employed low-income families have greater wealth than other low-income families, but lower wealth than employed non-low-income families. The median net worth of employed low-income families was \$19,000 compared to \$1,000 for other low-income families, and \$257,700 for employed non-low-income families (Table 2).

### Assets

The assets contributing to net worth highlight further differences among groups. The median value of total assets for employed low-income families (\$60,000) fell between the other two groups: significantly higher than the other low-income group (\$3,000) but less than one-sixth of the median of the other employed group (\$389,200).

Home equity is the most valuable asset for many Canadians. More than one-half of employed low-income families owned their homes compared to just over one-third of the other low-income group.

Employed low-income families were also more likely to hold other financial assets (excluding RRSPs) than other low-income families. Furthermore, 42% of the employed low-income had RRSPs compared to 22% among other low-income families. The liquidity of such assets can help families weather temporary shocks like the loss of a job or an unexpected expense.

Although Registered Education Savings Plans (RESPs) are used by relatively few low-income families, employed low-income families are twice as likely to hold an RESP compared to other low-income families (20% versus 10%).

**Table 2 Assets, debts, and net worth by employment income group**

	Employed low-income	Not-employed low-income	Employed non-low-income
<b>Net worth</b>		\$	
Median value of net worth	19,000	1,000*	257,700*
Mean value of net worth	151,000	41,700*	531,600*
		%	
Net worth not stated	54	45	49
<b>Assets</b>		\$	
Median value of total assets	60,000	3,000*	389,200*
Mean value of total assets	200,900	59,100*	643,600*
		%	
<b>Type of asset</b>			
Tangible assets	87	69*	97*
Home ownership			
Owns home without mortgage	20	20	22*
Owns home with mortgage	38	16*	58*
Does not own home	42	64*	20*
		years	
Average years of remaining mortgage	16.0	12.1*	14.2*
		%	
RRSP	42	22*	81*
RESP	20	10*	29*
Other financial assets	52	37*	78*
Business assets	16	F	18*
No assets	13	36	1*
Total assets not stated	51	42	48
<b>Debts</b>		\$	
Median total debt	10,000	0	50,000
Mean total debt	63,000	17,300*	113,100*
		ratio	
Median debt-to-income ratio	1.00	0.64*	0.90*
Median debt-to-asset ratio	0.44	0.49*	0.27*
<b>Type of debt</b>		%	
Mortgage	42	16*	64*
Student loan	13	15*	14
Outstanding credit card balance	40	26*	41
Outstanding balance on line of credit	21	11*	38*
Other loans and liabilities	25	15*	30*
No debts or liabilities	31	56*	17*
Total debts not stated	20	17	18

\* significant difference from the employed low-income (reference group) at the 5% level  
 Note: Median values are bootstrap-weighted but not age-standardized. Age-standardized medians are estimated but not reported in the table as they cannot be bootstrap-weighted and tested for significance. Individuals in employed low-income families are used as the base profile so medians do not change for this group. The age-standardized median net worth value is \$250 for not-employed low-income families, and \$247,000 for employed non-low-income families. The age-standardized median total assets are \$2,000 for not-employed low-income families, and \$382,300 for employed non-low-income families. The age-standardized median total debt is \$0 for not-employed low-income families, and \$55,000 for employed non-low-income families.

Source: Statistics Canada, Canadian Financial Copability Survey, 2009.

About 1 in 6 (16%) employed low-income families held business assets—slightly less than the 18% of employed non-low-income families who held such assets.

### Debts and liabilities

In addition to having a higher level of assets, employed low-income families also carried more debt, on average, than other low-income families. Just over one-half (56%) of not-employed low-income families carried no debt compared to 31% of employed low-income families.

The higher incidence of debt among employed low-income families was primarily due to mortgages. Notably, 42% of employed low-income families had mortgages on their homes compared to 16% of other low-income families. Employed low-income families also surpassed other low-income families in the incidence of all other types of debt except student loans. Counter to most financial advice, 4 in 10 employed low-income families carry outstanding credit card balances.

In summary, the average wealth of employed low-income families exceeded that of other low-income families, but was significantly lower than that of employed non-low-income families. Did these differences in wealth translate into other indicators of financial security? The next

section looks at the financial security of employed low-income families compared to the other two groups.

### Employed low-income families less likely to be behind on payments than others in low income

Over one-half of all families reported having a household budget (Table 3). A slightly smaller proportion of employed low-income families reported having a household budget (54%) than other groups. However, they were also less likely to report rarely or never staying within their budget (11%) than the other low-income group (14%). In other words, they were a bit better at staying on budget than the other low-income families.

Just over one-half of employed low-income families have monthly expenses under \$2,000 compared to 3 out of 4 in the other low-income group. Despite higher spending, a smaller proportion of employed low-income families reported falling behind on payments.<sup>9</sup>

### Employed low-income families more likely than other low-income families to have enough savings to cover unexpected expenses

Having a 'rainy day' fund helps during periods of financial hardship or given an unexpected expense.

When asked what individuals would do given a \$500 unexpected expense, 46% of those in employed low-income families said they would use savings to cover such an expense (Chart A). This is higher than the other low-income group (with no employed family members), among whom less than one-third would use savings to cover such an expense.

However, if the unexpected expense were \$5,000, the proportion of employed low-income families who would use savings to cover the expense would only be slightly higher (17%) than the other low-income group (14%) (Chart B).

**Table 3 Household budget and expenses by family type**

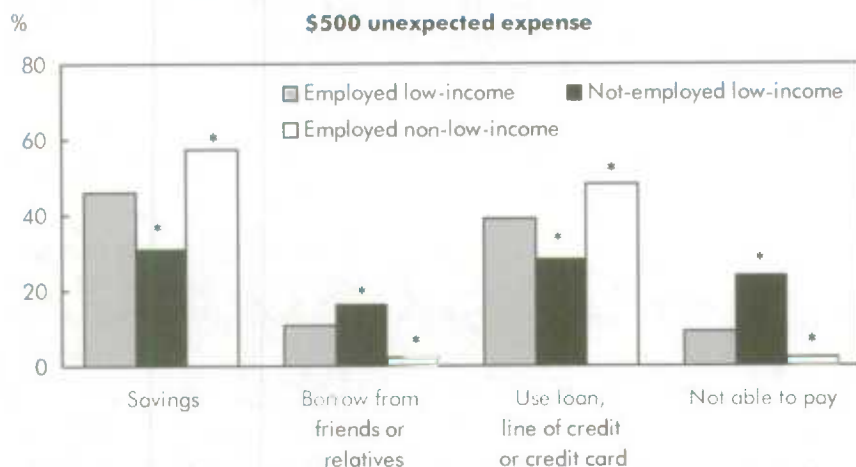
	Employed low-income	Not-employed low-income	Employed non-low-income
		%	
Have a household budget	54	57*	55*
Rarely/never stay on budget	11	14*	9*
<b>Average monthly expenses</b>			
Less than \$2,000	53	76*	33*
\$2,000 to \$3,999	40	22*	55*
\$4,000 or more	7	F	12*
<b>At least two months behind in...</b>			
Paying bills	23	29*	10*
Mortgage payments	5	7*	1*
Loan payments	7	8*	2*

\* significant difference from the employed low-income (reference group) at the 5% level

Note: Results are age-standardized.

Source: Statistics Canada, Canadian Financial Capability Survey, 2009.



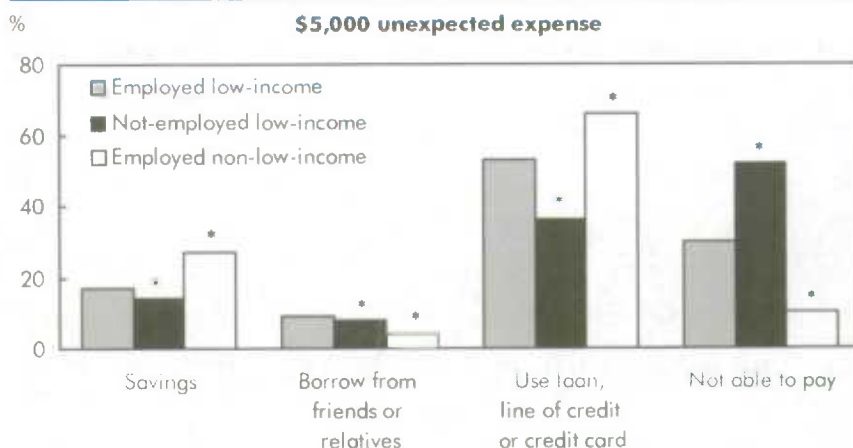
**Chart A Ability to pay a \$500 unexpected expense by family type**


\* significant difference from the employed low-income (reference group) at the 5% level  
 Note: Results are age-standardized. Proportions may not add to 100% as categories are not mutually exclusive. Individuals may have multiple responses.  
 Source: Statistics Canada, Canadian Financial Copability Survey, 2009.

### Employed low-income families more likely to prepare for retirement than other low-income group

Over one-half of employed low-income families reported preparing financially for retirement compared to less than one-quarter of the other low-income families (Table 4). A slightly higher proportion of not-employed low-income families plan to rely on government pensions than employed low-income families (86% and 81%, respectively). However, a higher proportion of the employed low-income included employer pensions as a planned source of retirement revenue than others in low income (44% and 33%, respectively).

Employed low-income families would be less likely to borrow from friends or relatives than other low-income families (11% and 16%, respectively) but a higher proportion would draw on lines of credit or credit cards (39% versus 28%). For a larger unexpected expense, both low-income groups would be less likely to go to their friends or families for a loan. Instead, over one-half of employed low-income families would borrow the \$5,000 from a line of credit or credit card, compared to just over one-third of the other low-income group. The not-employed low-income were more likely to report that they would be unable to pay (52%) than employed low-income families (30%).

**Chart B Ability to pay a \$5,000 unexpected expense by family type**


\* significant difference from the employed low-income (reference group) at the 5% level  
 Note: Results are age-standardized. Proportions may not add to 100% as categories are not mutually exclusive. Individuals may have multiple responses.  
 Source: Statistics Canada, Canadian Financial Copability Survey, 2009.

**Table 4 Retirement preparation by family type**

	Employed low- income	Not- employed low- income	Employed non-low- income
		%	
<b>Financially preparing for retirement</b>	<b>52</b>	<b>24*</b>	<b>85*</b>
<b>Sources of revenue included in financial plan</b>			
Government pensions	81	86*	82*
Employer pensions	44	33*	61*
RRSP	65	50*	85*
Sale of assets	31	33	35*
Rely on family or inheritance	30	39*	27*
Earnings in retirement	53	50*	52*
<b>Reason for not financially preparing for retirement<sup>1</sup></b>			
Can't afford to, don't earn enough, income too low	50	39*	42*
Don't have a job, haven't worked long enough	14	40*	10*
Too many debts, bills, financial commitments	8	7*	11*
Don't think about it, haven't got around to it	11	7*	13*
I'm young, lots of time	10	F	11
<b>Level of confidence of income in retirement</b>			
Very confident	12	14*	18*
Fairly confident	38	28*	53*
Not very confident	33	31*	22*
Not at all confident	16	26*	7*
Know level of income needed in retirement	26	22*	48*

\* significant difference from the employed low-income (reference group) at the 5% level

1. Other reasons not shown in this table for not planning for retirement include relying on government pension; relying on partner's pension; relying on future inheritance; relying on financial support from family; don't think I'll live that long; waiting to get a job with a pension plan; and other reasons. Data for these reasons are excluded from the table due to low cell count.

Note: Results are age-standardized. Proportions for sources of revenue and reason not financially prepared may not add to 100% as responses are not mutually exclusive.

Source: Statistics Canada, Canadian Financial Capability Survey, 2009.

RRSPs also figured into many families' retirement plans. Employed low-income families were more likely to include RRSPs (65%) in their retirement plans than others in low income (50%). Although both low-income groups had lower intentions of using RRSPs in retirement than employed non-low-income families, RRSPs may not be the best retirement

savings vehicle for many in low income. Since the main transfer program for low-income seniors, the Guaranteed Income Supplement (GIS), is reduced by 50 cents for each dollar of additional income above an income threshold, the advantages of investing in RRSPs are diminished for low-income families. Previous research indicated that low-income non-

savers may be better off than those with modest savings given the GIS eligibility requirements in place at the time (Shillington 2003).

Working during the retirement years is another option. Despite the differences in their current situations, similar proportions of each group reported that they would at least partially rely on employment earnings when they retire—ranging from 50% to 53%. While working during the retirement years is likely to be financially driven, it is becoming more common and previous research has concluded that it may often be a choice rather than a necessity (Hébert and Luong 2008).

For those who reported they were not financially preparing for retirement, the most frequent reason was "can't afford to, don't earn enough, income too low." Employed low-income families were most likely to cite this reason (50%) followed by the employed non-low-income group (42%). On the other hand, 40% of the not-employed low-income group reported "don't have a job, haven't worked long enough" as their reason for not financially preparing for retirement compared to 14% of the employed low-income group—a reminder that the concept of retirement is, after all, linked to long-term labour force attachment.

When asked how confident respondents were that their household income in retirement would provide the standard of living they anticipated, few low-income families were very confident (12% for employed families and 14% for not-employed families). However, employed low-income families

were more likely to report being fairly confident than the other low-income group (38% versus 28%). Although one-half of employed low-income families were very or fairly confident in their income adequacy in retirement, just one-quarter knew how much money would be needed to maintain their desired standard of living. This likely reflects the range of factors that can affect income retirement adequacy, as well as the range of opinions on the topic.

## Conclusion

In addition to income, wealth is an important indicator of well-being since some assets could presumably be converted into cash for immediate consumption needs, especially during periods of economic hardship. This study examined the wealth, financial security and retirement plans of individuals living in employed low-income families compared to those in not-employed low-income families and those in employed non-low-income families.

On the whole, the wealth of employed low-income families was higher than that of not-employed low-income families, but was significantly lower than that of the employed non-low-income group. An examination of assets and debts adds nuances to this finding. While 69% of employed low-income families carried debt compared to 44% of the other low-income group, a large proportion of their debt took the form of residential mortgages. Much of their debt thus supported the long-term advantages of home ownership: greater wealth and lower housing expenses when the mortgage is paid off. However, employed low-income families were also more likely to carry consumer debt than the other low-income group. Notably, 4 in 10 employed low-income families carry outstanding credit card debt.

Indicators of financial security again highlight some differences between employed and not-employed low-income families, as well as their position relative to families not in low income. Employed low-income families were less likely to report not keeping up with payments than other low-income families, despite higher expenses. Nevertheless, when compared to the other employed group, employed low-income families were twice as likely to be behind in their payments.

Another indicator of financial security is how families would deal with an unexpected expense. Compared to others in low income, a smaller proportion of employed low-income families reported that they would

not be able to cover the expense, whether the amount were \$500 or \$5,000. Moreover, the employed low-income group would be more likely to use savings to cover such an expense than the other low-income group. Altogether, these results indicate that employed low-income families were likely to feel more financially secure than the other low-income families but likely to feel less secure than families who weren't in low income.

Retirement planning also differed for the two low-income groups. Employed low-income families were more likely to have a plan that included more diverse sources of income than other low-income families. Families with a weaker connection to the labour market would be less likely to include workplace pensions or group RRSPs in their plans. Moreover, retirement planning may be a moot point for some since government pensions and other transfers to seniors replace a higher level of pre-retirement income for those near the bottom of the income distribution (LaRochelle-Côté et al. 2010).

## Perspectives

### ■ Notes

1. Estimated using the Low Income Measure (LIM) from the 2008 Survey of Labour and Income Dynamics. LIM is defined as 50% of the median of the adjusted household income over the population of individuals.
2. Using the 2008 Survey of Labour and Income Dynamics, the proportion of the low-income who were part of an employed family is based on the definition of an employed family where either the reference person or the spouse was employed a minimum of 910 hours during the reference year (Fleury and Fortin 2006). This proportion increases to 51% of all families when those with any work hours are included.
3. Previous studies have used the term 'working poor.' Statistics Canada does not measure poverty—it measures low income.
4. The inter-group differences in assets and debts were in the same direction and were statistically significant in both surveys, but varied in level. There was no clear pattern in the SFS–CFCS-level differences—they were negative in some cases, positive in others.
5. LIM previously estimated the median over the population of families. However, this has been revised and it now estimates the median over the population of individuals. LIM is now defined as 50% of the median of the adjusted household income observed at the person level (Murphy et al. 2010).



## Appendix

### Employment and low-income definition comparisons between SLID and the CFCS

Using the CFCS, individual employment status is identified using the variable LF\_Q01, which asks about the respondent's employment status. Respondents are flagged as employed if they reported currently being employed or self-employed (regardless of the number of hours worked per week). Additionally, the variable LF\_Q05 is similarly used to determine the employment status of the spouse.

In this study, low-income status is defined by adjusting the self-reported total household income before taxes by the square root of the household size.<sup>10</sup> The low-income threshold for 2008<sup>11</sup> is \$21,189<sup>12</sup> and is used to determine whether families are living in low income. Those who had adjusted total household income<sup>13</sup> before taxes below the LIM threshold are flagged as living in low income. Finally, individuals are categorized as employed low-income, not-employed low-income or employed non-low-income based on their employment and low-income status.

Two employment definitions using the 2008 Survey of Labour and Income Dynamics (SLID) are used for comparison with the CFCs. Previously, Fleury and Fortin (2006) identified 910 hours as the threshold for being employed. They reasoned that an

individual (or his or her spouse) should work for at least half the year in order to be considered employed. However, hours of work information was not available in the CFCs, thus an alternate definition was used: whether an individual (or their spouse) was employed at the time of the survey.

Results indicate the proportion employed estimated by the CFCS falls between the two SLID estimates (Table 5). The estimates using both surveys for the low-income estimates are very close, with the CFCS higher by 1 percentage point.

The proportion of individuals in employed low-income families in the CFCS matches that of the positive hours estimate in SLID (9%). The CFCS estimates for all the other groups fall somewhere between the two SLID definitions.

Overall, the proportion by employment and low-income status estimated by the CFCS is comparable to that for both measures using SLID. A closer examination of the sample profile by family type shows similar distributions between the SLID self-reported definition and the CFCS definition. Therefore, the samples are sufficiently consistent between the two surveys to conclude that the CFCS provides an accurate representation of the employed low-income group.

**Table 5** SLID and CFCS definition comparison of employment income groups from age 25 to 64

	SLID		CFCs	
	Work hours 910 or more	Work hours more than 0	Self- reported	Population
				'000
<b>Total population</b>	<b>18,428</b>		<b>18,253</b>	
	%		%	'000
Employed	82	89	86	15,631
Low-income	14	14	15	2,819
Employed low-income	7	9	9	1,632
Not-employed low-income	8	6	7	1,187
Employed non-low-income	76	81	77	13,999
Not-employed non-low-income	10	5	8	1,434

Note: Total annual hours were used and divided by 52 weeks to estimate weekly hours worked.  
Sources: Statistics Canada, Survey of Labour and Income Dynamics (SLID), 2008; Canadian Financial Capability Survey (CFCS), 2009.

6. Individuals living in not-employed low-income families may be referred to as 'the not-employed low-income' or 'the other low-income group.' Individuals living in employed non-low-income families may be referred to as 'the employed non-low-income' or 'the other employed group.'
7. An individual was defined as living in an employed family if the respondent and/or his or her spouse was employed at the time of the survey.
8. Morissette et al. (2002) used the same definition of wealth as this study. However, it was not possible to examine 'financial wealth' using the CFCS since net housing equity and net business equity cannot be separated from total asset value.
9. The CFCS asked respondents whether they had been behind on various payments for two consecutive months or more.
10. In 2010, the equivalence scale was changed from a given weight depending on the age and number of family members to simply taking the square root of the household size (Murphy et al. 2010).
11. Although the CFCS was conducted in 2009, income is reported for 2008.
12. LIM is defined as 50% of the median of the adjusted household income over the population of individuals. In this analysis, the LIM threshold for 2008 (\$21,189) was used as the threshold for determining whether an

individual was in low income. This threshold was calculated using income data from the Survey of Labour and Income Dynamics and can be found in CANSIM Table 202-0808. Although the CFCS was conducted in 2009, the reference year for the income information is 2008. Therefore, the 2008 LIM threshold was used.

13. Another change made to LIM is the use of household income rather than economic family income (Murphy et al. 2010).

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# Job-related training of immigrants

Jungwee Park

Due to challenges associated with differences in language, culture and labour market networks, immigrants may find it difficult to acquire job-related training in Canada. Similarly, immigrants with credentials and skills obtained in foreign countries may encounter difficulties getting their qualifications and experience recognized. This could act as a barrier to job training, especially if training prerequisites are related to credentials (Lochhead 2002). To the extent that such barriers exist, they could impede the labour market integration of newcomers since most immigrants do plan to get job-related training or education (Statistics Canada 2003).

Few recent Canadian studies have investigated job-related training among immigrants. Using data from the 1998 Adult Education and Training Survey (AETS), Hum and Simpson (2003) reported that immigrant workers had a lower participation rate in job-related training than their Canadian-born counterparts (Hum and Simpson 2003). According to this study, immigrants who arrived in Canada as adults, in particular, trained less.<sup>1</sup> Since other research indicates that the labour market situation of immigrants has deteriorated in the past decade, their training situation merits updating.

Although immigration status by itself provides useful information, there are other characteristics of newcomers that may affect training. Economic, family-class and refugee immigrants arrive under different circumstances and thus have different training needs. Age at arrival and source country may also affect training. Immigrants' situations will also evolve after they arrive, so time since immigration and citizenship are other likely sources of variation.

The Access and Support to Education and Training Survey (ASETS), most recently conducted in 2008, provides detailed information on adult education in-

cluding job-related training (see *Data source and definitions*). The survey also collects data on demographic, labour market and immigration characteristics. This article focuses on the population age 18 to 64 who worked at a job or business at any time between July 2007 and June 2008, excluding full-time students and temporary residents.

In addition to current job training, this article also covers job training during the past 5 years, which helps to assess whether persistent differences in job-related training opportunities among subgroups of employees exist.

Immigrants and non-immigrants are compared across several aspects of job-related training—participation, intensity, and perceived barriers—in order to answer the following research questions:

1. To what extent do immigrant employees participate in job-related training? Is their participation comparable to that of Canadian-born workers? Are there differences in the subjects, objectives and satisfaction with training between the two groups?
2. Are there any sub-groups of immigrant employees who show significantly different levels of participation in job-related training?
3. Are there differences in the intensity of job-related training between immigrants and the Canadian-born? Are there differences in employer support for training activities?
4. Which demographic and labour market characteristics are related to the likelihood of immigrant employees' participation in job training? Compared to the Canadian-born, is the training of immigrant workers correlated with similar factors?
5. To what extent do immigrant employees perceive barriers to job-related training? Do foreign-born workers perceive different barriers compared with Canadian-born workers?

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## Data source and definitions

The data source is the most recent cycle (2008) of the Access and Support to Education and Training Survey (ASETS). ASETS is a new survey of 72,000 households and is a combination of three previously conducted surveys: the Survey of Approaches to Educational Planning, the Post-Secondary Education Participation Survey, and the Adult Education and Training Survey (Statistics Canada 2008). Data collection took place between June and October 2008. Most survey questions refer to activities undertaken between July 2007 and June 2008. Information collected in this survey includes the incidence and intensity of adults' participation in job-related training, a profile of employer support, and barriers preventing individuals from participating in training they want or need to take. The survey also contains information on labour market and other personal characteristics. ASETS collects immigration-related information such as respondents' immigration status, age at immigration, immigration class, country of birth and citizenship status.

For this study, the population includes those age 18 to 64 who worked at a job or business at any time between July 2007 and June 2008 (total 17.0 million, immigrants 3.3 million), excluding full-time students and those who are neither Canadian citizens nor landed immigrants. The sample size was 17,500 (immigrant  $n=2,300$ ).

Given the complex nature of the survey design, bootstrap estimation was used to derive the variances for odds ratios and percentages.

**Job-related learning** refers to activities undertaken for the development or upgrading of skills for use in present or future employment rather than personal interest or other non-employment related reasons. ASETS collected information on two components of lifelong learning—education and training. **Job education**, also referred to as 'education programs,' encompasses learning activities provided in formal systems of education, which lead to a formal education credential, including primary and secondary level education, and postsecondary education like university and college diplomas and degrees. On the other hand, **job training**, also referred to as 'training activities,' includes courses and workshops not leading to a formal education credential.

**Employer support** consists of one or more of the following: providing the training, paying for the training (either directly or by reimbursing the employee), allowing a flex-

ible work schedule to accommodate training or providing transportation to and from the training location. ASETS collected information on employer support for one randomly selected training activity rather than all training activities.

**Satisfaction with training participation** is determined by a response to the following question asked to training participants: "Were there any circumstances that made it difficult for you to participate in this program?" If the response was "no difficulty," the participant was considered satisfied with his or her training participation. The survey considered "difficult circumstances" to include "you were too busy at work," "your program conflicted with your work schedule," "there was lack of support from your employer," "your family responsibilities were too great," "you had financial constraints," or "another reason."

**Satisfaction with training effect** is measured by a series of questions asking if the most recent job-related training had actually helped achieve each of their training objectives up to now (Table 3). If a respondent answered positively to any one of those questions, he or she was considered satisfied with the effect of the training.

**Occupational skill** includes four groups based on HRSDC's National Occupational Classification Matrix 2006:

- management
- occupations that usually require a university education
- occupations that usually require a college education or apprenticeship training
- occupations that usually require secondary school and/or occupation-specific training, and occupations for which on-the-job training is usually provided.

**Industry** was divided into two categories:

- goods-producing industries comprising agriculture, forestry, fishing, mining, oil and gas, utilities, construction, and manufacturing
- service industries comprising trade, transportation, finance, insurance, real estate and leasing, professional, scientific and technical services, education, health care and social assistance, information, culture and recreation, accommodation and food services, and public administration.

## Job-related training versus job education

Job-related learning can be divided into job-related training and job education related to a current or future job. Job-related training encompasses structured learning activities and includes courses, workshops, private lessons and guided on-the-job training, but does not lead to a formal education credential. Job

education, on the other hand, involves programs leading to formal credentials (Knighton et al. 2009). Both types include employer-supported and non-supported activities. This analysis focuses on job-related training rather than job education since training is by far the larger component<sup>2</sup> (for job education undertaken by immigrants, see *Job-related education programs*).

## Job-related education programs

In 2008, about 1 in 10 employees participated in job-related education programs (Table 1). Almost one-half of those participants were supported by their employers. Between immigrant and Canadian-born employees, there were no statistically significant differences in participation in job-related education programs leading to a formal credential. In terms of the type of programs, however, there was a significant difference between immigrants and non-immigrants. Among male participants, a significantly greater proportion of immigrants than their Canadian-born counterparts took an education program leading to a credential above the bachelor level. This reflects the higher education level of immigrants compared to the Canadian-born population.

**Table 1 Job-related programs taken by Canadian-born and immigrant employees**

	Men		Women	
	Canadian-born	Immigrants	Canadian-born	Immigrants
	%			
<b>Overall participation</b>	10.6	11.3	12.6	11.1
<b>Employer support among participants</b>	54.1	44.7	46.5	46.7
<b>Program type leading to credentials</b>				
Lower than bachelors degree	40.1	30.7 <sup>*</sup>	36.4	39.1
Bachelors degree	19.2	14.6 <sup>*</sup>	20.9	16.0 <sup>*</sup>
Higher than bachelors degree	25.3	41.0 <sup>*</sup>	27.9	34.3
Other	6.9 <sup>†</sup>	F	8.8	F

<sup>\*</sup> significantly different from the Canadian-born population at the 5% level

Source: Statistics Canada, Access and Support to Education and Training Survey, 2008.

## Immigrant workers had lower participation in job-related training

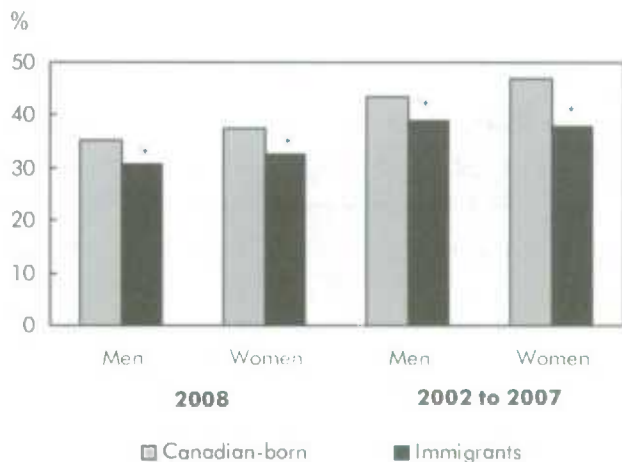
Overall, Canadian-born employees received more job-related training than immigrant employees (Chart A). Between July 2007 and June 2008, 35% of Canadian-born men received job training compared to 31% of immigrant men. Among women, 37% of the Canadian-born and 33% of immigrant workers took some job-related training.

Job-training experiences over the past 5 years also differed. For example, 62% of immigrant women employees reported not having received any job training in this period compared to 53% of non-immigrant women.

Research shows that previous training increases the likelihood of taking further training (Hum and Simpson 2003). Indeed, more than 60% of workers who received job training in 2008 reported that they had some training in the previous 5 years while only 36% of non-participants reported that they had some training in that period (data not shown).

Most training (83%) was at least partially supported by the employer. Means of support can include paying for training or allowing flexible hours (see *Data source*

**Chart A Immigrants had lower participation in job training**



<sup>\*</sup> significantly different from the native-born population at the 5% level

Source: Statistics Canada, Access and Support to Education and Training Survey, 2008.

and definitions). The gap between immigrant and non-immigrant workers in terms of employer-supported job training was greater than the gap in overall training activities (Chart B). Immigrant employees were less likely to take job-related courses that their employers supported in any way than their non-immigrant counterparts. Much of the gap was due to differences in the rate of financial support for training.

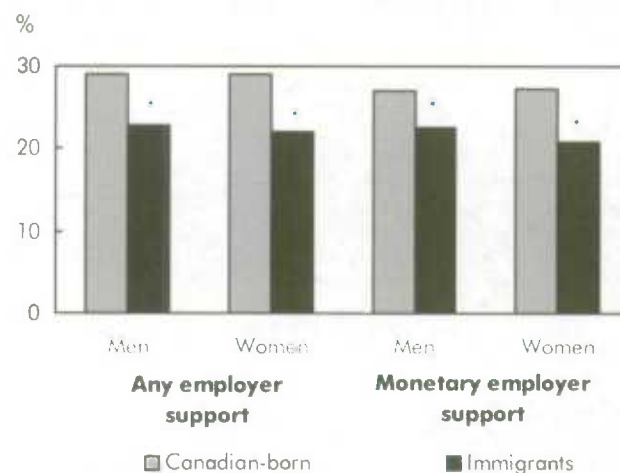
### Similar subjects, goals and results of job training for immigrants and Canadian-born

ASETS collects information on the main subject of one job-related course and classifies it into 1 of 14 categories.<sup>1</sup> The categories range from apprenticeship training to professional training and personal development.

Professional training was the most frequently mentioned category for immigrants, accounting for one-quarter of training activities of both women and men (Table 2). A greater proportion of training taken by immigrant men (16%) was computer-related courses compared to their non-immigrant counterparts (9%). On the other hand, training taken by Canadian-born men was more likely to be related to apprenticeship, equipment, or sales than that taken by immigrant men.

Immigrants and the Canadian-born shared similar goals and expressed a similar level of satisfaction with their training. The improvement of job performance

**Chart B Immigrants had lower participation in employer-supported job training**



\* significantly different from the native-born population at the 5% level

Source: Statistics Canada, Access and Support to Education and Training Survey, 2008.

was mentioned as a training objective by most trainees (Table 3). The second most reported objective for both Canadian-born and immigrant workers was "to meet requirements."

**Table 2 Subject of job-related course<sup>1</sup> taken by Canadian-born and immigrant employees**

	Men		Women	
	Canadian-born	Immigrants	Canadian-born	Immigrants
	%			
Managerial-supervisory training	8.2	8.5 <sup>£</sup>	5.6	6.6 <sup>£</sup>
Computer hardware/software	8.6	16.0 <sup>£*</sup>	7.6	8.6 <sup>£</sup>
Apprenticeship/equipment/sales	10.6	5.6 <sup>£*</sup>	5.6	F
Professional training	17.5	25.3 <sup>*</sup>	24.9	25.7
Occupational health and safety	17.3	15.4 <sup>£</sup>	11.3	9.6 <sup>£</sup>
Group decision-making/problem solving/ team building/communication	2.5 <sup>£</sup>	5.7 <sup>£</sup>	4.4	8.3 <sup>£</sup>
Orientation/personal development/basic skills/language	8.7	7.1 <sup>£</sup>	12.8	14.1 <sup>£</sup>
Other	26.5	17.3 <sup>£*</sup>	28.0	25.9

<sup>£</sup> significantly different from the Canadian-born population at the 5% level

1. One course selected randomly.

Source: Statistics Canada, Access and Support to Education and Training Survey, 2008.



**Table 3 Training objectives and satisfaction for training participants**

	Men		Women	
	Canadian-born	Immigrants	Canadian-born	Immigrants
	%			
<b>Training objectives<sup>1</sup></b>				
Increase income	9.5	7.6 <sup>E</sup>	5.6	7.8 <sup>E</sup>
Avoid losing job	5.6	5.3 <sup>E</sup>	4.8	6.5 <sup>E</sup>
Meet requirements	43.6	46.6	36.8	31.8
Start own business	1.5 <sup>E</sup>	F	2.1 <sup>E</sup>	F
Perform better at job	72.3	76.0	77.9	78.5
Prepare for first career/find a job	3.7	4.7 <sup>E</sup>	3.1	4.4 <sup>E</sup>
Change careers/get a promotion	7.5	10.9 <sup>E</sup>	6.0	6.0 <sup>E</sup>
Other	2.3 <sup>E</sup>	F	1.7 <sup>E</sup>	F
<b>Training satisfaction</b>				
Satisfaction with training participation	78.0	72.4	75.3	73.1
Satisfaction with training effect	89.2	92.0	87.9	87.3

1. Multiple answers were allowed.

Source: Statistics Canada, Access and Support to Education and Training Survey, 2008.

The vast majority reported that they were satisfied with the effects of training in relation to their objectives. For example, 92% of immigrant men and 87% of immigrant women reported that their training activities helped them achieve the training objectives they had set. Overall, around three-quarters of all participants were satisfied with their training participation, indicating that they did not encounter difficulties attending because of, for example, workload or work-schedule conflicts (see *Data source and definitions*). In other words, immigrant workers were as satisfied with the process and results of job training as their non-immigrant counterparts.

### Training participation varies by immigrant characteristics

Since the immigrant population varies widely across a number of dimensions, job-related training

may be influenced by these factors. Five immigration-related variables—immigration class, citizenship, age at immigration, years since immigration, and country of birth of the immigrant—are examined. The results include incidence rates and regression analyses that identify differences in training participation while controlling for a number of other factors.<sup>4</sup>

About 31% of immigrant men and 33% of immigrant women employees participated in job-related training in 2008 (Table 4). The predicted probabilities of participating in training for immigrant men and women were significantly lower than those for Canadian-born workers after controls for other factors were in place. Immigrant men were almost 20% less likely and immigrant women were about 15% less likely than their Canadian-born counterparts to receive job training.

To study the effects for immigration-related characteristics, five additional regression models were estimated. For each of the five immigrant variables modeled, the Canadian-born are the reference group.

Certain groups of immigrants were less likely to receive training. For example, among female workers, family-class immigrants had significantly lower odds of receiving training and lower incidence rates (6 percentage point difference) than Canadian-born workers. Family-class immigration is for family members who wish to come from other countries to reunite with the sponsoring member in Canada. Those who immigrated for family reunification may be less prepared for the labour market than other skilled immigrants (Aydemir 2010).

Non-citizen employees were also less likely to receive job-related training. Only 1 in 5 non-citizen men received job training in 2008 compared with 35% of the Canadian-born and 32% of naturalized citizens. The training participation rates for non-citizens remained significantly lower than those of naturalized citizens as well as the Canadian-born after controlling for other factors. As Canadian citizenship includes a language and residence requirement (at least three years over a four-year time span), naturalized citizens may be more prepared to undertake job training than non-citizen immigrants.

Male employees who migrated as adults (18 and over) were 25% less likely to receive training than their Canadian-born counterparts. Unlike those who immigrate at a younger age, adult immigrants are less likely to have a Canadian education and may experience difficulties getting foreign credentials rec-

**Table 4 Incidence rates and odds of predicted probability of participation in job-related training**

	Men		Women	
	Incidence (%)	Odds of predicted probability <sup>1</sup>	Incidence (%)	Odds of predicted probability <sup>1</sup>
<b>Canadian-born (ref.)</b>	35.1	ref.	37.4	ref.
<b>Immigrants</b>	30.5*	0.82*	32.7*	0.86*
<b>Immigration class</b>				
Family-class	27.9*	0.78*	31.4*	0.87*
Economic immigrants	34.2	0.83	30.6	0.83
Refugees/others	25.1* <sup>ε</sup>	0.85	28.4 <sup>ε</sup>	0.89
<b>Citizenship</b>				
Naturalized citizen	32.1	0.84*	30.7*	0.82*
Non-citizen	20.1* <sup>ε</sup>	0.68*	28.6*	0.94
<b>Age at immigration</b>				
Less than 18	31.9	0.86	33.7	0.87
18 or over	27.8*	0.75*	29.0*	0.85*
<b>Years since immigration</b>				
10 years or less	26.0*	0.76*	23.5*	0.82
More than 10 years	31.0	0.82*	33.5	0.86*
<b>Country of birth</b>				
United States, northern/ western Europe <sup>2</sup>	29.5	0.75*	37.8	0.87
Other countries	30.7	0.84*	31.5*	0.85

\* significantly different from reference group (ref.) at the 5% level

1. Variables controlled for age, education level, personal income, ethnic origin, marital status, language spoken at home, job tenure, full-time/part-time, permanent job status, unionization, occupation, firm size, job sector (public/private), industry.

2. Comprises Ireland, Denmark, Finland, Iceland, Norway, Sweden, United Kingdom, Austria, Belgium, France, Germany, the Netherlands, and Switzerland.

Source: Statistics Canada, Access and Support to Education and Training Survey, 2008.

ognized. Furthermore, challenges associated with migration, like language and cultural barriers, tend to be more pronounced among immigrants who arrive as adults (Hum and Simpson 2003).

Immigrants who came to Canada within the last 10 years were less likely than the Canadian-born to have access to job training. The rate of job training for recent immigrant women (24%) was significantly lower than the rates for established immigrants (34%) and non-immigrants (37%).

Source countries were divided into two groups. Immigrants from the United States and northern and western European countries—who may be more likely to speak English or French and experience fewer difficulties with their foreign credentials—comprise the first group. The second group encompasses immigrants from all other parts of the world. Female employees who emigrated from other countries were less likely to participate in job-related training than their Canadian-born counterparts.

### Less employer-supported training for some immigrant groups

Similar to the results for all job training, the five immigrant characteristics were related to access to employer-supported training. Overall, the predicted probability for immigrant men's receipt of employer-supported job training was 24% lower than that for Canadian-born males. Compared with Canadian-born women, immigrant women employees had about a 22% lower probability (Table 5).

Family-class immigrants, both men and women, were less likely to participate in employer-supported job-training activities. Similarly, the probability of receiving employer-supported job training for non-citizen men was less than one-half that for their Canadian-born counterparts. Moreover, the participation rate in employer-supported training was much lower for non-citizen immigrants than naturalized citizens (11% versus 26%).

Immigrant employees who migrated as adults (18 and over) were less likely to receive training than their Canadian-born counterparts: 22% of those who as adults received employer-supported job training in the past year compared with 29% of Canadian-born workers.

Immigrants who came to Canada in the last 10 years were less likely to receive employer-sponsored job training than Canadian-born workers.

Results indicated that recent immigrants were about 30% less likely to receive employer-sponsored training, although only the results for women were statistically significant. The finding seems incongru-

**Table 5 Incidence rates and odds of predicted probability of participation in employer-supported job training**

	Men		Women	
	Incidence (%)	Odds of predicted probability <sup>1</sup>	Incidence (%)	Odds of predicted probability <sup>1</sup>
<b>Canadian-born</b> (ref.)	28.9	ref.	29.0	ref.
<b>Immigrants</b>	22.8*	0.76*	22.1*	0.78*
<b>Immigration class</b>				
Family-class	21.5*	0.74*	22.5*	0.78*
Economic immigrants	25.7	0.82	23.5 <sup>†</sup>	0.80
Refugees/others	22.9 <sup>†</sup>	1.00	22.1 <sup>†</sup>	0.91
<b>Citizenship</b>				
Naturalized citizen	26.4	0.87	23.3*	0.76*
Non-citizen	11.2 <sup>†</sup>	0.49*	18.2 <sup>†</sup>	0.83
<b>Age at immigration</b>				
Less than 18	24.5	0.82	23.8	0.78*
18 or over	21.8*	0.75*	21.7*	0.81
<b>Years since immigration</b>				
10 years or less	19.0*	0.74	15.0 <sup>†</sup>	0.72*
More than 10 years	24.7	0.80*	25.6	0.81*
<b>Country of birth</b>				
United States, northern/ western Europe <sup>2</sup>	25.9	0.76	30.0	0.85
Other countries	22.3*	0.81	20.1*	0.75*

\* significantly different from reference group (ref.) at the 5% level

1. Variables controlled for age, education level, personal income, ethnic origin, marital status, language spoken at home, job tenure, full-time/part-time, permanent job status, unionization, occupation, firm size, job sector (public/private), and industry.

2. Comprises Ireland, Denmark, Finland, Iceland, Norway, Sweden, United Kingdom, Austria, Belgium, France, Germany, the Netherlands, and Switzerland.

Source: Statistics Canada, Access and Support to Education and Training Survey, 2008.

ous given recent immigrants' relatively higher level of educational attainment, which is an important determinant of participation in job training. However, recent immigrants may be disproportionately located in the types of jobs for which training is less likely to be provided (Lochhead 2002).

### No differences in intensity of training

The intensity of job training is measured by the duration of training in hours and the number of

courses taken. Among those who participated in job training, there were no significant differences in intensity between immigrant and Canadian-born workers. The average duration of job training activities for Canadian-born men was 56 hours per year whereas for immigrant men it was 68 hours (Table 6). The average for women workers, immigrant or Canadian-born, was about 42 hours. There was also no significant difference in the average number of courses.

Similarly, there were no significant differences between immigrant and Canadian-born trainees in receiving employer support. More than 80% of training taken by immigrant men was reported to be paid for by the employer compared with 79% of training taken by non-immigrant men. The rate for immigrant women was 73% while that for Canadian-born women was 77%.

In summary, there were no meaningful differences in job-training intensity between the Canadian- and foreign-born. The primary effect of immigration status is thus related to the likelihood of participation in training.

### Age, sex, and income are factors linked to training

To identify specific demographic or labour market factors affecting job training, additional regression analyses were estimated for immigrant and Canadian-born employees. Each model included demographic, job and workplace factors to help understand the particular effects of each condition on their participation in job-related training and employer-supported training.<sup>5</sup> This section examines whether such factors have different effects for immigrants and the Canadian-born.

The effects of age and income stand out as the most important personal characteristics related to training. Among female immigrants, those from age 45 to 64 were more likely to receive training than those from 18 to 24 (Table 7). This finding is consistent with research suggesting that women in general receive less training especially early in their careers (Hum and Simpson 2003). Although the



**Table 6 Intensity of job-training among training participants**

	Men		Women	
	Canadian-born	Immigrants	Canadian-born	Immigrants
	%			
<b>Training hours</b>				
Less than 10 hours	14.3	12.1 <sup>E</sup>	21.3	23.2
10 to 29 hours	31.6	29.4	36.7	36.2
30 to 49 hours	24.4	24.8	21.8	17.1
50 or more hours	29.7	33.8	20.2	23.5
Average hours	55.9	68.3 <sup>E</sup>	42.1	41.9
<b>Number of courses</b>				
1 course	36.0	39.0	32.7	36.5
2 courses	26.3	24.2	26.5	22.9
3 or more courses	37.8	36.8	40.8	40.6
Average	2.6	2.6	2.7	2.8
<b>Employer support</b>				
Any employer support	84.8	81.3	81.4	77.4
Monetary support	79.3	80.5	76.6	72.7

Source: Statistics Canada, Access and Support to Education and Training Survey, 2008.

age effect also exists for non-immigrant women, the gap in training due to age is much smaller among Canadian-born women.

Among men, immigrant workers from age 25 to 44 were more likely to receive job training than their older colleagues. Training participation among immigrant men seems to be more concentrated for the core working-age group than for Canadian-born workers.

Low personal income was related to a lower probability of training for both immigrant and non-immigrant employees. Compared with immigrant women with the highest personal income<sup>6</sup> (\$100,000 or more), those in the lowest income group (under \$25,000) were much less likely to undertake job training. Part of the reason for this lower training rate among low-income individuals is associated with the fact that opportunities for training and skill development are an important indicator of job quality (Canadian Policy Research Networks 2011). Those in high-paying jobs tend to have more job-training opportunities.

Unlike the situation for Canadian-born workers, the effect of education level on job training is negligible for both male and female immigrant employees when job and workplace characteristics are taken into consideration. Notably, when the occupational skill level

was entered in the models, the significance of education disappeared for immigrants but not the Canadian-born.

Marital status had no effect on access to training for immigrant employees. This differs from other studies showing that married women tend to receive less training throughout their careers than other women (Hum and Simpson 2003).

Although other studies have highlighted the importance of language fluency (Hum and Simpson 2003), speaking a language other than English or French in the home did not have a significant effect on training.

### Skilled workers receive more training

When controls are in place for demographic and labour market characteristics, the occupational skill level (HRSDC 2006) has a persistent effect on the probability of receiving job training for immigrants and non-immigrants alike. Compared with immigrant workers in occupations requiring a university education, employees in occupations requiring a high school education or less were much less likely to receive job-related training. According to Altonji and Spletzer (1991), the incidence of training increases with the verbal, math, and clerical skill requirements of an occupation and decreases with manual skill requirements.

Among immigrant workers, the probability of receiving job training for permanent workers and other workers did not differ significantly. However, among the Canadian-born, permanent workers were more likely to receive training than non-permanent employees.

### Incidence of training highest in large firms

Among immigrants, men and women working in firms with more than 500 employees were more likely to receive training than those in firms with less than 20 employees. A similar training gap existed for the Canadian-born in firms with less than 20 employees.

**Table 7 Odds of predicted probability of participating in job-related training for immigrant employees**

	Canadian-born		Immigrants	
	Men	Women	Men	Women
<b>Sociodemographic characteristics<sup>1</sup></b>	odds ratio			
Age				
18 to 24	1.01	0.81*	1.03	0.24*
25 to 44	1.07	0.95	1.27*	0.86
45 to 64 (ref.)	ref.	ref.	ref.	ref.
Personal income				
Under \$25,000	0.35*	0.50*	0.50*	0.29*
\$25,000 to \$49,999	0.66*	0.74*	0.60	0.32
\$50,000 to \$75,999	0.76*	0.87	0.97	0.40
\$75,000 to \$99,999	0.94	0.94	1.20	0.53
\$100,000 or more (ref.)	ref.	ref.	ref.	ref.
Education level				
Less than high school graduation	0.79*	0.46*	0.99	0.83
High school diploma or its equivalent	0.81*	0.79*	0.80	0.89
Postsecondary education degree, diploma or certificate (ref.)	ref.	ref.	ref.	ref.
<b>Job characteristics<sup>2</sup></b>				
Terms of employment				
Permanent	1.11*	1.13*	1.21	0.91
Non permanent (ref.)	ref.	ref.	ref.	ref.
Occupation by skill level				
Management	1.06	0.99	0.95	1.03
Occupations requiring university education (ref.)	ref.	ref.	ref.	ref.
Occupations requiring college education or apprenticeship	0.89*	0.83*	0.82	0.91
Occupations requiring high school education or less	0.77*	0.63*	0.44*	0.55*
<b>Workplace characteristics</b>				
Job sector				
Public sector	1.19*	1.17*	1.28	1.00
Private sector (ref.)	ref.	ref.	ref.	ref.
Firm size				
Less than 20 employees	0.85*	0.85*	0.67*	0.74*
20 to 99 employees	0.93	0.91	0.70*	0.94
100 to 500 employees	0.95	0.95	0.68*	0.83
Over 500 employees (ref.)	ref.	ref.	ref.	ref.
Industry				
Goods-producing (ref.)	ref.	ref.	ref.	ref.
Service-producing	0.99	1.10	1.08	1.23*

\* significantly different from the reference group (ref.) at the 5% level

1. Other variables controlled for are marital status, visible minority status, language spoken most often at home, and geographic region.

2. Other variables controlled for are working hours, unionization and job tenure.

Source: Statistics Canada, Access and Support to Education and Training Survey, 2008.

For immigrant men, employees of mid-sized firms also received less training than their counterparts in larger firms, which was not the case among Canadian-born women or men. Larger firms tend to have a greater incentive to train employees because they can pool training risks (Holtmann and Idson 1991), whereas smaller companies may have difficulty sparing resources for training when meeting the bottom line is a priority (Leckie et al. 2001).

The incidence of training was significantly higher in the public sector for Canadian-born men and women, but not immigrants. On the other hand, immigrant women working in services were more likely to have received training than those in goods-producing industries—a distinction that wasn't noted among the Canadian-born.

## Barriers to training

The ASETS asked respondents whether there was training that they wanted to take, but did not, and whether there was training they needed to take, but did not. Having either the need or the desire to take training can be considered a proxy for being willing or ready to engage in a training activity (Knighton et al. 2009). In this analysis, these two groups and their reasons for not training are combined in order to examine perceived barriers to job training.

Three main types of barriers to participation in job-related training have been identified as situational, institutional and dispositional (Sussman 2002). Situational barriers arise from one's situation in life at a given time—too busy at work, financial constraints, family responsibilities or lack of child care, and language or health problems. Institutional barriers consist of established practices and procedures that exclude or discourage participation, such as high tuition fees, entrance requirements, limited course offerings and courses offered at inconvenient times or locations. Dispositional barriers involve attitudes and opinions towards learning, as well as perceptions of oneself as a learner (Cross 1981).

Compared with their Canadian-born counterparts, immigrant employees were more likely to perceive the presence of barriers to training access. Among immigrant women, 35% reported barriers compared to 30% of Canadian-born women (Table 8). Similarly, 25% of non-immigrant men and 31% of immigrant men perceived some barriers to training.

Situational barriers were more frequently reported among immigrant employees than Canadian-born workers. Among immigrant women who reported training barriers, about three-fourths indicated that their perceived barriers were situational. In particular, significantly more immigrant workers than their Canadian-born counterparts reported that their needs for job training were unmet due to family responsibilities,<sup>7</sup> conflicts with work and financial constraints.

## Conclusion

Job-related training is an important aspect of economic integration for immigrants since they may be chal-

lenged by differences in language, culture and labour market networks. Moreover, they may also encounter difficulties getting their foreign credentials recognized in the workplace.

This study found that immigrant workers were significantly less likely to receive training than their Canadian-born counterparts. Even after controls were in place for demographic and labour market factors, the training rate for immigrant men and women remained lower than the corresponding rates for Canadian-born workers. Training rates were even lower among family-class immigrants, i.e., those who arrived as adults within the

**Table 8 Training barriers perceived by Canadian-born and immigrant employees**

	Men		Women	
	Canadian-born	Immigrants	Canadian-born	Immigrants
	%			
<b>Barriers perceived</b>	<b>25.1</b>	<b>30.5*</b>	<b>29.6</b>	<b>34.6*</b>
<b>Types of barriers</b>				
Situational barriers	60.2	68.8*	68.8	73.9*
Conflict with work schedule	29.7	34.9	29.3	25.5
Family responsibilities	18.4	28.8*	31.7	37.8*
Need to work	30.9	36.7*	30.1	29.7
Too expensive	17.4	22.7*	27.4	29.9
Couldn't get a loan	2.3	3.3 <sup>E</sup>	2.6	F
Health reasons	1.7	F	3.3	F
Institutional barriers	24.5	25.2	27.0	26.0
Couldn't find the information	3.4	6.3 <sup>E</sup>	3.2	6.3 <sup>E</sup>
Do not have the prerequisites	3.7	6.0 <sup>E</sup>	3.9	5.0 <sup>E</sup>
No employer support	8.5	7.2 <sup>E</sup>	7.6	7.2
Inconvenient time	12.3	10.5	15.2	14.2
Inconvenient place	6.9	6.9 <sup>E</sup>	10.2	8.5 <sup>E</sup>
Dispositional barriers	25.1	25.5	22.7	19.5
Not sure it is worth it	10.8	10.3	8.6	8.3 <sup>E</sup>
No confidence/interest/motivation	16.5	18.7	16.3	13.3
Other	22.3	15.9*	17.4	16.0

\* significantly different from the Canadian-born population at the 5% level

Note: Multiple answers were allowed.

Source: Statistics Canada, Access and Support to Education and Training Survey, 2008.



past 10 years from countries other than the United States and northern and western European countries, and those who had not yet obtained their citizenship.

Among immigrants, workers with low personal income tend to receive less job-related training, even after controls are in place for other factors. Those working in lower-skilled jobs or small workplaces were also less likely to take training. Finally, women in goods-producing industries had a lower training rate than women in service industries.

Compared with Canadian-born employees, a greater proportion of immigrant workers identified situational factors as barriers to job-related training. Such factors include family responsibilities and financial constraints.

Immigrant employees who did participate in training reported similar levels of employer support and satisfaction with training to Canadian-born workers. And among those who took training, the intensity did not differ between foreign- and Canadian-born employees. Moreover, both groups reported similar goals and job-training subjects.

Thus immigrants received less training overall than the Canadian-born, even after controls were in place for individual, job and workplace characteristics. Once they do receive training, immigrants report similar benefits to their Canadian-born counterparts.

### Perspectives

#### ■ Notes

1. Their participation is lower than that of not only the Canadian-born, but also immigrants who arrive as children (Hum and Simpson 2003).
2. Although some studies combined the two groups for analysis (Underhill 2006 and Sussman 2002), the two components of job-related training were not combined in this analysis given that they represent two different concepts.
3. If a respondent was enrolled in more than one job-related course, which occurred for 65% of participants, the 2008 ASETS randomly selected and asked about one course.
4. Factors controlled for in the regression analyses include the following sociodemographic factors: age, education level, household income, ethnic origin, marital status, language spoken at home, and geographic region. They include the following job factors: job tenure, full-time/part-time, terms of employment (permanent or not), unionization, and occupation. Also included are the following workplace factors: firm size, job sector (public/private), and industry.
5. Since similar results were found for both job-related and employer-supported training, only the results for the former are presented. Detailed results for employer-supported training can be obtained from the author.
6. As the information on earnings is not available in ASETS, personal income is used for analysis.
7. An additional regression analysis on perception of barriers to training access indicated that immigrant women with dependent children were more likely to report barriers than women with no children.

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# What's new?

## *Recent reports and studies*

### ■ From Statistics Canada

#### ■ *Debt and family type in Canada*

This article explores rising levels of household debt over the past 40 years, using National Accounts data. It also uses data from the 2009 Canadian Financial Capability Survey to examine which types of families are most likely to experience high levels of debt.

Real household debt more than doubled between 1984 and 2009, largely as a result of falling interest rates. The debt-to-after-tax income ratio for households increased to 148% by 2009, compared to 93% in 1990.

Both lone parent and couple families with children were more likely to have higher debt-to-service ratios than couples without children and unattached individuals. People 50 to 64 were less likely to have high debt than younger Canadians, while factors influencing higher debt-to-asset ratios included being born outside of Canada, lower household income, and living in large centres with high housing costs.

For more on this subject, see the full article "Debt and family type in Canada," *Canadian Social Trends*, April 2011.

#### ■ *Competing priorities: Education and retirement saving behaviours*

Using data from the 2009 Canadian Financial Capability Survey, this article examines who saves for their children's postsecondary education and what methods they use to do so.

In 2009, 70% of parents indicated that they were currently saving or had saved for their children's postsecondary education. Of these, two-thirds of parents used Registered Education Savings Plans.

Parents' income, educational attainment and province are examined with respect to savings, as is their need to save for retirement at the same time as for their children's education. Six out of 10 parents were saving for their children's education and saving for retirement at the same time. Only 1 in 10 was saving for neither. Results showed that as income increased, so did saving for both plans.

To view this article, see "Competing priorities: Education and retirement saving behaviours of Canadian families," *Education Matters*, May 2011.

#### ■ *Income management strategies of older couples*

Using the 2007 General Social survey, this study examines how older couples—in which at least one spouse or partner is age 45 or older—manage their incomes. The three strategies examined were allocative, where one spouse manages the finances and allocates a share to the other; pooled, in which both partners pool their incomes; and separate, in which the partners keep their incomes mostly or completely separate.

The study found that over one-half of older Canadian couples pooled their resources, with the remainder split almost evenly between allocative and separate finance strategies. Various socioeconomic characteristics tend to correlate with which strategies are more often used; for example, separate income management was more often used in common-law relationships, those of shorter duration, where children were not present, or when one or both partners had a postsecondary education. Second marriages and blended families also influenced which strategy was used.

For more information on this subject, refer to *The Income Management Strategies of Older Couples in Canada*, Analytical Studies Branch Research Paper Series, Statistics Canada, June 2011.



### ■ *Small, medium and large businesses in the Canadian economy*

This paper sheds light on the contribution of small, medium-sized and large businesses to the Canadian economy in 2005, by examining the shares of business-sector GDP produced by these groups.

Large firms with 500 or more employees accounted for 45.7% of the business-sector GDP, and tended to be in the businesses of utilities, information, mining and oil and gas, manufacturing, transportation and warehousing. Small and medium-sized businesses made up more than one-half of the GDP in most of the 17 industries used in the study, which included agriculture, accommodation and food services, wholesale, professional services, administrative, arts and entertainment, finance, and retail.

For additional information, see *Small, Medium-sized and Large Businesses in the Canadian Economy: Measuring Their Contribution to Gross Domestic Product in 2005*, Economic Analysis Series, Statistics Canada, May 2011.

### ■ *Labour Force Survey*

Employment was little changed in August, following three months of consecutive increases. In the past year, employment has grown by 1.5%. During this time, the private sector registered an increase of 2.2%, public sector employment grew by 0.9%, and the number of self-employed people declined by 0.7%. See the August 5, 2011, issue of *The Daily* on Statistics Canada's website ([www.statcan.gc.ca](http://www.statcan.gc.ca)) for details.

### ■ *Manufacturing: The Year 2010 in Review*

Canada's manufacturing sector finished 2010 with widespread growth, reversing the 2009 downturns. Manufacturing sales increased 8.9%, the largest single year advance since 2000, recouping 40% of the previous year's decrease.

The three manufacturing industries with the largest increases were transportation equipment, petroleum and coal, and primary metal manufacturing. Among the industries surveyed, 19 out of 21 reported growth, as did 7 out of 10 provinces. The first quarter of 2011 continues this trend.

For more information see *Manufacturing: The Year 2010 in Review*, Analysis in Brief, June 2011.

### ■ *Retail trade*

According to the Retail Trade Survey, retail sales in May edged up 0.1% to \$37.5 billion. Higher sales in 7 of 11 subsectors were mostly offset by declines at motor vehicle and parts dealers and at food and beverage stores. Gasoline station sales were up 1.1% in May, a fourth consecutive increase. In terms of volume, sales were unchanged from last month.

To learn more, see the July 22, 2011, issue of *The Daily* on Statistics Canada's website ([www.statcan.gc.ca](http://www.statcan.gc.ca)).

### ■ *Participation of adult workers in job-related training*

The 2008 Access and Support to Education and Training Survey was used to determine the participation of adult workers age 25 to 64 in formal, job-related training activities or education. The participation rates were then analyzed in relation to demographic characteristics, occupation, employer characteristics, training objectives, and learning obstacles.

Participation by women was higher in every age group. Paid workers were more likely to take part in job-related training than the self-employed. Also, more unionized women participated in job-related training or education than unionized men, which may be due to a higher proportion of women employed in health occupations, and social sciences, education and government service occupations. These occupations are heavily unionized and have high rates of participation in job-related training activities or education.

Younger workers were more likely to indicate they were taking training to get a promotion or to change jobs, while older workers wanted to improve their job performance or gain knowledge.

For additional details, refer to "A glance at the participation of adult workers in formal, job-related training activities or education in 2008," *Education Matters*, Statistics Canada, June 2011.

## ■ From other organizations

### ■ *Pensions at a glance 2011*

The average pensionable age by 2050 in OECD countries will increase to 65 for both men and women. Since life expectancy is rising even faster, older adults' retirement years will continue to rise. This is the case for 29 of the 34 OECD countries, including Canada. Improving incentives to continue working is one way to ensure pension packages, but sufficient demand for older workers remains an issue. In this issue of *Pensions at a glance 2011*, national pension system indicators are provided for all OECD countries. In addition, issues surrounding life expectancy, retirement, and older workers are discussed.

For more information, see [www.oecd.org/els/social/pensions/PAG](http://www.oecd.org/els/social/pensions/PAG).

### ■ *Taxing wages report*

Canada has a relatively low average tax wedge for every family type among OECD countries in 2010. The tax wedge is defined as "income taxes plus social security contributions, minus cash transfer as a percentage of total labour cost."

Single parents with 2 children benefit the most from a lower tax wedge as they in fact have a negative tax, meaning they receive more in government transfers than they pay. That's 24% lower than the OECD average for their family type.

For details, see [www.oecd.org/ctp/taxingwages](http://www.oecd.org/ctp/taxingwages).

### ■ *Tensions from the two-speed recovery*

The world real Gross Domestic Product (GDP) is expected to grow by 4.5% in both 2011 and 2012, according to the latest forecasts from the International Monetary Fund (IMF). The recovery is gaining strength but unemployment remains high in advanced economies. Financial conditions have improved but remain fragile. Concerns include overheated emerging

economies, weak real estate markets, and rising food prices, as commodity increases are passed on. Moreover, there is still much work to be done on reforming the global financial system.

For more on this subject, see <http://www.imf.org/external/pubs/ft/weo/2011/01/index.htm>.

## ■ Upcoming events

### ■ Socio-economic conference, September 26-27, 2011

Palais des congrès de Gatineau  
200, promenade du Portage  
Gatineau (Hull sector), Quebec

Statistics Canada's socio-economic conference provides an annual forum for empirical research focusing on issues of concern to Canadian decision-makers. The conference targets studies discussing emerging economic trends and their underlying causes; the ability of various groups to participate in society and the economy; and recent research on health, justice and the environment. The Socio-Economic Conference 2011 will include plenary sessions and state-of-the-art lectures featuring invited guest speakers who are leading authorities in their fields.

For the preliminary program, see <http://www.statcan.gc.ca/conferences/socioecon2011/program-eng.htm>.

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# In the works

*Some of the topics in upcoming issues*

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## ■ Consumer debt in Canada

The article will examine the growth and the changing composition of consumer debt in Canada between 1982 and 2008. It will also highlight the differences in financial liability (i.e. debt payment as % of disposable income), spending, and saving patterns between households owing consumer debt only, and those owing both consumer and mortgage debt. Most of the analysis is based on the 2008 Survey of Household Spending.

## ■ Job-related training by older workers ages 55 to 64

This paper will examine the factors influencing job-related training on the retention of older workers in the labour force, including current and changing trends, barriers to training, and socio-demographic issues. The data source used will be the 2008 Access and Support to Education and Training Survey.

## ■ The evolution of wealth over the life-cycle

This paper will study the evolution of the financial wealth of Canadians over their life-cycle by using a synthetic cohort approach on a variety of cross-sectional wealth data sources.

## ■ Labour market allocation after the downturn

Using the most recent sources of labour data, this paper will study which areas and groups have been most impacted by employment changes in the aftermath of the recent downturn. It will also provide comparisons with the previous downturns.

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### Perspectives

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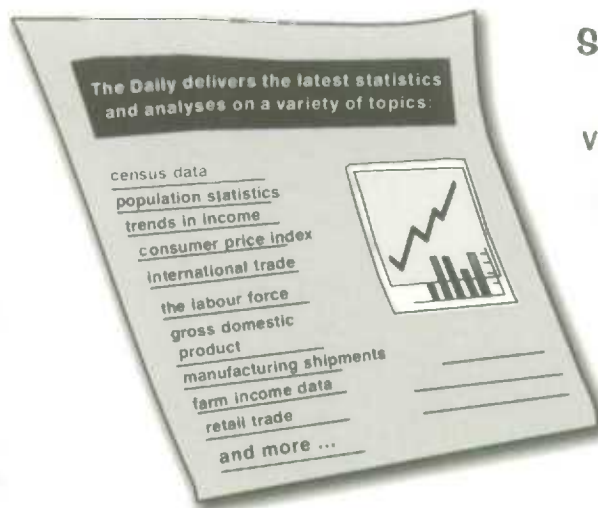


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