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# PERSPECTIVES

## ON LABOUR AND INCOME

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- CONVERGING  
GENDER ROLES
- WIVES AS PRIMARY  
BREADWINNERS
- EDUCATION AND  
EARNINGS
- IS THE WORKPLACE  
BECOMING SAFER?
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# PERSPECTIVES

ON LABOUR AND INCOME

## Departments

- 3 Highlights
- 56 What's new?
- 63 Varia
  - Unionization*
  - Gambling*

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## Articles

### 7 Converging gender roles

*Katherine Marshall*

The division of labour between men and women continues to evolve. Today's couples have a much more equal partnership in sharing financial, child care and household responsibilities. This has been brought about in large part by the expanding economic role of women, which has helped erode the idea that men should be primarily responsible for paid work while women look after unpaid household and family duties.

### 20 Wives as primary breadwinners

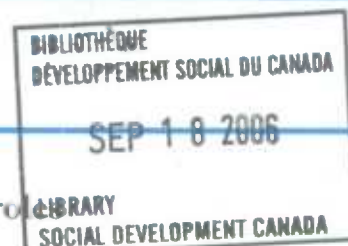
*Deborah Sussman and Stephanie Bonnell*

Over the last four decades, the dramatic increase in dual-earner couples has also engendered an increase in wives as primary breadwinners. These women tend to be older and more educated than women who are secondary earners, and they are more frequently found in managerial and professional occupations. The article examines the earnings and characteristics of primary- and secondary-earner spouses.

### 28 Education and earnings

*Lucy Chung*

Between 1980 and 2000, and particularly the latter half of the 1990s, the earnings gap widened between young workers who were less-educated and those who were well-educated. Some research attributes the gap to technological change, which requires a workforce that is more skilled and better educated. The subsequent demand resulted in higher wages for such workers and hence increased returns to education. However, the past five years have seen strong job growth in industries that employ many young people with less education. How has the earnings gap been affected?



# PERSPECTIVES

ON LABOUR AND INCOME

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## 36 Is the workplace becoming safer?

*F. Curtis Breslin, Peter Smith, Mieke Koeboorn and Hyunmi Lee*

As in Europe and other parts of North America, compensation claims for lost workdays in Canada have generally declined. Although this event is encouraging, the rate of decrease may not be uniform for all age groups, industries or regions. Workplace injuries among young workers aged 15 to 24 are of particular interest in this look at injury claim rates in Ontario and British Columbia.

## 42 The GST credit

*Raj K. Chawla*

The GST (goods and services tax) provided \$30.6 billion to the federal government in 2002/2003. Of this, \$2.9 billion was paid back as a credit to taxfilers aged 16 and older based on their income. How many individuals received the GST credit, and who are they? Does this credit help to redistribute income?

## 51 Increased work stoppages

*Ernest B. Akyeampong*

Improvements during the 1980s and 1990s in Canada's strike and lockout statistics appear to have stalled somewhat in recent years. The drop in time lost to industrial disputes at the beginning of the decade was offset by increases in 2004 and 2005. It is too early to say if this is the beginning of a new trend. What can be done, however, is to gain an understanding of recent stoppages by looking at the main areas of dispute, the jurisdictions in which the stoppages occurred, and how they were resolved.

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- p preliminary
- r revised
- x confidential
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- F too unreliable to be published

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# Highlights

*In this issue*

## ■ Converging gender roles ... p. 7

- In 2005, persons aged 25 to 54 spent a total of 8.8 hours a day working at their job and doing housework or other unpaid household tasks, up from 8.2 hours in 1986. For men, most of the increase came from unpaid work (up from 2.1 to 2.5 hours). For women, the entire increase was in the form of paid work (up from 3.3 to 4.4 hours).
- Women with children significantly increased their daily participation in paid labour, from 39% in 1986 to 45% in 2005. While only half of men (with and without children) participated in daily housework in 1986, roughly 7 in 10 did so by 2005.
- The number of dual-earner couples increased between 1986 and 2005, as did their average time spent on paid work and housework. By 2005, wives put in 46% of the total time couples spent at jobs and 62% of the time they spent on housework.
- The division of labour within dual-earner couples becomes more equal as wives bring in more personal income. When wives had an income of \$100,000 or more, each partner spent about 6.5 hours a day at paid work and 1.5 hours on housework.
- In addition to feeling more time-stressed, dual-earner women with children were significantly less satisfied with their work-life balance than dual-earner women without children, or dual-earner men with and without children.

## ■ Wives as primary breadwinners ... p. 20

- In 2003, women were primary breadwinners in 1.4 million dual-earner couples—29% of all such couples. These women tended to be older and more educated than their secondary-earner counterparts.
- In line with their age and education, primary-earner wives were found more frequently in managerial and professional occupations. They were also more likely to have a full-time job, work more paid hours per week, and have more years of experience.
- Although most primary-earner wives earned more than twice as much as their husbands, their earnings did not match those of primary-earner husbands. Similarly, their average family income lagged behind.

## ■ Education and earnings ... p. 28

- Over the last 25 years, technological advancement has increased the need for highly educated workers. In 2005, 72% of Canadians aged 25 to 34 had some type of postsecondary education, compared with 54% in 1980.
- As a result of strong commodity and real estate markets, the past five years have seen a shift from white-collar to blue-collar jobs, where young people with less education are more often employed. Although this change does not appear to have boosted the overall employment rate of young, less-educated men, it may have mitigated any further downward pressure on their employment rates.

- Coinciding with the recent movement toward blue-collar jobs, average real earnings have increased more for young, less-educated men than for any other group. (Men with a university degree actually saw theirs decline.) Nevertheless, the real earnings of these men are still below their 1980 levels, and the gap between them and their university-educated counterparts is still large.

### ■ Is the workplace becoming safer? ... p. 36

- Between 1990 and 2001, work injury claim rates declined 4.6% in Ontario (from 5.2 to 2.5 per 100 full-time equivalents) and 3.0% in British Columbia (from 6.1 to 4.1).
- Although injury rates declined more for men than for women over the period, women still had lower overall rates in both provinces.
- The service sector had lower injury rates than the goods sector in both provinces in 1990 and 2001, with B.C.'s rates continuing to be slightly higher than Ontario's in each category.
- In both provinces, injury rates continued to be highest for young workers aged 15 to 24 and lowest for workers over 50.

### ■ The GST credit ... p. 42

- In 2002/2003, the federal government collected \$30.6 billion from the GST (goods and services tax). The GST accounts for 70% of consumption tax revenue and 16% of federal government revenue. The government returned \$2.9 billion in GST credits to 9.1 million persons aged 16 and over in 7.5 million economic families.
- Almost two-thirds of those receiving a GST credit were major income recipients of economic families (including unattached individuals). Children still living with their parents accounted for another 21%. Although credits are designed to soften the burden of GST for families with lower incomes, only 26% of the total credit went to low-income families.

- Families with a GST credit received an average of \$389, which represented 5% of their total government transfers or 1% of pre-tax income. Thus the GST credit has only a minimal effect on the redistribution of income.

### ■ Increased work stoppages ... p. 51

- Work stoppages due to strikes and lockouts fell from an annual average of 754 in the 1980s, to 394 in the 1990s, to 319 in the 2000s. The time-loss ratio, which controls for the rise in employee numbers, also reveals an overall declining trend: from an annual average of 541 workdays lost per 1,000 employees in the 1980s, to 233 in the 1990s, to 203 in the 2000s.
- More recently, however, work stoppages have increased. In 2005 they totalled 261 compared with 221 in 2003. The 2005 stoppages involved 429,000 workers (a five-fold jump from 2003) and cost 4.1 million workdays (almost two and a half times the 2003 figure). Similarly, the time-loss ratio of 301 in 2005 was more than twice the 2003 level.
- Between 2003 and 2005, unions initiated about 84% of the 743 work stoppages (strikes) and 87% of the 9.1 million resulting lost workdays; the rest were initiated by employers (lockouts).
- Provincially, Quebec posted the largest share of strikes and lockouts (336 or 45%). At the industry level, approximately 29% of the strikes and lockouts occurred in manufacturing, followed by education, health and social services (21%).

### ■ What's new? ... p. 56

#### ■ From Statistics Canada

Head-office employment

General Social Survey: Commuting times

The death of a spouse and the impact on income

Education and labour market pathways of young adults

Employer pension plans (trusteed pension funds)  
 Culture sector employment in rural Canada  
 Employment and earnings among lone mothers  
 Canada's labour market at a glance  
 Census family income  
 Income of individuals

■ **From other organizations**

Working time over the 20th century  
 Accessibility and employment growth  
 Community unemployment and immigrants' health  
 in Montreal  
 Internal labour markets and labour market  
 restructuring

Attitudes to work and career progression (in  
 French)  
 The ins and outs of poverty in advanced economies  
 Involuntary unemployment and macroeconomic  
 policy  
 General/specific skills in the labour market  
 Wage differentials, discrimination and efficiency  
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**Perspectives**

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# Converging gender roles

Katherine Marshall

Families are the cornerstone of any society. Their supply of paid labour is vital to the economy, as is their unpaid labour in raising the next generation. The dynamics of who does which type of labour within families continue to change. Women's expanding economic role has been the main impetus for eroding the cultural idea that men should be primarily responsible for paid work while women look after unpaid household and family duties. Today's couples have a much more equal partnership in the sharing of financial, child care and household responsibilities.

Understanding the changing division of labour within families is crucial in developing effective policies. Employers may be well over the idea that women's earnings are simply pin money for the family, but accepting that men's work schedules are increasingly affected by home responsibilities, such as picking up children from daycare, staying home with a sick child, or taking parental leave, is relatively new. Changing workplace practices, such as on-site daycare and flexible work arrangements, as well as labour legislation such as parental, maternity and compassionate care leave confirm that "WLB (work-life balance) has emerged as a critical public policy issue in Canada" (HRSDC [2005?]). The increasing number of dual-earner families and a heavier overall workload make balancing a job and home life that much more difficult.

The division of labour within families is also of interest from a sociological point of view. Women's entrenched participation in the labour market was expected to launch "a revolution in the gendered division of labor," but the rate of change has been slow (Cooke 2004). Tension from multiple daily demands and a longer workday can arise when 'second-shift' duties are discussed and divided. An imbalance in the division of household labour has been linked to marital conflict, reduced physical and mental well-being, and lower wages (Cooke 2004; Coverman 1983).

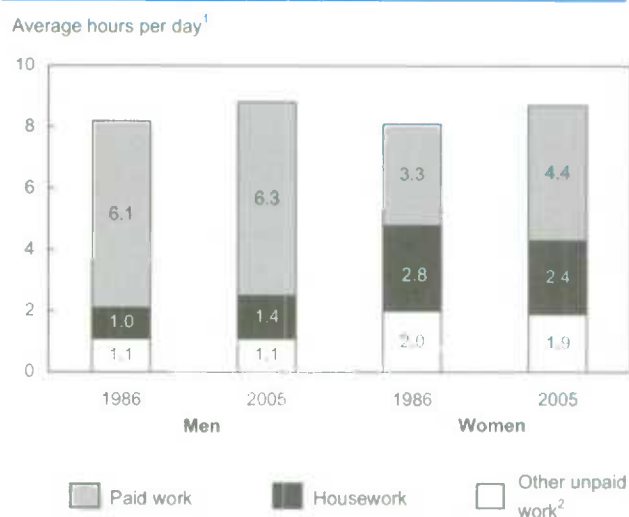
Katherine Marshall is with the Labour and Household Surveys Analysis Division. She can be reached at 613 951-6890 or [katherine.marshall@statcan.ca](mailto:katherine.marshall@statcan.ca).

Time-use surveys can illuminate overall trends in the hours men and women spend on paid work and housework, as well as on child care and other unpaid household labour. Time-use diaries permit analysis of the types of activities done on a daily basis, and for how long. The study targets those aged 25 to 54 as they are the most likely to be employed and have dependent children at home, leaving them challenged for time. The latter part of the article focuses on the hours of work, the division of labour, and the well-being of dual-earner families (see *Data sources and definitions*).

## More time at the office, particularly for women

The average daily time spent on paid work, housework and other unpaid household duties (including child care) for those aged 25 to 54 has increased steadily

**Chart A** Time spent on paid and unpaid work has shifted among those 25 to 54, particularly women



1 Numbers may not add due to rounding.

2 Primary child care and shopping for goods and services.

Source: Statistics Canada, General Social Survey

## Data sources and definitions

Every year since 1985, the **General Social Survey (GSS)** has interviewed Canadians aged 15 and over living in the 10 provinces on a wide range of social issues. Using a 24-hour diary, the GSS collected detailed information on time use in four different years using varying sample sizes: 1986 (16,400), 1992 (9,800), 1998 (10,700) and 2005 (19,600). Individual activities were recorded sequentially throughout the day and subsequently coded to an international listing. Each day of the week is sampled. Therefore, calculations are usually averaged over a 7-day period (see below). While the 1986 survey collected data during the months of November and December, the remaining cycles covered a 12-month period. Most time-use surveys include sections on the perception of time and indicators of well-being.

The **Labour Force Survey (LFS)** collects information on labour market activity every month during a one-week period from all persons 15 years and over. It includes questions about the usual and actual weekly hours spent at a person's main job and any other job. The **LFS participation rate** for a particular group (for example, women aged 25 to 54) is the labour force in that group expressed as a percentage of the population for that group.

Replacing the Family Expenditure Survey in 1997, the annual **Survey of Household Spending (SHS)** collects data on the expenditures, income and characteristics of families and individuals living in private households. The SHS category 'domestic help' includes, for example, housekeepers, cleaners, paid companions and housesitters.

**Paid work** (time use) includes the work activities of all jobs or businesses, while **related paid activities** include looking for work, delays at work, and coffee breaks. **Commute to work** is the total time spent travelling to and from the workplace. **Total paid work** covers paid work, related paid activities, and commuting.

**Core housework** (time use) includes meal preparation, meal clean-up, indoor cleaning, and laundry. Core activities are those that are most likely done on a daily basis and generally demand the most time. **Non-core housework** includes things such as outdoor cleaning, mending or sewing, interior or exterior maintenance and repair, gardening, pet and plant care, household paperwork, or unpacking groceries. **Total housework** consists of core and non-core activities.

**Primary child care** (time use) consists of activities directly involving children, such as feeding, helping, teaching, reading to, talking or playing with, medical care, and any related travel such as taking children to school or driving them to sports or other activities.

**Activity participation rate** (time use) indicates the proportion of the population (or sub-population) that reported spending some time on the activity on diary day. The participation rate is a daily rate and, unless otherwise specified, is an average over a seven-day week.

**Average time spent on activities** (time use) of the population or a sub-population refers to the total time all respondents reported spending on a given activity divided by the population, and averaged over a seven-day week. The time spent by participants refers to only those who participated in that activity on diary day, but again averaged over seven days.

**Dual-earners** are defined here as married or common-law couples in which the main activity of both partners in the previous seven days was 'employed.' Both partners had to be currently living in the same household and not on vacation from their job during the previous week. Since the analysis focuses on the division of labour by sex, same-sex couples were excluded.

**Total paid work and housework time within couples** is the sum of minutes both partners spent on paid work and related paid activities, and on core and non-core housework, on diary day. This calculation uses the 24-hour diary reporting for the respondent's time, and the time-related questions asked of the respondent for their partner's time. For example, if the respondent reported that their partner worked on diary day, a follow-up question asked the exact start and end times of all shifts worked on that day. (Since respondents were not asked to report any commute time for their partners, commute time for both partners is excluded from the total paid work calculation.)

Respondents were also asked to estimate the total number of hours their partner spent on core and non-core housework in the previous week. Therefore, average daily time spent on housework by the partner was calculated by adding the total weekly core and non-core hours, dividing this amount by 7, and then (based on established housework activity patterns), multiplying by 0.11 if diary day was a weekday, and 0.22 if diary day was a Saturday or Sunday. Calculations of the average time both partners spent on paid and unpaid work at the household level are very consistent with individual level data—that is, using only diary data for respondents by sex. Knowing the work dynamic within a couple is important for understanding the individual work pattern and well-being of each of the partners.

The **target population** includes all respondents aged 25 to 54 at the time of the survey. This is the core working-age group and also the group most likely to have dependent children living at home, thus increasing the likelihood of their having significant employment and home responsibilities. In order to clearly examine the amount of paid and unpaid labour done by those living alone or in a couple, households with extra members, such as grandmothers or boarders, were excluded.

over the past two decades, rising from 8.2 hours in 1986 to 8.8 hours in 2005. All of the increase comes from paid labour, which rose from an average of 4.7 hours per day in 1986 to 5.4 hours in 2005, while unpaid work dropped slightly. These findings refute the theories that advanced technology and growth in productivity capacity would invariably lead to increased leisure time.<sup>1</sup>

Both men and women have added to their overall workday since 1986 (Chart A). Most of the 0.6 hour increase for men has come from unpaid work, rising from 2.1 to 2.5 hours, although their paid labour also rose (from 6.1 to 6.3 hours). The 0.7 hour increase for women has come entirely from paid work (3.3 to 4.4 hours), despite a half hour drop in unpaid work (4.8 to 4.3 hours). Although gender differences in the division of labour are still evident, they are slowly breaking down.

### Converging labour force participation rates

The jump in the average time women spend in paid labour is attributable not only to time spent on the job, but also to an increase in their participation rate. Canadian women have one of the highest participation rates in the world, a rate that is converging with men's. For example, while the difference in labour force participation rates for men and women aged 25 to 54 was 24 percentage points in 1986 (94% for men versus 70% for women), in 2005 it stood at 10 points (91% versus 81%) (Chart B). Time-use data on average daily participation rates show a similar trend,

with the women's rate rising from 44% in 1986 to 51% in 2005, and men's decreasing from 68% to 65% (Table 1).<sup>2</sup>

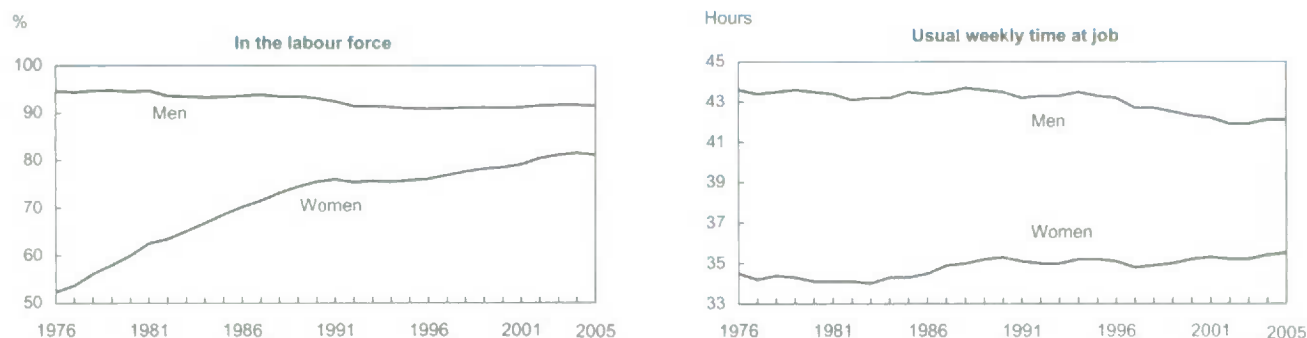
### Men's participation in housework up, women's down

The proportion of those doing some housework daily, be it making sandwiches for lunch, vacuuming, or taking out the garbage, increased from 72% in 1986 to 79% in 2005. However, this increase is entirely attributable to men, whose participation rose from 54% to 69%, while women's remained steady at around 90%. Changes in the daily participation rate for core housework (meal preparation, meal clean-up, indoor cleaning, and laundry) are the most noticeable—40% to 59% for men, and 88% to 85% for women.

Even though the proportion of people doing housework of some kind has increased, the amount of time spent at it has decreased (from an average of 2.7 hours per day in 1986 to 2.5 hours per day in 2005) (Chart C). All of the decrease comes from core housework. Labour-saving devices such as dishwashers, and semi-prepared or pre-packaged food items (such as pre-washed bags of salad, already peeled carrots, or frozen dinners) as well as numerous take-out options, may be helping to cut down the time spent in kitchens.

Still, given the trend toward ever bigger homes,<sup>3</sup> it seems puzzling to witness a reduction in time spent on housework. Canadians are not alone in this; a remarkably similar trend has been observed in the United

**Chart B Women have increased their labour force participation dramatically, but men still put in more hours on the job**



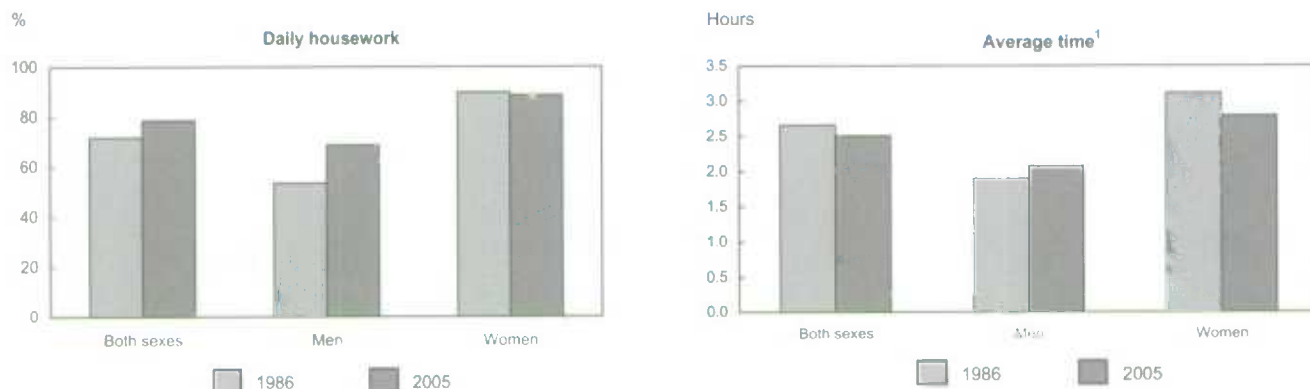
Source: Statistics Canada, Labour Force Survey

**Table 1 Participation in, and time spent on, paid work, housework and other unpaid work**

	Men 25 to 54				Women 25 to 54			
	1986	1992	1998	2005	1986	1992	1998	2005
Average hours per day (population) <sup>1</sup>								
<b>Total paid and unpaid</b>	<b>8.3</b>	<b>8.6</b>	<b>8.9</b>	<b>8.8</b>	<b>8.1</b>	<b>8.4</b>	<b>8.5</b>	<b>8.8</b>
Paid work and related	6.1	6.1	6.3	6.3	3.3	3.6	4.0	4.4
Work	4.9	5.1	5.1	5.3	2.8	3.0	3.2	3.7
Related activities	0.7	0.6	0.6	0.4	0.3	0.3	0.4	0.3
Commute	0.5	0.5	0.5	0.6	0.3	0.3	0.3	0.4
Housework	1.0	1.4	1.4	1.4	2.8	2.9	2.6	2.4
Core	0.4	0.5	0.7	0.7	2.5	2.3	2.2	1.9
Non-core	0.6	0.9	0.7	0.7	0.3	0.6	0.5	0.5
Other unpaid	1.1	1.1	1.2	1.1	2.0	1.9	2.0	1.9
Child care	0.4	0.4	0.5	0.5	0.9	1.0	1.0	1.0
Shopping and services	0.7	0.6	0.7	0.6	1.1	0.9	1.0	0.9
Average hours per day (participants) <sup>1</sup>								
<b>Total paid and unpaid</b>	<b>8.7</b>	<b>8.9</b>	<b>9.1</b>	<b>9.2</b>	<b>8.3</b>	<b>8.5</b>	<b>8.6</b>	<b>8.9</b>
Paid work and related	9.0	9.4	9.5	9.7	7.6	8.0	8.2	8.5
Work	7.7	8.1	8.1	8.5	6.7	6.9	7.1	7.5
Related activities	1.4	1.2	1.3	1.1	1.1	1.0	1.0	1.1
Commute	0.9	0.8	0.9	1.0	0.7	0.7	0.8	0.9
Housework	1.9	2.0	1.8	2.1	3.1	3.1	2.8	2.8
Core	1.1	1.0	1.0	1.2	2.9	2.6	2.4	2.3
Non-core	2.2	2.3	2.2	2.5	1.3	1.6	1.4	1.8
Other unpaid	2.4	2.1	2.1	2.2	2.9	2.8	2.8	2.9
Child care	1.5	1.6	1.8	1.8	2.1	2.2	2.3	2.5
Shopping and services	2.3	1.8	1.7	1.9	2.4	2.0	1.9	2.0
Participation (%)								
<b>Total paid and unpaid</b>	<b>94</b>	<b>96</b>	<b>98</b>	<b>96</b>	<b>98</b>	<b>99</b>	<b>99</b>	<b>98</b>
Paid work and related	68	65	67	65	44	45	48	51
Work	64	63	63	62	41	43	46	49
Related activities	46	48	51	39	29	33	36	30
Commute	61	57	59	58	39	40	43	46
Housework	54	67	77	69	90	93	94	89
Core	40	52	69	59	88	91	92	85
Non-core	26	38	36	31	23	37	42	35
Other unpaid	46	51	56	49	69	68	71	66
Child care	23	28	30	27	44	44	43	39
Shopping and services	32	33	39	31	45	47	51	45

1 Time averaged over seven days; numbers may not add due to rounding.

Source: Statistics Canada, General Social Survey

**Chart C Overall, more people are doing some daily housework, but they are spending less time at it**

1 By those who did some housework.

Source: Statistics Canada, General Social Survey

States. Between 1975 and 1995 the average weekly hours Americans spent on housework dropped from 15.5 to 13.7. Furthermore, “women’s and men’s hours spent in housework have converged over the period, primarily due to the steep decline in women’s hours of housework” (Bianchi et al. 2000). One reason for the overall decline could be today’s service-oriented economy. From take-out meals to snow removal, groundskeeping and housecleaning, people buy many goods and services once produced in the home. Housework standards may also be falling and people are less bothered if their house fails the ‘white-glove’ dust test. In the same vein, people’s priorities may have changed as to how they want to spend their time (Bianchi et al. 2000).

Overall, participation rates for other types of unpaid labour—primary child care and shopping for goods and services—have remained relatively stable over the past 20 years. The average time spent has trended upward for child care and downward for shopping. However, the participation rate and time spent on child care for those with children at home shows a more noticeable increase, particularly among men (see *Sharing the caring*).

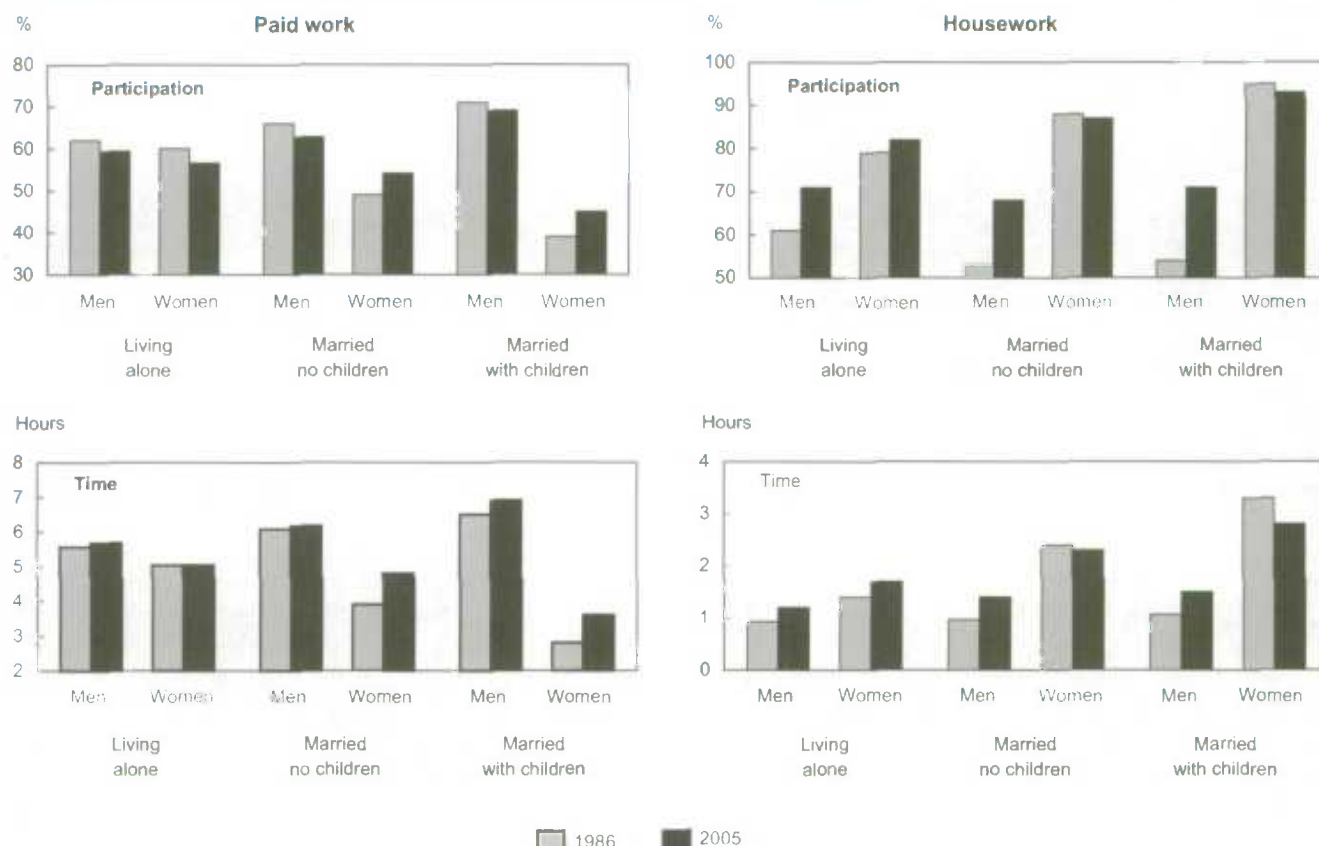
### Marriage today less likely to alter women’s labour market behaviour

In both 1986 and 2005, married men with children had appreciably higher daily participation rates for paid labour than men living alone—roughly 70% versus

60% (Chart D).<sup>5</sup> On the other hand, in 1986, married women (with or without children) were significantly less likely to participate in paid labour (39% and 49% respectively) than those living alone (60%). By 2005, however, no statistically significant difference was seen between married women without children and those living alone. And while the difference between married women with children and those living alone was 21 percentage points in 1986, the difference in 2005 was down to 12 points.

Similar patterns emerge for daily hours spent on paid work. While married men with children spent significantly more time on paid work than men living alone in both 1986 and 2005, women with children spent significantly less than their counterparts living alone. However, while paid work hours were significantly different in 1986 for women living alone and married women without children (5.0 and 3.9 respectively), no significant difference was evident in 2005 (5.0 and 4.8).

Married women, with or without children, significantly increased the average time they spent at paid labour between 1986 and 2005. Therefore, although married men (with or without children) still spent more time at paid work than women in the same circumstances, the difference has narrowed. For example, married men without children spent an average of 2.2 hours more time at paid labour than women in 1986 (6.1 versus 3.9 hours), but by 2005 the difference had dropped to 1.4 hours (6.2 versus 4.8).

**Chart D Daily participation in, and time spent on, paid work and housework, by living arrangements**

Note: Except paid work for those living alone, all other differences between men and women are statistically significant.  
 Source: Statistics Canada, General Social Survey

### More married men now doing housework

In all family types, daily participation rates for housework continue to be significantly higher for women than for men. However, the gap is narrowing. For example, among married men with children, the participation rate rose from 54% to 71%. Furthermore, while the presence of a wife lessened men's involvement in housework in 1986 (single men had a participation rate of 61%, and married men 53%), 2005 saw roughly 7 in 10 married men, both with and without children, participating in housework. The increase in husbands' participation is a logical reaction to the reality that most wives are now engaged in paid labour, and for longer hours, and therefore have less time to

do housework. The significant increase in participation among men living alone may be partly attributable to changing cultural norms, whereby both men and women have been taught life skills formerly reserved for the opposite sex. "It is likely more acceptable for men to cook and clean, indeed, welcomed, for men to show competence at making a home-cooked meal, for example" (Bianchi et al. 2000).

From the standpoint of time, married women, particularly those with children, continue to do significantly more housework than married men, but the overall difference has lessened. In 1986, women with children did 2.2 hours more per day than their male counterparts (3.3 versus 1.1 hours), with the difference

## Sharing the caring

As the roles of men and women with respect to paid labour and household maintenance continue to converge, so too does the responsibility for nurturing children. Once excluded from delivery rooms, men are now not only labour coaches, but active participants in the multitude of tasks associated with caring for babies and young children. As with housework, a key impetus behind men's increasing role in child care is the increasing participation of women in the labour force. In 1976, 36% of couples with dependent children at home were dual-earner families; by 2005 the proportion had increased to 69% (Table A). Greater sharing of financial responsibility has led to "a pattern of convergence whereby women and men increasingly come to see themselves not only as co-parents but as co-providers for their children." (Daly 2004, p. 7). To some extent this attitude has become reality. Although still less involved in primary child care than women, men have significantly increased their participation. Primary care includes direct

**Table A Husband-wife families with children under 16 at home**

	1976		1986		1992		2005	
	'000	%	'000	%	'000	%	'000	%
<b>Total</b>	<b>5,663</b>	<b>100</b>	<b>5,473</b>	<b>100</b>	<b>5,532</b>	<b>100</b>	<b>5,485</b>	<b>100</b>
Dual-earner	2,041	36	2,905	53	3,190	58	3,758	69
Single-earner <sup>1</sup>	3,041	54	1,796	33	1,397	25	1,147	21
Mother at home	2,991	98	1,720	96	1,278	91	1,022	89
Father at home	49	2	76	4	119	9	125	11
Other <sup>2</sup>	581	10	772	14	945	17	580	11

1 Stay-at-home parent must not be looking for work, but must be able to work and not attending school.

2 Includes no-earner families and single-earner families with an unemployed spouse.

Source: Statistics Canada, Labour Force Survey

**Table B Average time<sup>1</sup> spent on primary child care by married persons aged 25 to 54**

	Men		Women	
	1986	2005	1986	2005
	Hours			
<b>With children under 19 at home</b>	0.6(*)	1.0*(*)	1.4	2.0*
At least one child under 5	1.0(*)	1.6*(*)	2.6	3.4*
All children 5 to 18	0.3(*)	0.6*(*)	0.7	1.2*
	Participation rate (%)			
<b>With children under 19 at home</b>	38(*)	52*(*)	67	72*
At least one child under 5	57(*)	73*(*)	92	94
All children 5 to 18	25(*)	40*(*)	52	60*

1 Population.

\* Significant difference with 1986 at the .05 level or less.

(\*) Significant difference between men and women at the .05 level or less.

Source: Statistics Canada, General Social Survey

involvement such as reading to children, taking them to the park, helping with homework, or driving them to activities (see *Data sources and definitions*). For example, while just over 90% of women with pre-school children reported doing primary child care in both 1986 and 2005, men's involvement jumped from 57% to 73%. However, unlike housework where the average time spent has increased for men but dropped for women, time spent on child care has increased for both sexes. Overall, in 2005, fathers with children under 19 at home spent about 1.0 hour per day on child care (up from 0.6 in 1986) and mothers 2.0 hours (up from 1.4 hours) (Table B).<sup>4</sup> Despite the increasing time spent on paid labour, both have also increased their direct involvement with their children. However, studies have suggested that fathers and mothers provide different types of care. While "there is a trend of convergence in the amount of time" mothers and fathers are involved with their children, "women continue to carry most of the responsibility dimension that involves the planning, scheduling, orchestrating and coordination of family activities" (Daly 2004, p. 12).

Another indication of change is the number of families with a stay-at-home father. Although families with a stay-at-home parent have declined substantially since 1986, the proportion with a father in this role has increased from 4% in 1986 to 11% in 2005 (Table A). Furthermore, since an amendment to the Employment Insurance Act in 2000 increased the length of paid parental leave from 10 to 35 weeks, fathers' participation in the program has risen from 3% to 11%. The more than 1 in 10 fathers now taking a formal employment leave to be home with their newborn is not only a "statistically significant increase, but also a socially significant one" (Marshall 2003).

decreasing to 1.3 hours by 2005 (2.8 versus 1.5 hours). This narrowing is the result of married men with children spending significantly more time on housework, and married women spending significantly less.

### Dual-earners

The steady rise in women's labour force participation means that in most couples, even those with dependent children at home, both spouses are now employed. The proportion of dual-earners among husband-and-wife families with children under 16 at home rose from 36% in 1976, to 58% in 1992, to 69% in 2005 (see *Sharing the caring*). Without a doubt, juggling home and work responsibilities is more challenging when both parents are employed. Society has a vested interest in ensuring that these individuals are able to meet this challenge, since the consequences of being overburdened affect not only the health and well-being of individuals and their family, but also the ability to be effective in the workplace. Unmanageable responsibilities in either sphere can have negative spillover effects, such as inattentiveness at home or lack of productivity at the workplace (Daly 2004).

Not only has the number of dual-earners increased since 1992, so too has the average daily amount of time these couples spend on paid work and housework combined (up 0.5 hours per day, a result of 0.7 hours more paid work but 0.2 hours less housework) (Table 2).<sup>6</sup> This net change within couples was due to an increase in husbands' paid work and housework (0.3 hours and 0.1 hours respectively), and an increase in wives' paid work and decrease in housework (0.4 hours and -0.2 hours respectively).<sup>7</sup>

In both 1992 and 2005, each partner in dual-earner couples did 50% of the combined paid work and housework each day (Table 3). However, wives did 45% of total paid work but 65% of housework in 1992. By 2005 these proportions stood at 46% and 62%.

As in the general population, men in dual-earner families have increased their participation in housework (from 70% in 1992 to 74% in 2005), while the women's rate has dropped (from 94% to 90%).

### Children widen the gap...

Several factors are associated with who does what in a dual-earner family, and how much time they spend. For example, school-aged children at home add an

average of 1.2 hours to a family's workday, pushing it to more than 8 hours for both parents (Table 3). However, fathers tend to add both paid work and housework (0.4 and 0.3 hours respectively) compared with men without children at home, whereas women add only housework (0.6 hours more than women without children).

### ... and education narrows it

When only the wife in a couple has a university degree, her share of housework decreases to 59%, compared with 62% overall. Although not a strong finding, this is consistent with other studies, which have found that "increases in wife's education, as a proxy for wage rate, tend to be associated with an increased share of housework for the husband" (Anxo and Carlin 2004, p. 30). Also, lower levels of education for both partners add to the length of the total workday (paid work and housework). Families in which neither partner graduated from university worked an average 16.3

**Table 2 Participation in, and time spent on, paid work and housework in dual-earner families**

	Participation		Time per day <sup>1</sup>	
	1992	2005	1992	2005
	%		Hours	
<b>Total</b>				
Both	99	99	15.3	15.8
Husband	99	98	7.7	7.9
Wife	100	99	7.6	7.8
<b>Paid work</b>				
Both	72	72	11.5	12.2*
Husband	71	73	6.3	6.6
Wife	72	70	5.2	5.6
<b>Housework</b>				
Both	82	82	3.8	3.6
Husband	70	74	1.3	1.4
Wife	94	90*	2.4	2.2
<b>Wife's share</b>	50	50		
Paid work	45	46		
Housework	65	62*		

1 Figures may not add due to rounding. Based on household reporting; participation based on respondent reporting.

\* Significantly different from 1992 at the .05 level or less.

Source: Statistics Canada, General Social Survey

**Table 3 Total average time spent on paid work and housework within dual-earner couples**

	Total paid and housework			Paid			Housework			Wife's proportion of time		
	Both	Hus-band	Wife	Both	Hus-band	Wife	Both	Hus-band	Wife	Total	Paid	House-work
	Hours									%		
<b>Total dual-earners</b>	<b>15.8</b>	<b>7.9</b>	<b>7.8</b>	<b>12.2</b>	<b>6.6</b>	<b>5.6</b>	<b>3.6</b>	<b>1.4</b>	<b>2.2</b>	<b>50</b>	<b>46</b>	<b>62</b>
No children under 19 at home (ref)	15.2	7.6	7.6	12.1	6.4	5.7	3.1	1.2	1.9	50	47	61
At least one under 5	15.3	7.7	7.6	11.8	6.4	5.5	3.5*	1.3	2.1*	50	46	62
All between 5 and 18	16.4*	8.3*	8.2*	12.5	6.8*	5.7	4.0*	1.5*	2.5*	50	45	63
Both have university degree (ref)	15.2	7.6	7.6	12.2	6.4	5.8	3.1	1.2	1.9	50	47	60
Wife only	15.0	7.6	7.4	11.5	6.2	5.3	3.5*	1.4	2.1	49	46	59
Husband only	14.9	7.5	7.3	11.6	6.3	5.3	3.3	1.2	2.1	49	46	62
Neither have a degree	16.3*	8.2*	8.1*	12.5	6.8	5.7	3.8*	1.4*	2.4*	50	46	62
Wife's income <sup>1</sup>												
Less than \$30,000 (ref)	16.4	8.3	8.1	12.5	7.0	5.5	3.9	1.2	2.7	50	44	68
\$30,000 - \$59,999	15.4*	7.6	7.7	12.1	6.4	5.6	3.3*	1.2	2.1*	50	47	64*
\$60,000 - \$99,999	15.6	7.9	7.7	11.9	6.4	5.5	3.6	1.5	2.2*	49	46	60*
\$100,000 or more	16.3	8.3	8.1	13.2	6.7	6.5	3.2 <sup>E</sup>	1.6 <sup>E</sup>	1.6 <sup>E</sup>	49	49*	50*
Husband's income <sup>1</sup>												
Less than \$30,000 (ref)	16.0	8.4	7.6	12.1	6.5	5.6	3.9	1.9	2.1	47	46	52
\$30,000 - \$59,999	15.9	8.0	7.9	12.3	6.5	5.8	3.6	1.5	2.1	50	47	59
\$60,000 - \$99,999	15.5	7.9	7.6	11.7	6.2	5.5	3.8	1.7	2.1	49	47	55
\$100,000 or more	16.1	8.1	8.0	12.6	6.8	5.9	3.5	1.4	2.1	50	47	61
Both full-time (ref)	16.1	8.0	8.1	12.5	6.6	5.9	3.5	1.4	2.1	50	47	60
Husband full-time, wife part-time	14.1*	8.0	6.1*	10.3*	6.9	3.4*	3.9	1.1*	2.7*	43*	33*	71*
Husband part-time, wife full-time	12.2*	4.2*	8.0	8.7*	2.7 <sup>E</sup>	6.0	3.5	1.5	2.0 <sup>E</sup>	66*	69*	58

1 Based on respondent information only as the income of the spouse was not collected.

\* Significantly different from reference group (indicated by 'ref') at the .05 level or less.

Source: Statistics Canada, General Social Survey, 2005

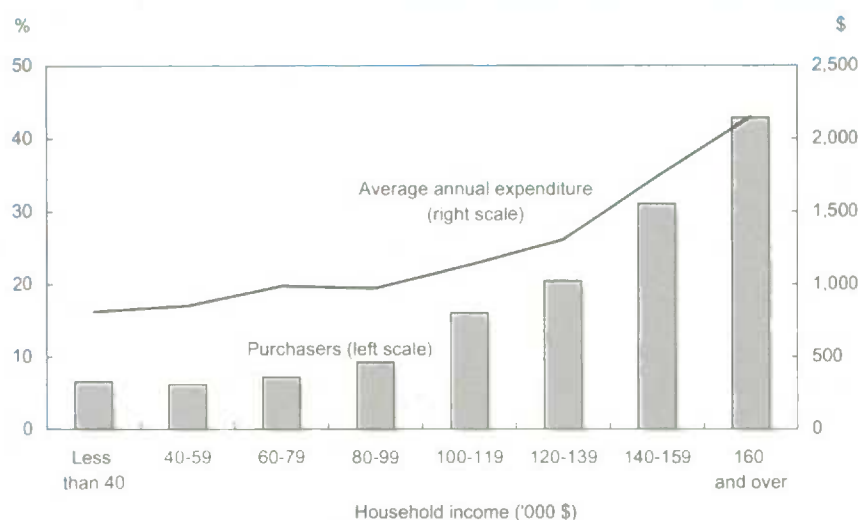
hours per day compared with 15.2 hours for those in which both had a university degree. Most of the added time came from housework.

### Parity in labour when wives have high income

High personal income, for either sex, is associated with spending more time at a job and less on housework. For example, compared with women whose annual income was less than \$30,000, those with \$100,000 or more did one hour more of paid work, and one hour less of housework per day. (Both did an average of 8.1 hours of total work per day.)

Longer job hours often bring higher earnings, which in turn can offer some relief from housework by providing the means to hire someone else to do it. In 2004, only 7% of households with income less than \$40,000 paid for domestic help, spending an average of \$813. This compared with 43% of households with \$160,000 or more, who spent \$2,150 (Chart E).

When wives have an income of \$100,000 or more, the division of paid labour and housework between partners is more likely to be split equally. In these couples, each partner spent about 6.5 hours per day on paid work and 1.5 hours on housework.

**Chart E Higher income households are more likely to hire domestic help**

Source: Statistics Canada, Survey of Household Spending, 2004

Furthermore, a wife's income is likely to influence the husband's time spent on housework as well as her own. For him, time spent doing housework rises along with her income, while for her, the time falls. On the other

hand, regardless of her husband's income level, a wife's time spent on housework stays the same. These findings partly support the 'relative resources' theory of the division of housework, which suggests that partners with relatively high education and income have more power to get out of doing housework (Bianchi et al. 2000). Other research has shown that high-income households are more likely to buy domestic help, especially if the wife is the primary earner. The latter are twice as likely to hire help than high-income households in which the husband is the main earner (Palameta 2003).

Finally, even though dual-earner partners working full time both contribute 8 hours of total labour each day, husbands are more likely than wives to spend more time at a job (6.6 versus 5.9 hours) and less time on housework (1.4 versus 2.1 hours). Past research has found that

**Table 4 Indicators of well-being for couples aged 25 to 54**

	Satisfied with work-life balance		Not time stressed		Satisfied with life generally	
	Men	Women	Men	Women	Men	Women
%						
<b>Husband sole earner</b>						
No children under 19	78	...	64(*)	75	84	85
At least one under 19	69 *	...	61	55*	82	85
<b>Wife sole earner</b>						
No children under 19	...	82	79(*)	58	74	83
At least one under 19	...	73	77(*)	59	80	81
<b>Dual-earners</b>						
No children under 19	78	76	62(*)	53	88	88
At least one under 19	77(*)	67*	58(*)	45*	87	86
<b>Both full-time</b>	77(*)	69	60(*)	45	87	87
Husband full-time, wife part-time	78	86	57	65	89	88
Wife full-time, husband part-time	F	61	F	F	F	88

\* Significant difference between those with and without children at the .05 level or less.

(\*) Significant difference between men and women at the .05 level or less.

Source: Statistics Canada, General Social Survey, 2005

not only are wives in these families more likely to do most of the housework, but they also feel most responsible for anticipating, planning and organizing what needs to be done (Marshall 1993). Findings show that husbands or wives who work part time and have a spouse working full time have a shorter overall workday (paid work and housework) than their spouse. However, many are likely spending a considerable amount of time on child care.

### Although time-stressed, employed parents satisfied with life overall

Both children and work arrangements within families influence work-life balance (WLB) satisfaction and stress caused by lack of time. Sole earners in couples with children at home had some of the lowest WLB satisfaction rates (69% for sole-earner fathers and 73% for mothers) (Table 4). Dual-earner fathers reported the highest satisfaction rate (77%), significantly higher than dual-earner mothers, who had the lowest (67%).

Men and women in dual-earning families, with and without children, feel most stressed about not having enough time. Given that children require a great deal of time and energy, it is not surprising to find that when both parents are employed, only 58% of fathers and 45% of mothers did not feel stressed for lack of time. Except in couples with dependent children and the husband as sole earner, women reported being significantly more stressed for time than men.

Interestingly, compared with other women, those in dual-earner couples and working part time express the highest WLB satisfaction (86%), are some of the least

time-stressed (65%), and have a high overall life satisfaction rate (88%). On the other hand, women in dual-earner couples working full time are much less likely to feel satisfied with their WLB (69%) and more likely to feel pressed for time (only 45% did not feel time-stressed). However, despite the pressure of having children at home and each partner having a paid job, dual-earner men and women are the most likely to report high levels of satisfaction with their life as a whole.

### Parenting and long hours more burdensome for women

Not surprisingly, the longer a couple spends on an average weekday working at their jobs and doing housework, the more difficult it is to find balance in life with time enough to accomplish everything.<sup>8</sup> Women generally tend to feel more time-stressed than men, regardless of length of workday or presence of children (Table 5). For example, among couples with the longest workday and children at home, two-thirds of the women felt time-stressed compared with one-half of the men. Research has found that mothers, regardless of employment status, consistently feel more time-crunched than fathers (Zukewich 2003).

Longer workdays and the presence of children also affect women more than men in terms of WLB satisfaction. Only 52% of women with children in couples with long hours felt satisfied with their WLB, the lowest rate overall. In contrast, 71% of their male counterparts were satisfied. However, although overall life satisfaction fell somewhat as the workday lengthened

**Table 5 Indicators of well-being for dual-earners by combined length of workday**

	Satisfied with work-life balance		Not time-stressed		Satisfied with life generally	
	Men	Women	Men	Women	Men	Women
<b>No children under 19 at home</b>				%		
Less than 18 hours	77	74	69	51 (*)	90	85
18.0 to 21.9	78	79	64	53	87	89
22 or more	77	66	50*	50	83	84
<b>With children under 19 at home</b>						
Less than 18 hours	80	73	61	49 (*)	95	89
18.0 to 21.9	80	68 (*)	61	42 (*)	86	85
22 or more	71	52*(*)	49*	36*(*)	86	80

\* Significantly different from couples with less than 18 hour day and no children at the .05 level or less.

(\*) Significantly different from men at the .05 level or less.

Source: Statistic Canada, General Social Survey, 2005

for both men and women in dual-earner families (with or without children), the difference was not significant, and the vast majority (80% or more) felt satisfied with their life as a whole.

## Conclusion

While women's entry into the job market has been dramatic, men's entry into housework has been gradual, prompting some to call the latter a 'stalled revolution' (Cooke 2004). However, this study shows that, although gender differences persist in the division of labour, they are steadily diminishing. Since 1986, of the total time spent on paid and unpaid work, women aged 25 to 54 have proportionally increased their average daily time at a job (4.4 hours of 8.8 in 2005), while men have increased their time on housework (1.4 of 8.8 hours in 2005). As women's job attachment has increased, so too has men's involvement in housework and child care. Women's increasing hours in paid labour (and thus income), combined with "normative changes in the direction of equality and sharing" (Beaujot 2006, p. 24) is likely to further reduce gender differences in the division of labour in the future.

However, not only are more men and women sharing the economic and domestic responsibilities in families, but most are also increasing the length of their paid workday. This has helped position work-life balance among the top 10 issues in collective bargaining. It has risen in importance because of the "increased recognition of the costs of work-life imbalance in terms of workplace injury rates and the general health of workers, as well as the development and well-being of children and aging parents" (Canadian Association of Administrators of Labour Legislation 2002, p. 4). Dual-earner couples who worked long days doing their job plus housework and who had dependent children at home were less satisfied with their work-life balance. They also felt more time-stressed, particularly women. However, despite these stage-of-life pressures, the majority of dual-earner husbands and wives felt satisfied with their life as a whole.

Increasingly, employees are legally entitled to various kinds of paid and unpaid leave for family responsibilities. As well, more workplaces are offering flexible work arrangements, health promotion and employee assistance programs, and other family support such as on-site child care. It has been shown that employees

with flextime arrangements feel considerably less time-stressed than those without this benefit (Fast and Frederick 1996). In short, changing work arrangements in the home are inspiring alternative work arrangements at the office.

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## Perspectives

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### ■ Notes

- 1 For a discussion of the different theories of leisure, see Gershuny and Fisher (2000).
- 2 While both the GSS and the LFS show women's average hours at paid work increasing, the LFS shows men's hours falling but the GSS shows them increasing. It is difficult to explain this difference, but some of it may be due to the different collection methods of the two surveys (see Data sources and definitions).
- 3 According to the census, the average number of rooms per dwelling increased from 5.8 in 1986 to 6.3 in 2001. Although square footage is not collected, this increase does suggest larger homes.
- 4 Average daily time spent on primary child care for participants has also steadily increased.
- 5 Married couples also include common-law couples.
- 6 A comparison of dual-earners couples from the first time use survey in 1986 was not possible since information about spouse's main activity was not collected.
- 7 The increase in paid work between 1992 and 2005 would have been larger if commuting to work had been included. This activity increased during this time but was not part of the calculation of work time within dual-earner couples (see Data sources and definitions).
- 8 This section looks at the total paid work and housework time couples do on an average weekday (Monday through Friday). This is arguably the most hectic part of the week. Women's total labour as a proportion of the couple's total work day (paid work and housework combined) was around 50% for all lengths of days (6 hours of a 12-hour day, or 10 hours of a 20-hour day).

### ■ References

- Anxo, Dominique and Paul Carlin. 2004. "Intra-family time allocation to housework: French evidence." *International Journal of Time Use Research* 1, no. 1 (August): 14-36.

- Beaujot, Roderic. 2006. "Gender models for family and Work." *Horizons* 8, no. 3 (April): 24-26.
- Bianchi, Suzanne M., Melissa A. Milkie, Liana C. Sayer and John P. Robinson. 2000. "Is anyone doing the housework? Trends in the gender division of household labor." *Social Forces* 79, no.1 (September): 191-228.
- Canadian Association of Administrators of Labour Legislation (CAALL). 2002. *Work-Life Balance: A Report to Ministers Responsible for Labour in Canada*. Gatineau, Quebec: CAALL.
- Cooke, Lynn Prince. 2004. "The gendered division of labor and family outcomes in Germany." *Journal of Marriage and Family* 66 (December): 1246-1259.
- Coverman, Shelley. 1983. "Gender, domestic labor time, and wage inequality." *American Sociological Review* 48, no. 5 (October): 623-637.
- Daly, Kerry. 2004. *The Changing Culture of Parenting*. Contemporary Family Trends series. Ottawa: The Vanier Institute of the Family.
- Fast, Janet E. and Judith A. Frederick. 1996. "Working arrangements and time stress." *Canadian Social Trends* (Statistics Canada, catalogue no. 11-008-XPE) (Winter): 14-19.
- Gershuny, Jonathan and Kimberly Fisher. 2000. "Leisure." In *Twentieth-Century British Social Trends*, 3<sup>rd</sup> edition. Edited by A.H. Halsey with Josephine Webb. pp. 620-649. London: Macmillan.
- Human Resources and Social Development Canada (HRSDC). [2005?]. *Addressing Work-Life Balance in Canada*. [http://www.hrsdc.gc.ca/asp/gateway.asp?hr=/en/lp/spila/wlb/awlb/01table\\_of\\_contents.shtml&hs=](http://www.hrsdc.gc.ca/asp/gateway.asp?hr=/en/lp/spila/wlb/awlb/01table_of_contents.shtml&hs=)
- Marshall, Katherine. 1993. "Employed parents and the division of housework." *Perspectives on Labour and Income* (Statistics Canada, catalogue no. 75-001-XPE) 5, no. 3 (Autumn): 23-30.
- . 2003. "Benefiting from extended parental leave." *Perspectives on Labour and Income* (Statistics Canada, catalogue no. 75-001-XPE) 15, no. 2 (Summer): 15-21.
- Palameta, Boris. 2003. "Who pays for domestic help?" *Perspectives on Labour and Income* (Statistics Canada, catalogue no. 75-001-XPE) 15, no. 3 (Autumn): 39-42.
- Zukewich, Nancy. 2003. *Work, parenthood and the experience of time scarcity*. Days of our Lives series. Catalogue no. 89-584-XIE. Ottawa: Statistics Canada.

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# Wives as primary breadwinners

Deborah Sussman and Stephanie Bonnell

One of the most dramatic transformations in the labour market in recent decades has been the tremendous growth in the labour force participation of married women. As a result, dual-earner, husband-and-wife families are quickly becoming the norm, shattering the image of the 'traditional' family in which the husband is the only breadwinner (Winkler 1998).

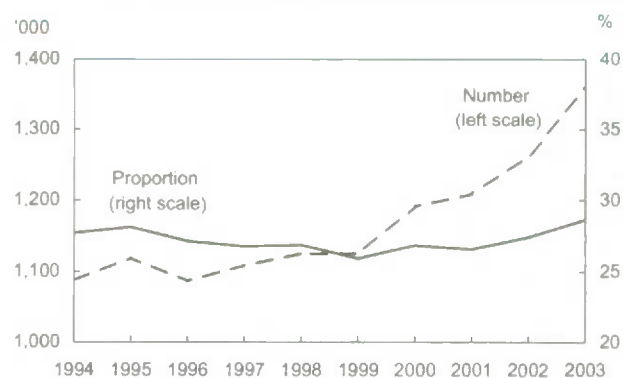
Reasons for the sustained increase in dual-earner couples are many, including the rise in women's educational attainment, the increase in their full-time employment rate, and expanded occupational opportunities. Other reasons, particularly for couples with children, involve increased acceptance of alternative work arrangements (flexible work hours, compressed work schedules, telework), expanded childcare options, and changes to parental leave. Together these factors have improved women's access to better-paying jobs and their ability to rise in the ranks. While for some couples the rising cost of living may have made two incomes a financial necessity, for others it may be a matter of both spouses pursuing their own interests or aspirations.

One notable corollary has been an increase in wives earning more than their husbands. Between 1967 and 1982, the proportion of wives who were primary breadwinners rose from 11% to 18% and hovered around 19% throughout most of the 1980s. The steady rise was likely the joint effect of women's long-term movement into higher-paying managerial and professional occupations (Hughes 1995), more women working full time, and better maternity benefits, combined with the much slower rise in men's average earnings over the period. During the recession of the early 1990s, the proportion of women who were primary

earners jumped to 25%,<sup>1</sup> mainly because men in high-wage and manufacturing jobs experienced periods of unemployment (Crompton and Geran 1995).

The proportion continued at approximately 1 in 4 dual-earner couples for the rest of the decade even as employment levels improved, hitting a high of 29% in 2003, or about 1.4 million couples (Chart A). The continued rise suggests that women in the role of primary breadwinner is not likely a temporary phenomenon resulting from a recessionary period.<sup>2</sup>

**Chart A** The number of dual-earner couples with primary-earner wives has continued to grow, while the proportion has remained stable



Source: Statistics Canada, Survey of Labour and Income Dynamics

## Challenges facing less traditional couples

This reversal of traditional earnings patterns may come at a price, however. The distribution of household earnings between spouses has been found to affect gender roles, spending patterns, and household decision making. Although findings have been mixed,

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women's share of household income can be an important determinant in the decision to purchase home services such as cleaning or child care (Palameta 2003). This is an example of the persistence of traditional roles, since the income of these women is being used to buy services that reflect women's traditional role. Another study found that among couples in which the wife outearned the husband by more than 50%, the husbands did more housework, although their wives still did the lion's share (Tichenor 1999). Moreover, wives, regardless of earnings, maintained the responsibility for organizing the household and making sure things got done. This uneven division of labour may become a source of tension, which can lead to dissatisfaction with the relationship (Tichenor 1999) and perhaps a higher incidence of divorce (Heckert, Nowak and Snyder 1998).

In the same vein, another study found that when women were the chief wage earners (by at least \$10,000 more a year), complicated systems of shifting money into various spending pools were used to maintain the traditional role of the man as provider (Commuri and Gentry 2005). Also, full-time employed men in dual-earner couples who endorsed traditional gender roles were more likely to experience lower 'marital-role quality'<sup>3</sup> when their wives' market-based success threatened their need to be the primary provider (Brennan, Barnett and Gareis 2001). In contrast, among their full-time employed wives, a higher marital-role quality was associated with greater participation by their husbands in child care.

On the positive side, some men may welcome the sharing of the financial burden, and the family as a whole can become a stronger economic unit as a result. A working wife may also allow a man to be financially supported while he switches careers or starts his own business (Fix 1994), or if he becomes unemployed.

### Primary-earner wives: older and more educated

Primary-earner wives differ from other working wives in many ways. For one, they are slightly older. In 1994, the difference was only marginal: a median age of 39 versus 38.<sup>4</sup> In 2003, the median age was 43 versus 41, and the gap appears to be growing. Their husbands were also slightly older, with a median age of 45 in 2003, compared with 43 for primary-earner husbands (Table 1).

Primary-earner wives are also generally more educated than secondary-earner wives and primary-earner husbands. In 2003, 30% had a university degree, compared with 21% of secondary-earner wives and 25% of primary-earner husbands. Only 35% had a high school diploma or less, compared with 42% of secondary-earner wives and 40% of primary-earner husbands. Moreover, more than one-third of primary-earner wives had more education than their husbands (data not shown). This educational pattern is similar to that of a decade earlier, only less pronounced.

### Managerial and professional occupations more frequent

With their higher education levels, primary-earner wives have increased their presence in higher-paying occupations.<sup>5</sup> In 2003, these

**Table 1 Selected characteristics of dual-earner spouses**

	Primary earner				Secondary earner			
	Wife		Husband		Wife		Husband	
	1994	2003	1994	2003	1994	2003	1994	2003
<b>Median age</b>	39	43	41	43	38	41	42	45
<b>Education</b>	%							
Less than high school	13.7	10.1	18.7	14.0	15.8	11.5	24.6	17.8
High school graduate	22.8	24.8	25.5	26.4	31.5	30.4	25.2	27.6
Postsecondary certificate or diploma	38.5	35.0	33.3	34.6	35.8	36.9	30.3	31.9
University degree	24.9	30.0	22.4	25.0	17.0	21.2	19.8	22.7
<b>Work pattern</b>								
Full-time	84.6	88.2	98.1	97.9	66.4	71.9	92.5	90.8
Part-time	15.4	11.8	1.9	2.1	33.6	28.1	7.5	9.2
<b>Average paid weekly hours</b>	31.2	29.5	38.4	35.2	23.9	23.4	29.4	26.7
<b>Average work experience</b>	Years							
	9.9	11.9	15.4	14.7	8.4	9.5	14.4	15.3

Source: Statistics Canada, Survey of Labour and Income Dynamics

women were more likely than secondary-earner wives to be employed in managerial and professional occupations (40% versus 26%). Nevertheless, even though these positions were typically high-paying, primary-earner wives still could not match the earning power of primary-earner husbands in the same occupational group. Primary-earner wives in managerial and professional occupations earned on average \$68,000 annually while their male counterparts earned \$83,000. In general, primary-earner wives earned less than primary-earner husbands in each of the occupational groups examined.

Primary-earner husbands had a somewhat different occupational pattern, with 40% working in occupations related to construction, manufacturing and processing. Primary-earner husbands in this group had average earnings of \$48,000. Another 37% were employed in managerial and professional occupations (with average earnings of \$83,000). Secondary-earner husbands were found mostly in these same occupational categories, but their average earnings were less than half those of primary-earner husbands (Table 2).

### Secondary-earner husbands more likely to have been unemployed

Earnings disparities can arise not only from differences in age, education and occupation, but also from differences in labour force attachment and work patterns. Indeed, 16% of secondary-earner husbands were unemployed at some point in 2003, compared with only 7% of primary-earner husbands (Chart B). Moreover, the length of the husband's unemployment spell was more likely to be longer when the wife was

**Chart B In one in six dual-earner couples with a primary-earner wife, the husband was unemployed at some point in 2003**



Source: Statistics Canada, Survey of Labour and Income Dynamics, 2003

the primary earner. More than one-quarter of secondary-earner husbands who had been unemployed spent more than six months looking for work. On the other hand, only 12% of primary-earner husbands were unemployed for that length of time. The same held true in 1994 when 22% of secondary-earner husbands were unemployed at some point during the year, compared with only 10% of primary-earner husbands. In some cases then, the wife's primary breadwinner role may not have been intended, but rather may have occurred by default.

**Table 2 Dual-earner spouses by occupation and average earnings**

	Primary earner				Secondary earner			
	Wife		Husband		Wife		Husband	
	%	Earnings (\$)	%	Earnings (\$)	%	Earnings (\$)	%	Earnings (\$)
<b>All occupations</b>	<b>100</b>	<b>41,200</b>	<b>100</b>	<b>57,800</b>	<b>100</b>	<b>22,000</b>	<b>100</b>	<b>21,300</b>
Managerial and professional	40	68,200	37	83,200	26	36,300	29	31,300
Financial, clerical, technical, culture and sport	33	38,500	9	50,100	37	26,700	12	28,600
Sales and service	19	32,900	14	51,600	28	16,700	18	23,800
Construction, manufacturing and processing	8	30,200	40	47,900	9	18,900	41	22,100

Source: Statistics Canada, Survey of Labour and Income Dynamics, 2003

### Long-term primary-earner wives

With longitudinal data, the duration of earnings patterns can be examined. Of couples with a primary-earner wife in 1999, almost half were still in that situation almost five years later.<sup>6</sup>

In 1999, long-term primary-earner wives had a median age of 42, as did working wives in general. However, primary-earner wives were more likely to have postsecondary education.

In line with their higher education, long-term primary-earner wives were also more likely to be in a managerial or professional occupation than wives in general. Indeed, more than 60% held such a position.

Higher rates of full-time work (90%) and longer workweeks (34 hours) were also characteristic of these primary-earner wives.

Five in six long-term primary-earner wives did not have preschool-aged children at home, so they may have been able to dedicate more energy to their careers, thus allowing them to maintain their primary breadwinner status for a longer period of time.

Long-term primary-earner wives had higher average earnings than other primary-earner wives and secondary-earner wives in 1999. The gap between their earnings and those of their husbands was on average larger as well. Indeed, almost two-thirds had more than twice the earnings of their husbands.

In short, compared with other wives, long-term primary-earner wives were older, more educated, and more likely to hold managerial or professional jobs. They were more likely to be full-time workers and work more paid hours, and less likely than secondary-earner wives to have

preschool children at home. They also had higher average earnings and the largest gap between their earnings and their husband's. Taken together, all these characteristics appear to have provided these women with the conditions not only to attain a primary-earner status, but also to maintain it for a longer period.

		Primary-earner wives	
1999	Secondary-earner wives	All	Long-term <sup>1</sup>
		Years	
Median age	40	42	42
		%	
Education	100.0	100.0	100.0
High school or less	45.3	41.0	37.1 <sup>E</sup>
Postsecondary education <sup>2</sup>	54.7	59.0	62.9
Presence of preschool children	25.5	15.6	16.2 <sup>E</sup>
Work pattern			
Full-time	70.1	85.6	90.2
Average paid weekly hours	24.7	29.7	34.2
		\$	
Average earnings	20,000	35,000	39,500

1 Five or more years.

2 Degree, certificate or diploma.

Source: Statistics Canada, Survey of Labour and Income Dynamics, 1999 to 2003

### Full-time schedule associated with primary-earner wives

Another area with marked differences was work patterns. Almost 90% of primary-earner wives worked full time in 2003, compared with less than 75% of those who were secondary earners. The full-time rate for primary-earner husbands was the highest at 98%, while secondary earners had a full-time rate similar to primary-earner wives. Viewed another way, secondary-earner wives were by far the most likely to work part time, with almost 30% doing so in 2003 compared with only 12% of primary-earner wives. For both primary- and secondary-earner husbands, the rates have changed little since 1994. For wives in general, however, full-time rates have increased, thereby reducing differences in work patterns between primary- and secondary-earner wives (Table 1).

Similarly, primary-earner wives also worked more hours per week and had more years of experience than their secondary-earner counterparts.<sup>7</sup> Specifically, primary-earner wives worked on average 7 hours more a week (30 hours versus 23). As well, primary-earner wives had about 12 years of work experience in 2003, while secondary-earner wives had only 10 years. This is akin to the pattern a decade earlier when primary-earner wives worked 31 hours per week and had 10 years of experience, while secondary-earner wives worked 24 hours and had 8 years experience. Primary-earner husbands had the most paid weekly hours and years of experience in both 2003 (35 hours, 15 years) and 1994 (38 hours, 15 years).

The trends in work patterns associated with primary-earner wives (full-time work, more paid weekly hours, more years of work experience) may also be linked to added stress and the difficulty of maintaining a healthy

balance between paid work and family demands. People with the most demands on their time are under the most stress (Frederick 1995). Moreover, women dissatisfied with their work-life balance spent more time on the job than women who were satisfied (Frederick and Fast 2001). Also, professional and managerial women were less satisfied with their work-life balance and had higher odds of being time-crunched than other workers. Similarly, about two-thirds of full-time employed parents were dissatisfied with their work-life balance (Silver 2000). Both fathers and mothers attributed this dissatisfaction to not having enough time for their family and spending too much time on the job. Moreover, these dual-earner parents were often doing some form of household work (such as shopping, cleaning, or household maintenance) when they were with their children.

#### Data source and definitions

The **Survey of Labour and Income Dynamics (SLID)** is a longitudinal household survey that began in January 1993. Every three years some 15,000 households are added and surveyed annually for six years. The longitudinal portion of this study focused on people who entered the survey in 1999 (Panel 3) and responded consecutively for the next four years. This was the most recent panel for which three or more years of data were available.

**Earnings** refers to all wages and salaries or net income from self-employment. Net self-employment earnings can be negative. Employment Insurance benefits (including parental benefits), CPP disability benefits, and workers' compensation are not included, but employer-paid maternity leave and parental leave benefits are.

An **earner** receives a wage or salary as an employee or net income from self-employment during the reference year.

A **husband-wife family** includes all married and common-law couples with or without children or other relatives in the same household. It does not include same-sex couples.

**Dual earners** are husband-wife families in which both spouses reported employment income in the reference year.

**Primary-earner wives** earned at least one dollar more than their husband in the reference year.

**Primary-earner husbands** earned at least one dollar more than their wife in the reference year. They also include husbands who had earnings equal to their wife's (2% of all dual-earner couples).

**Family income** is the sum of incomes received by all family members: employment earnings, investment income, pensions, and government transfers.

#### Presence of children

The timing of family formation can affect the earnings of women (Drolet 2002).<sup>8</sup> A significant portion of opportunities for promotion and earnings growth occur early in one's career, a period that may often coincide with decisions related to marriage and family formation. Women who miss this stage because of child-raising will recover in terms of earnings only as their children grow older, or perhaps not at all.

Primary-earner wives were less likely than secondary-earner wives to have preschool-aged children at home. Indeed, only 15% of primary-earner wives had one or more preschoolers at home, compared with almost one-quarter of secondary-earner wives. This is consistent with primary-earner wives being older and having more work experience.

#### Income lower in families headed by primary-earner wives

In 2003, primary-earner wives earned about \$41,000, almost 30% less than primary-earner husbands (Table 2).<sup>9</sup> This pattern was consistent across all occupational groups. Average family incomes also lagged behind—\$74,000 compared with \$86,000 for families in which the husband was the primary earner (Chart C). The tax system narrowed some of this gap, resulting in after-tax incomes of \$61,000 and \$69,000 respectively.

**Chart C Primary-earner wives contributed less than primary-earner husbands to total family income**



1 Non-employment income and other family members' earnings  
Source: Statistics Canada. Survey of Labour and Income Dynamics, 2003

Primary-earner wives also contributed less to family income than primary-earner husbands. Employment earnings of primary-earner wives represented just over half of their family's income, while the earnings of primary-earner husbands corresponded to two-thirds. As well, the contribution of other family members' earnings and non-employment income played a greater role when the wife was the primary earner, accounting for 16% of family income, compared with only 7% in families with the husband as the primary earner.

### Most primary-earner wives have more than twice the earnings of their husbands

The amount by which a primary-earner wife outearns her husband can range from a little to a lot. If the couple's earnings are very close, the primary-earner status can shift more easily from one to the other than if the earnings are farther apart. In 2003, in nearly two-thirds of couples with a primary-earner wife, the wife earned more than twice as much as her husband.<sup>10</sup> Only about one-quarter of primary-earner wives earned less than 50% more than their husband (data not shown). However, the ratio of wives' earnings to husbands' earnings has remained relatively static (Table 3).

**Table 3 Ratio of earnings in dual-earner couples**

	1994	1997	2000	2003
<b>Primary-earner husband</b>				
% of dual-earner couples	72.3	73.3	73.2	71.4
Ratio of husband's to wife's earnings	2.6	2.6	2.6	2.6
<b>Primary-earner wife</b>				
% of dual-earner couples	27.7	26.7	26.8	28.6
Ratio of wife's to husband's earnings	1.9	1.9	1.9	1.9

Source: Statistics Canada, Survey of Labour and Income Dynamics

### Summary

Over the last four decades, the dramatic increase in dual-earner couples has been accompanied by an increase in wives as primary breadwinners. In nearly 1.4 million (29%) of the 4.7 million dual-earner couples in 2003, the wife was the primary breadwinner. These women tend to be older and more educated

than their secondary-earner counterparts. Many are more educated than their spouses. In line with their age and education, primary-earner wives are more frequently found in managerial and professional occupations. They are also more likely to have a full-time job, work more paid hours per week, and have more years of experience. All these characteristics are associated with higher earnings.

While most primary-earner wives had more than twice the earnings of their husbands in 2003, they did not match the earning power of primary-earner husbands. Moreover, the ratio of their earnings to their husbands' has on average remained relatively static since 1994. Their average family income also lagged behind that of families in which the husband was the primary breadwinner. Also, on average, primary-earner wives contributed less than primary-earner husbands to their family's total income.

Whether through intent or circumstance, primary breadwinner wives are likely to remain a significant part of Canada's labour force, a phenomenon that is likely to bring lasting changes to traditional gender roles, spending patterns, and household decision making.

### Perspectives

#### ■ Notes

1 The United States experienced a similar rise. According to the Current Population Survey, the proportion of dual-earner couples in which the wife earned more than the husband increased from 16% in 1981 to 23% in 1996 (Winkler 1998). The study was restricted to couples in which both spouses were aged 25 to 64; the self-employed were excluded.

2 It has been argued that the stable percentage of primary-earner wives, even during a strong economy, can be linked to structural changes in the labour market. For example, the presence of adult women aged 25 to 54 in the labour force has increased over time. Moreover, during the 1990s, the rapid growth of the information and communication technology sector drove the demand for more highly educated white-collar workers, while the slump in resources (mining and agriculture) and construction depressed growth for the less educated blue-collar workers. Government downsizing was also a factor during this period. However, labour market patterns since 2000 have proven to be the reverse of the 1990s, shifting from high-tech to housing construction (and real estate) and resources (mining), as well as reinvestment in public services, notably hospitals (Cross 2005).

3 Marital-role quality was determined using a list of 26 marital reward and 26 marital concern items. Subjects used a four-point scale (from 'not at all' to 'extremely') to indicate to what extent each of the items were currently rewarding or of concern. The reward items were weighted by 1 and the concern items by -1, and the weighted mean constituted the scale score. See Barnett et al. 1993 for more information and the complete list of role-quality measures.

4 The year 1994 was chosen for comparison since the previous study (Crompton and Geran 1995) looked at 1993.

5 Occupations were grouped. Managerial and professional: management occupations (group A in the Standard Occupational Classification); professional occupations in business and finance (B0); natural and applied sciences and related occupations (C); professional occupations in health, nurse supervisors and registered nurses (D0-D1); and occupations in social science, education, government service and religion (E). Financial, clerical and technical: financial, secretarial and administrative occupations (B1-B3); clerical occupations including supervisors (B4-B5); technical, assisting and related occupations in health (D2-D3); and occupations in art, culture, recreation and sport (F). Sales and service occupations (G). Construction, manufacturing and processing: trades, transport and equipment operators (H); occupations unique to primary industry (I); and occupations unique to processing, manufacturing and utilities (J).

6 To examine the earnings patterns of these couples over time, only couples who remained together for the entire five-year period were selected. In this way, the financial implications of marital dissolution would not be an issue. Moreover, couples had to maintain their dual-earner status for all five years. One million dual-earner couples in 1999 remained dual earners over the study period. In some 300,000 of them, the wife was the primary breadwinner.

7 This refers to years of work experience in full-year, full-time equivalents. Each year worked part time is counted as half a full-time year.

8 Drolet found that in 1998, the average hourly earnings of women who delayed having children were 17% higher than the earnings of those who had children early. Moreover, these women had an average of 1.7 more years of full-time, full-year work experience. Delaying children refers to postponing the birth of the first child at least one full year after the 'predicted' age for having children. Similarly, having children early refers to having children at least one full year before the predicted age for the birth of a first child. Predicted age is the average age for giving birth for the first time, taking into account education level, major field of study, urban size, and birth year of the mother.

9 Interestingly, secondary earners earned almost the same amounts: \$22,000 for wives, and \$21,000 for husbands. This implies that the difference in the average family income of the two family types was principally due to the earnings of the main breadwinner. The same was also true in 1994.

10 This high proportion is in part related to the inclusion of negative earners (the self-employed), and unemployed or retired persons who worked at some point during the year.

## ■ References

- Barnett, Rosalind C., Nancy L. Marshall, Stephen W. Raudenbush and Robert T. Brennan. 1993. "Gender and the relationship between job experiences and psychological distress: A study of dual-earner couples." *Journal of Personality and Social Psychology* 64, no. 5 (May): 794-806.
- Brennan, Robert T., Rosalind C. Barnett and Karen C. Gareis. 2001. "When she earns more than he does: A longitudinal study of dual-earner couples." *Journal of Marriage and Family* 63, no. 1 (February): 168-182.
- Commuri, Suraj and James W. Gentry. 2005. "Resource allocation in households with women as chief wage earners." *Journal of Consumer Research* 32, no. 2 (September): 185-195.
- Crompton, Susan and Leslie Geran. 1995. "Women as main wage-earners." *Perspectives on Labour and Income* (Statistics Canada, Catalogue no. 75-001-XPE) 7, no. 4 (Winter): 26-29.
- Cross, P. 2005. "Recent changes in the labour market." *Canadian Economic Observer* (Statistics Canada, Catalogue no. 11-010-XIB) 18, no. 3 (March): 3.1-3.10.
- Drolet, Marie. 2002. "Wives, mothers and wages: Does timing matter?" Analytical Studies Branch Research Paper Series, no. 186. Catalogue no. 11F0019MIE2002186. Ottawa: Statistics Canada.
- Fix, Janet L. 1994. "Partners on the green: More couples see earnings power shift." *USA Today*. October 17. Money section.
- Frederick, Judith A. 1995. *As time goes by... : Time use of Canadians*. Catalogue no. 89-544-XPE. Ottawa: Statistics Canada.
- Frederick, Judith A. and Janet E. Fast. 2001. "Enjoying work: An effective strategy in the struggle to juggle?" *Canadian Social Trends* (Statistics Canada, Catalogue no. 11-008-XIE) 61 (Summer): 8-11.

Heckert, D. Alex, Thomas C. Nowak and Kay A. Snyder. 1998. "The impact of husbands' and wives' relative earnings on marital disruption." *Journal of Marriage and Family* 69, no. 3 (August): 690-703.

Hughes, Karen D. 1995. "Women in non-traditional occupations." *Perspectives on Labour and Income* (Statistics Canada, Catalogue no. 75-001-XPE) 7, no. 3 (Autumn): 14-19.

Palameta, Boris. 2003. "Who pays for domestic help?" *Perspectives on Labour and Income* (Statistics Canada, Catalogue no. 75-001-XPE) 15, no. 3 (Autumn): 39-42.

Silver, Cynthia. 2000. "Being there: The time dual-earner couples spend with their children." *Canadian Social Trends* (Statistics Canada, Catalogue no. 11-008-X1E) 57 (Summer): 26-29.

Tichenor, Veronica Jaris. 1999. "Status and income as gendered resources: The case of marital power." *Journal of Marriage and Family* 61, no. 3 (August): 638-650.

Winkler, Anne E. 1998. "Earnings of husbands and wives in dual-earner families." *Monthly Labor Review* 121, no. 4: 42-48.

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### **Perspectives on Labour and Income**

*The quarterly for labour market and income information*

# Education and earnings

Lucy Chung

**B**etween 1980 and 2000, and particularly the latter half of the 1990s, the earnings gap widened between young workers who were less-educated and those who were well-educated. Several explanations have been suggested. Some research attributes the gap to skill-biased technological change, whereby workplaces supplanted manual labour with newer technology and processes requiring more skilled and better educated workers. The subsequent demand resulted in higher wages for such workers and hence increased returns to education. Other explanations include the growth of international trade (Wood 1994) and institutional changes such as the de-unionization of workplaces (Dinardo and Lemieux 1997).

In a global economy, industries that do not require a highly skilled, highly educated workforce search the world for cheap labour, often finding it in developing countries such as China, India or Mexico. This leaves Canadian workers with no postsecondary education facing significant uncertainty. Moreover, as the economy becomes more dependent on those with high levels of education, it is expected that the education wage premium will increase and the earnings gap between university and high school graduates will widen.

Recently, however, hot commodity and housing markets, as well as increased consumer spending since 2000, have led to a change in the industries and occupations with the most job growth. The frontrunners have been mining and oil and gas extraction, construction, and real estate, with increases of 17%, 18% and 10% respectively between 2000 and 2004 (Cross 2005). The retail sector also saw strong employment growth.

Although both blue-collar and white-collar jobs have become more plentiful since 2000, the most substantial growth occurred in positions not requiring post-

secondary education, such as retail sales and clerical for white-collar, and construction and mining for blue-collar. Such jobs generally employ a larger proportion of young, less-educated workers.

The favourable conditions in these industries and occupations in recent years raise the question as to what extent the wages of young, less-educated workers have recovered, if at all, since 2000 as a result of strong employment growth in lower-skilled jobs. This study aims to answer this question by comparing employment rates, the education gap, and the changing demand for less-educated and well-educated workers between 1980 and 2005 (see *Data sources and definitions*). Young workers refers to those aged 25 to 34 while older workers are 35 to 54.

## Education levels still rising

In 1980, individuals without a high school diploma represented roughly one-third of young workers, and half of older workers (Table 1). However, from 1980 to 2000, the proportion of young workers without a

**Table 1 Distribution of employees by educational attainment and age group**

	Census		LFS	
	1980	2000	2000	2005
	%			
<b>25 to 34</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>
Some high school or less	29	16	12	9
High school diploma	17	13	20	18
Some postsecondary	40	48	44	46
University degree	14	24	24	27
<b>35 to 54</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>
Some high school or less	47	22	18	13
High school diploma	11	16	22	22
Some postsecondary	33	44	41	43
University degree	10	19	19	22

Sources: Statistics Canada, Census of Population; Labour Force Survey, January and July

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### Data sources and definitions

This study uses census data from 1980, 1985, 1990, 1995 and 2000. The **Census**, which is taken every five years, is the only available source that provides consistent information on education level over the 20-year period in question. Since census data for 2005 are not yet available, the **Labour Force Survey** (LFS) was used to analyze changes in the labour market between 2000 and 2005. January and July data for each year were used.

The population is restricted to individuals aged 25 to 54 living in private households, and excludes full-time students, those living in the territories, unpaid family workers, and those working in the Armed Forces. Workers 55 and over were excluded since their performance in the labour market

may be affected by early retirement decisions. As well, other studies (Morissette and Johnson 2004; Morissette, Ostrovsky, and Picot 2004) have used this age cutoff, thus facilitating comparison with this study. The sample size for 2000 using the LFS was 110,668, representing 13.4 million Canadians. For 2005 the sample size was 53,114, representing 13.8 million.

**Educational attainment** is divided into four categories: some high school or less, high school diploma, some postsecondary, and university degree. **Real weekly earnings** are defined as annual earnings in 2004 dollars divided by the number of weeks actually worked.

diploma fell 13 percentage points, compared with 25 points for the older group. Meanwhile, the proportion with a university degree increased about 10 points for both groups. During the first five years of this decade the trend continued, with both age groups experiencing a 3-to-5-point reduction in their share of workers without a high school diploma and a 3-point rise in their share of university graduates. Clearly then, the educational landscape has changed over the last 25 years so that now a quarter of 25 to 34 year-olds and a fifth of 35 to 54 year-olds are university graduates, while the proportion without a high school diploma has dropped below 15%. If demand for less- and well-educated workers were constant, one would expect these changes in supply to have a positive effect on the employment and earnings of less-educated workers while negatively affecting those of the well-educated.

### Falling employment rates for men throughout the 1980s and 1990s

The moderate increase in the overall employment rate for workers from 1980 to 2000 masks underlying differences by sex, age and edu-

**Table 2 Employment rates by sex, age, and educational attainment**

	Census			LFS		
	1980	1990	2000	2000	2003	2005
	%					
<b>All employees</b>	<b>73.8</b>	<b>77.5</b>	<b>79.7</b>	<b>79.7</b>	<b>80.4</b>	<b>81.0</b>
<b>Men</b>	<b>87.7</b>	<b>84.5</b>	<b>84.6</b>	<b>85.5</b>	<b>84.8</b>	<b>85.1</b>
<b>25 to 34</b>	90.8	85.3	86.9	88.8	87.7	88.3
Some high school or less	84.1	74.9	74.6	75.0	76.6	76.5
High school diploma	92.0	85.9	85.3	89.0	85.8	88.7
Some postsecondary	92.9	88.5	89.6	91.0	89.8	90.0
University degree	96.2	93.4	92.5	92.7	90.8	90.2
<b>35 to 54</b>	90.6	86.8	86.0	88.7	87.8	88.4
Some high school or less	85.7	77.9	75.3	80.1	77.3	79.1
High school diploma	92.1	88.1	86.9	89.2	87.7	88.5
Some postsecondary	93.9	89.5	88.6	90.4	90.2	89.9
University degree	97.1	94.6	92.2	92.7	91.1	91.7
<b>Women</b>	<b>60.2</b>	<b>70.7</b>	<b>75.0</b>	<b>73.9</b>	<b>75.9</b>	<b>76.8</b>
<b>25 to 34</b>	60.8	71.1	75.8	75.7	77.3	78.2
Some high school or less	46.1	52.4	52.0	46.8	48.8	49.0
High school diploma	57.8	68.6	67.4	70.9	69.3	72.0
Some postsecondary	68.1	76.7	79.2	79.0	81.6	81.0
University degree	79.9	85.5	86.0	84.9	83.1	84.8
<b>35 to 54</b>	56.8	70.9	75.7	75.0	77.1	77.9
Some high school or less	47.5	55.7	58.9	56.8	59.4	57.6
High school diploma	58.5	71.8	74.4	74.0	75.5	75.9
Some postsecondary	67.3	78.0	80.3	79.2	81.2	81.5
University degree	76.6	85.2	85.0	83.8	82.1	83.8

Sources: Statistics Canada, Census of Population; Labour Force Survey, January and July

cation. For example, while the increased participation of women in the labour market produced an enormous growth in their employment rate (15 percentage points), the employment rate for men fell by 3 points (Table 2).<sup>1</sup> Most of the drop for men occurred between 1980 and 1990, coinciding with the deepest and longest recession in the economy since the

Second World War. The decrease was seen for men in all age and education groups, but especially those without a high school diploma.<sup>2</sup>

Employment rates for those with a high school diploma or less were consistently lower than those of university graduates throughout the 1980-to-2000 period. The gap increased during these years, with employment rates declining more for less-educated men than for well-educated men in each age category. During the past five years, however, the trend has reversed. Rather than continuing to decline, employment rates among workers with less education remained relatively stable, while their university-educated counterparts witnessed only slight decreases in each age category.

Among young men, high school graduates found that their chances of being employed remained virtually unchanged, while university graduates saw their employment rate drop by 2.5 percentage points. During the 2000-to-2005 period, employment rates generally did not improve for men but continued to increase for women. The expectation that more blue-collar jobs would spur a rise in the proportion of less-educated men employed did not materialize. Only young men who had not completed high school saw their employment rate rise (from 75.0% in 2000 to 76.5% in 2005).

Employment rates of young, less-educated women rose slightly during the 2000-to-2005 period, with a 2.2 percentage point increase registered for those who did not finish high school. This could reflect the growth in retail sales and clerical jobs (Cross 2005). Employment rates for women university graduates remained fairly constant.

Possibly, the employment rates of less-educated men would have continued to decline had it not been for the rise in blue-collar jobs in mining, oil and gas extraction, construction, and real estate—

especially as the share of jobs in manufacturing continued its long-term trend of decline, from 19% in 1980 to 13% as of December 2005.<sup>3</sup>

### Decomposition of employment

For analytic purposes, employment is often split into full-time paid, part-time paid, and self-employment. For the 1980-to-2000 period, full-time employment rates declined for men, regardless of their age or educational attainment. Between 2000 and 2005, decline in the full-time rate for men continued, but young workers with a university degree were responsible for most of it (Table 3). The overall employment rate for the well-educated group dropped 2.5 percentage points, as did their full-time employment rate (from 78.2% to 75.7%). And although the overall employment rate for young men with a high school diploma did not increase, examining the differences by employ-

**Table 3 Full-time paid employment rates by sex, age, and educational attainment**

	Census			LFS		
	1980	1990	2000	2000	2003	2005
	%					
<b>All employees</b>	<b>56.5</b>	<b>59.1</b>	<b>59.3</b>	<b>58.8</b>	<b>59.9</b>	<b>60.4</b>
<b>Men</b>	<b>71.4</b>	<b>68.5</b>	<b>66.8</b>	<b>66.2</b>	<b>66.2</b>	<b>66.3</b>
<b>25 to 34</b>	76.9	72.5	73.2	73.9	73.4	74.5
Some high school or less	68.5	61.6	60.5	59.7	61.2	62.9
High school diploma	78.5	72.6	70.4	72.1	71.9	74.6
Some postsecondary	80.1	76.2	76.1	76.8	75.4	76.5
University degree	82.1	80.2	79.4	78.2	76.7	75.7
<b>35 to 54</b>	72.0	69.3	67.6	67.0	67.3	67.1
Some high school or less	65.8	60.3	57.3	58.2	58.5	57.6
High school diploma	75.3	72.0	69.2	69.2	68.7	67.5
Some postsecondary	76.0	72.6	70.8	69.5	69.8	69.5
University degree	79.3	74.5	71.3	67.5	67.4	68.2
<b>Women</b>	<b>41.7</b>	<b>49.9</b>	<b>52.0</b>	<b>51.3</b>	<b>53.5</b>	<b>54.5</b>
<b>25 to 34</b>	43.9	52.4	56.0	56.4	59.5	59.9
Some high school or less	31.1	35.3	33.7	32.1	31.9	33.4
High school diploma	42.3	49.6	46.1	51.7	51.0	53.1
Some postsecondary	48.7	56.9	57.6	57.4	62.1	60.8
University degree	63.2	68.3	69.5	67.8	67.9	68.9
<b>35 to 54</b>	35.9	48.6	52.5	51.4	53.7	55.0
Some high school or less	29.4	37.1	39.5	37.0	40.3	40.2
High school diploma	37.5	50.2	51.8	52.0	53.0	53.5
Some postsecondary	41.9	52.9	55.4	54.2	56.0	57.5
University degree	55.7	61.6	61.2	57.8	58.7	59.6

Sources: Statistics Canada, Census of Population; Labour Force Survey, January and July

Table 4 Change in weekly earnings

	Overall				Full-time			
	Median		Average		Median		Average	
	1980-2000	2000-2005	1980-2000	2000-2005	1980-2000	2000-2005	1980-2000	2000-2005
<b>All employees</b>	<b>-1.2</b>	<b>-1.0</b>	<b>4.1</b>	<b>1.7</b>	% change			
					<b>-0.3</b>	<b>0.1</b>	<b>5.3</b>	<b>1.7</b>
<b>Men</b>	<b>-6.5</b>	<b>-0.6</b>	<b>1.2</b>	<b>0.2</b>	<b>-5.8</b>	<b>-1.3</b>	<b>3.1</b>	<b>0.4</b>
<b>25 to 34</b>	-16.9	0.9	-10.6	2.5	-15.7	1.9	-9.5	2.7
Some high school or less	-22.9	4.4	-21.1	7.8	-21.7	3.8	-20.3	8.1
High school diploma	-24.9	1.1	-21.0	5.2	-23.6	3.0	-19.8	5.1
Some postsecondary	-19.0	1.4	-14.5	2.6	-17.6	1.5	-13.6	2.7
University degree	-9.3	-1.3	0.3	-2.8	-8.0	0.9	1.2	-2.3
<b>35 to 54</b>	-6.8	-1.8	-0.4	-0.6	-5.7	-2.3	0.8	-0.5
Some high school or less	-14.0	-0.8	-10.6	0.6	-12.8	-1.2	-9.6	0.3
High school diploma	-16.9	-5.3	-15.7	-1.8	-15.1	-5.8	-14.4	-1.6
Some postsecondary	-10.5	-2.8	-5.6	-1.3	-9.8	-2.1	-4.6	-1.2
University degree	-11.4	-2.7	0.0	-3.9	-10.1	-4.4	1.9	-3.8
<b>Women</b>	<b>12.6</b>	<b>4.1</b>	<b>18.1</b>	<b>4.8</b>	<b>14.2</b>	<b>2.0</b>	<b>19.1</b>	<b>4.5</b>
<b>25 to 34</b>	0.8	3.5	5.3	5.3	-0.4	2.2	4.3	4.5
Some high school or less	-17.0	-1.8	-7.6	-1.6	-15.3	-0.9	-8.0	1.0
High school diploma	-20.2	0.4	-10.2	2.0	-15.2	-0.9	-9.4	0.5
Some postsecondary	-10.0	5.1	-4.4	5.1	-9.7	2.2	-5.4	3.8
University degree	-6.8	-0.6	0.5	2.4	-6.7	1.7	-1.1	2.7
<b>35 to 54</b>	17.2	3.5	22.8	5.4	16.3	3.6	19.1	4.6
Some high school or less	-1.5	2.1	5.9	5.5	-0.8	1.8	4.3	4.0
High school diploma	3.2	0.4	8.2	3.3	3.9	0.6	4.2	3.8
Some postsecondary	5.7	1.6	10.5	3.5	2.6	1.2	6.8	2.2
University degree	-4.5	-2.8	4.9	-0.1	-5.4	-4.8	2.5	-0.2

Sources: Statistics Canada, Census of Population, 1980 to 2000; Labour Force Survey, January and July 2000 to 2005

ment type indicates that full-time paid employment for this group went up 2.5 percentage points, but was offset by a decrease in self-employment (data not shown).

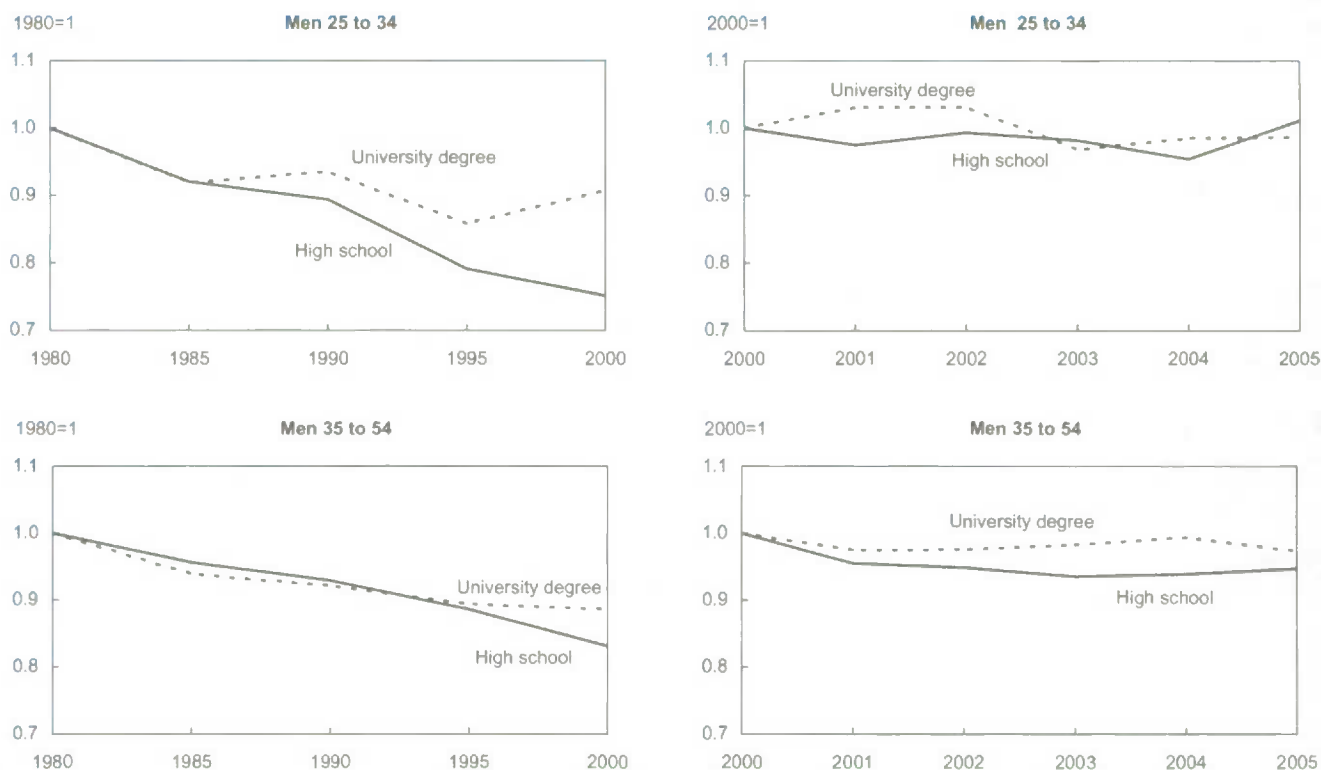
Between 1980 and 2000, full-time employment rates for women rose by at least 10 percentage points. This increase was more pronounced for the older age group where the rate increased almost 17%. Although full-time employment rates increased at all education levels, the rise was more pronounced among young, well-educated women than among those with less education. The older group saw increases at all education levels. Between 2000 and 2005, the full-time employment rate for women continued to climb for both age groups and for every level of education.

Given that full-time paid employment rates have risen slightly since 2000 for the young and less-educated, regardless of sex, it is interesting to see how the

increase and the concomitant shift to blue-collar and non-management white-collar jobs have affected their earnings.

### Education-earnings gap

On the whole, the constant-dollar median weekly earnings of paid workers have seen little change in the past 25 years (Table 4).<sup>4</sup> However, it is possible to find certain differences when examining earnings by age, sex and educational attainment. For example, between 1980 and 2000, men's median weekly earnings dropped by 7% while women's grew by 13%. In the last five years, median earnings have remained relatively constant for men while continuing to rise for women (4%). Average weekly earnings showed similar patterns.

**Chart A Median real weekly wages of men**

Sources: Statistics Canada, Census of Population, 1980 to 2000; Labour Force Survey, January and July 2000 to 2005

The increase in women's earnings between 1980 and 2000 was concentrated among older women, who saw their average real weekly earnings rise by 23%, compared with 5% for younger women. Older men also fared better than their younger counterparts over this period, their average weekly earnings remaining relatively constant while those of young men fell 11%.<sup>5</sup> Young male workers definitely bore the brunt of negative labour market changes in the 1980s and 1990s. Indeed, previous research has shown that between 1980 and 2000, real weekly earnings of young male high school graduates employed in the private sector fell 20% (Morissette, Ostrovsky and Picot, 2004).

High school graduates in both age groups saw their earnings fall in relation to those with a university degree over this period (except for older women). For instance, average weekly earnings of young male high school graduates fell 21% between 1980 and 2000,

while their university-educated counterparts saw a slight increase of 0.3%. As a result, the wage gap between young workers with university and high school credentials rose over the period (Charts A and B).

Over the last five years, however, earnings trends have changed somewhat. In the case of younger men, the trend has reversed. Between 2000 and 2005, the average weekly earnings of young male employees with a high school diploma rose by 5% while dropping 3% for those with a university degree. Even though the earnings gap between university-educated workers and those with a high school diploma remains large, these recent movements have somewhat narrowed the gap.

### Earnings effects of bust and boom

In an increasingly knowledge-based economy such as Canada's, the recent drop in real earnings among men with a university degree has been unexpected.

**Chart B Median real weekly wages of women**

Sources: Statistics Canada, Census of Population, 1980 to 2000; Labour Force Survey, January and July 2000 to 2005

However, while many lost their jobs in the high-tech bust of 2001, others have found work in the flourishing oil and gas, mining and construction industries. In fact, the oil boom led to a 43% growth in employment in the oil and gas sector between 2000 and 2004 (Cross 2005). Construction was also booming over this period (26%), while overall employment growth from 2000 to 2005 was less than 10%.

In order to determine the extent to which the high-tech meltdown was a cause of the decline in earnings of men with a university degree over the past five years, the computer and telecommunications (CT) sector was excluded from the calculation of weekly earnings (Table 5).<sup>6</sup> With this sector excluded, the average weekly earnings of young men fell by less than 1%, compared with 2.8% when it was included. For older men, median and average weekly earnings either

remained relatively constant or dropped even more when the CT sector was excluded. Wage changes in the CT sector therefore did not explain the drop in weekly earnings for this group of workers.

Employment growth in mining and oil and gas extraction, construction, and real estate likely contributed to the increase in weekly earnings for employees with high school education.<sup>7</sup> Excluding these sectors should therefore lessen the increase, and indeed this is true for certain groups of workers. All sectors included, young men with a high school diploma saw their average weekly earnings increase by 5.2% from 2000 to 2005. With the high-growth sectors excluded, their real earnings increased only 3.2%. For young men without a high school diploma, including all sectors showed an average weekly earnings gain of 7.8%. When mining and oil and gas extraction, construction,

**Table 5 Change in weekly earnings, 2000 to 2005**

	Excluding computer and telecommunications sector				Excluding mining, oil and gas, construction, and real estate			
	Overall		Full-time		Overall		Full-time	
	Median	Average	Median	Average	Median	Average	Median	Average
	% change							
<b>All employees</b>	<b>0.3</b>	<b>2.0</b>	<b>1.5</b>	<b>1.9</b>	<b>-0.2</b>	<b>1.4</b>	<b>0.6</b>	<b>1.4</b>
<b>Men</b>	<b>-0.9</b>	<b>0.5</b>	<b>-1.6</b>	<b>0.7</b>	<b>-1.1</b>	<b>-0.2</b>	<b>-1.6</b>	<b>0.1</b>
<b>25 to 34</b>	1.6	3.5	1.3	3.7	0.1	1.5	0.7	1.7
Some high school or less	4.2	7.8	3.8	8.1	3.4	3.6	4.3	4.2
High school diploma	1.1	5.0	4.1	4.9	-0.2	3.2	0.4	3.0
Some postsecondary	0.1	3.1	0.7	3.2	0.3	2.2	1.4	2.4
University degree	0.4	-0.7	-1.0	-0.2	-1.9	-3.2	-0.1	-2.7
<b>35 to 54</b>	-3.5	-0.4	-2.3	-0.4	-3.5	-0.9	-2.7	-0.8
Some high school or less	-1.0	0.5	-1.2	0.2	-3.1	-0.3	-2.4	-0.4
High school diploma	-5.3	-1.7	-5.8	-1.6	-4.8	-2.3	-5.6	-2.1
Some postsecondary	-2.8	-1.3	-3.1	-1.1	-2.4	-1.6	-2.8	-1.4
University degree	-5.5	-3.7	-2.7	-3.5	-2.7	-4.0	-3.5	-4.0
<b>Women</b>	<b>4.4</b>	<b>5.0</b>	<b>3.5</b>	<b>4.6</b>	<b>3.8</b>	<b>4.7</b>	<b>2.0</b>	<b>4.5</b>
<b>25 to 34</b>	5.5	5.8	2.6	4.7	3.0	5.1	2.2	4.3
Some high school or less	-1.8	-1.9	-0.9	0.6	-0.5	-1.4	-0.9	0.9
High school diploma	0.4	2.6	-0.6	0.8	0.4	1.9	-0.9	0.2
Some postsecondary	6.3	5.4	3.0	4.1	4.6	4.6	2.2	3.4
University degree	0.3	2.9	2.9	2.8	-0.6	2.4	1.7	2.6
<b>35 to 54</b>	2.8	5.3	4.2	4.5	4.0	5.3	3.4	4.5
Some high school or less	1.0	5.4	1.6	3.8	1.1	5.2	1.3	3.6
High school diploma	0.1	3.4	1.8	4.0	0.4	3.2	1.2	3.6
Some postsecondary	1.8	3.6	1.9	2.3	2.0	3.5	1.0	2.4
University degree	-3.9	-0.5	-5.1	-0.7	-2.3	-0.2	-5.1	-0.3

Source: Statistics Canada, Labour Force Survey, January and July

and real estate were excluded, the rise was only 3.6%. For women, the high employment growth sectors had little effect on the earnings of those with a high school diploma or less.

It appears then that the CT sector explains a portion of the decrease in the average weekly earnings of young university-educated male workers but not those of their older counterparts. In addition, the sectors with high employment growth during the last five years contributed to the increase in earnings among young male employees with a high school diploma or less, but

had little effect on their older counterparts or women with the same education.

### Summary

Over the last 25 years, technological advancement has increased the need for highly educated workers. In 2005, 72% of Canadians aged 25 to 34 had some type of post-secondary education, compared with 54% in 1980.

Employment rates also changed over the period. Women, regardless of education level, saw their employment rates increase as more

of them moved into the labour market. For men, however, rates decreased. Between 1980 and 2000, the decline was more pronounced for men with lower levels of education.

As a result of strong commodity and real estate markets, the past five years have seen a change from white-collar to blue-collar jobs, where young people with less education are mainly employed. Although this change does not appear to have boosted the employment rate of young, less-educated men, it may have mitigated any further downward

pressure on their employment rates. However, when employment rates are examined separately for full-time, part-time and self-employment, full-time employment of less-educated workers did rise over the last five years but was offset by a drop in self-employment.

Coinciding with the recent movement toward blue-collar jobs, average real earnings have increased more for young, less-educated men than for any other group. (Men with a university degree actually saw their decline.) Nevertheless, the real earnings of these men are still below their 1980 levels, and the gap between them and their university-educated counterparts is still large. Moreover, earnings growth among less-educated workers is not expected to be sustainable since the recent increases appear to be a result of short-term fluctuations in demand, mainly due to the boom in oil and gas, mining and construction.

### Perspectives

#### ■ Notes

- 1 Estimates for workers aged 15 to 24 are not presented because of small sample sizes.
- 2 The decline in employment rates does not reflect an absolute decline in employment but rather a decline relative to the growth in population.
- 3 The recent drop in male workers with a university degree could be attributed to the high-tech bust in 2001. The next year, employment in the computer and telecommunications sector fell by 10% and the unemployment rate jumped from 3.9% to 6.6%.
- 4 Overall median weekly earnings in 2005 were \$640; average weekly earnings were \$715.
- 5 The patterns are much the same for full-time employees (Table 3).
- 6 The CT sector includes the following NAICS (North American Industry Classification System) industries: commercial and service industry machinery manufacturing (3333), computer and peripheral equipment manufacturing (3341), communications equipment manufacturing (3342), audio and video equipment manufacturing (3343), semiconductor and other electronic components manufacturing (3344), navigational, measuring, medical and control instruments manufacturing (3345), computer and communications equipment and supplies wholesaler-distributors (4173), software publishers (5112), telecommunications (5133), data processing services (5142), computer systems design and related services (5415), electronic and precision equipment repair and maintenance (8112).
- 7 These high-growth sectors include the following NAICS industries: oil and gas extraction (2111), support activities for mining, and oil and gas extraction (2131), construction (23), real estate and rental and leasing (53).

#### ■ References

- Cross, Philip. 2005. "Recent changes in the labour market." *Canadian Economic Observer* (Statistics Canada, catalogue no. 11-010) 18, no. 3 (March) 3.1-3.10.
- Dinardo, John and Thomas Lemieux. 1997. "Diverging male wage inequality in the United States and Canada, 1981-1988: Do institutions explain the difference?" *Industrial and Labor Relations Review* 50, no. 4 (July): 629-651.
- Morissette, René and Anick Johnson. 2004. *Are Good Jobs Disappearing in Canada?* Analytical Studies Branch Research Paper Series, no. 239. Catalogue no. 11-F0019-MIE2004239. Ottawa: Statistics Canada.
- Morissette, René, Yuri Ostrovsky and Garnett Picot. 2004. *Relative Wage Patterns among the Highly Educated in a Knowledge-based Economy.* Analytical Studies Branch Research Paper Series, no. 232. Catalogue no. 11-F0019-MIE2004232. Ottawa: Statistics Canada.
- Wood, Adrian. 1994. *North-South Trade, Employment and Inequality: Changing Fortunes in a Skill-driven World.* Oxford: Clarendon Press.

# Is the workplace becoming safer?

*F. Curtis Breslin, Peter Smith, Mieke Koehoorn and Hyunmi Lee*

**J**obs in Canada are increasingly characterized by brain power rather than brawn. Despite the recent resurgence in some 'blue-collar' sectors (notably construction, oil and gas), the long-term shift has been away from resource and manufacturing industries to service-producing industries. Moreover, with an increasingly educated workforce, the structure and activities of many jobs are changing within sectors. Over the course of the 1990s, for example, the proportion of employees using computers on the job doubled from 30% to 60% (Marshall 2001). Have such changes resulted in fewer injuries on the job?

For more than a decade, compensation claims for lost work days have generally declined in North America and Europe. Over a six-year period in the 1990s, lost-time claim rates declined in Ontario by 28.8% (Mustard et al. 2003). Similar declines were seen elsewhere for claims related to specific conditions such as low-back pain and upper-extremity disorders (Silverstein et al. 1998; Murphy and Volinn 1999). Even though the declines are encouraging, the rate of decrease may not be uniform for all workers (Silverstein et al. 1998; Ostry 2000; Smith and Mustard 2004). For example, over a nine-year period, the proportion of women submitting claims for certain hand/wrist and elbow disorders more than doubled (Silverstein et al. 1998).

Workplace injuries among young workers aged 15 to 24 are of particular interest. Numerous U.S. and Canadian studies have shown youths to be at higher risk for work injuries than older workers. However, whether youths show a different relative risk for work injury between jurisdictions and how that risk changes over time has yet to be systematically examined. Initiatives such as media campaigns have been implemented in Canada and the U.S. to increase young workers' awareness of work safety (WorkSmartOntario 2006;

LOHP 1998). Differences in the scope and effectiveness of these initiatives may also lead to varying rates of decline for workers of different ages.

Although Canada may continue to become less reliant on jobs in the goods-producing sector, which has traditionally had higher injury rates, regional differences in economic structure and industry mean that dissimilar injury claim rates are likely to persist.

Using the Labour Force Survey to estimate the working population as well as work injury data from Ontario's Workplace Safety and Insurance Board and British Columbia's WorkSafeBC, this article examines injury claim rates to determine whether the two provinces show comparable claim trends over time; whether the injury risk differs by industry, sex or age; and whether injury rates changed between 1990 and 2001 (see *Data sources and definitions*).

## Work injury claim rates generally declining

Overall, between 1990 and 2001, work injury rates declined in both British Columbia and Ontario (Chart). These findings are generally consistent with previous North American and European studies. In Ontario, the decline was 4.6% per year (from 5.2 to 2.5 per 100 full-time equivalents) and in British Columbia, 3.0% per year (from 6.1 to 4.1). The absolute decline was somewhat larger in the early 1990s than in the latter half of the decade, especially in Ontario. Possible reasons for the slowing in the rate of decline could be related to changes in occupational health and safety enforcement, a slowing of 'de-industrialization' (the movement away from the primary and manufacturing sectors to more service-oriented jobs), as well as changes in the process for determining insurance premiums (for example, experience rating programs) and improvements in technology and equipment. These, coupled with the reductions not being predominantly due to changes in claim reporting practices (Mustard et al. 2003), support the notion that an important reduction in injury risk has occurred in the two provinces.

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## Data sources and definitions

### Ontario claims

Ontario's Workplace Safety and Insurance Board (WSIB) is the single payer workers' compensation insurance authority in Ontario and covers approximately 65% to 70% of labour force participants (AWCBC 2005). The remaining 30% to 35% include the self-employed, domestic workers, federal government workers,<sup>1</sup> the majority of the finance industry, and workers associated with interprovincial commerce. The WSIB requires lost-time claims to be submitted for any injury occurring during paid employment that results in an absence from regular work following the day of the accident, loss of wages/earnings, or a permanent disability/impairment.

Between 1990 and 2001, 1.5 million short-term and long-term disability claims were submitted to the WSIB. Records with no age, sex or industry were removed. Almost 33,000 claims (2%) were missing information on industry, and 270,000 (18%) were from industries with partial or complete voluntary coverage. These claims were removed since the workforce insured in these industries cannot be estimated. In addition, 11,000 claims (1%) had missing information on age or sex. This left a total of 1.2 million lost-time claims.

Each lost-time claim included injury date, sex, age at time of injury, and industry. The industry was coded to the Standard Industrial Classification 1980 (Statistics Canada 1986). Workplaces were grouped into two categories: goods and services. Goods-producing industries comprised agriculture, fishing, forestry, mining and oil, manufacturing, and construction. Service industries comprised transportation; communication; trade; finance and insurance; real estate; business services; government services; education; health and social services; and accommodation, food and beverages.

### British Columbia claims

WorkSafeBC insures approximately 90% of workers in British Columbia. The remaining 10% include certain government employees (AWCBC 2005). WorkSafeBC defines a lost-time claim as an injury that "disables a worker from earning full wages at the work at which the worker was employed." (Section 5(2) of the British Columbia Workers' Compensation Act). It goes on to say that compensation is payable from the first working day following the day of the injury, while a health-care benefit only is payable for day of the injury.

Between 1990 and 2001, 908,000 short-term and long-term lost-time claims were reported to WorkSafeBC. Of these, 4,000 (0.5%) had industry code problems. An additional 22,000 (2.4%) were missing information on age or sex, leaving almost 900,000 lost-time claims. Although the coding system used is based on the Standard Industrial Classification System 1980 (SIC80), it has been modified to include specific industry groups that are more prevalent in B.C. (e.g., classification unit 703016 – *tree planting or cone picking* is not specifically included in the SIC80, but rather is under 0511 – *other forestry services*). However, these additions did not affect the allocation of each claim under the broad category of goods or services. A full description of the allocation procedures used is available from the authors.

### Denominators

Denominators for lost-time claims were estimated using Statistics Canada's **Labour Force Survey** (LFS). The LFS is a monthly survey that uses a rotating panel design (respondents remain in the panel for six months) to estimate month-to-month changes in Canadian labour force participation among the civilian, non-institutionalized population aged 15 and older. The survey collects information on both employment status and hours worked.

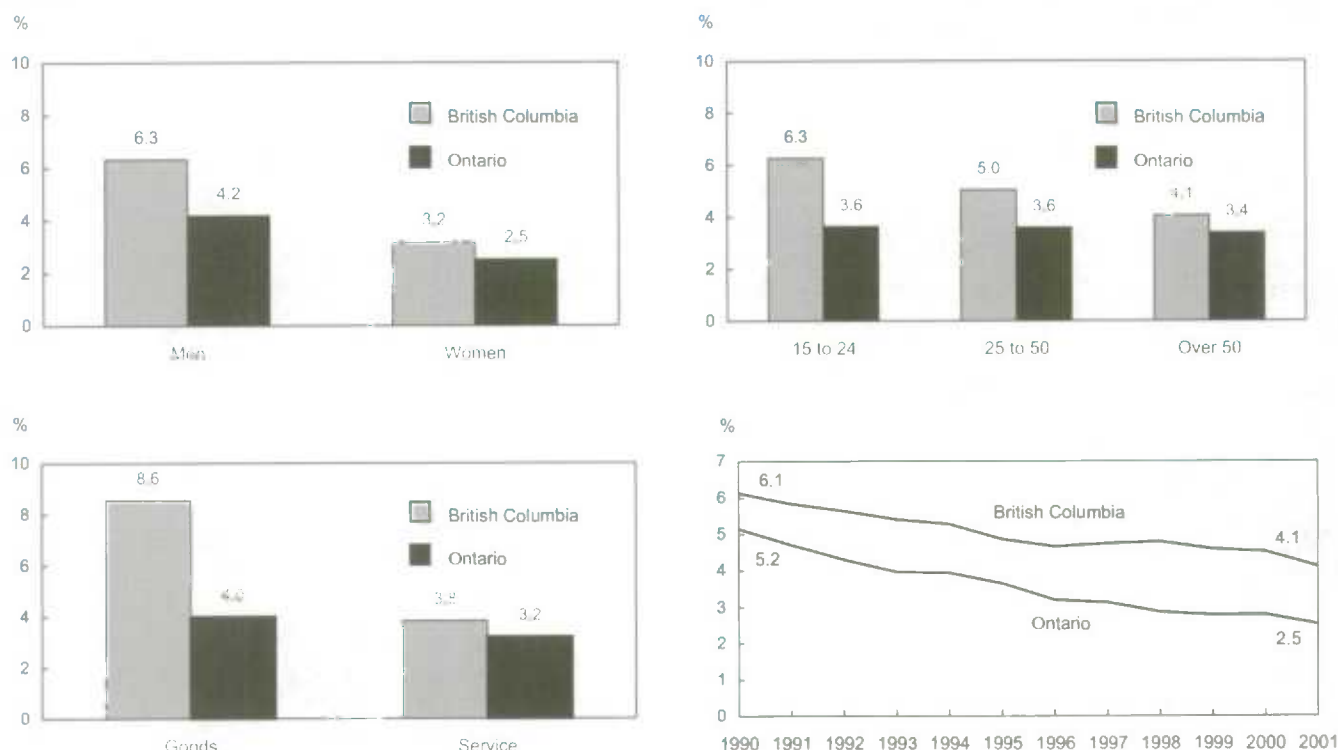
Federal government employees and the self-employed were not included in the denominator for either Ontario or British Columbia. Denominator estimates for Ontario were further adjusted to represent differing insurance coverage across industry groups. Methods for this adjustment have been more extensively described elsewhere (Smith, Mustard and Payne 2004).

Given the notable difference in missing industry codes between Ontario and British Columbia (2% versus 0.2% of claims), a sensitivity analysis was performed to determine whether adding these claims (which did contain information on age and sex) would substantially alter claim rates. That is, it was assumed that all claims missing industry data in Ontario were from workplaces with mandatory coverage. Including these in the calculation of age-sex rates did not substantively alter any of the conclusions in this paper.

Unadjusted rates of lost-time claims per 100 full-time equivalents (FTEs) per year were calculated by each age, sex, and industry combination. A **full-time equivalent** employee was estimated to represent 2,000 hours worked per year. Adjusted claim rates were calculated using direct standardization methods (Hennekens and Buring 1987). This method corrects crude injury rates to account for, in the case of this analysis, differences between Ontario and British Columbia in industry, age, and male-female composition of the labour force. That is, the rate of injury for male labour force participants, as presented in Table 2, is the rate expected if male workers in Ontario and British Columbia had identical participation rates across industry and age groups. A similar procedure was used to calculate adjusted claim rates across age and industry groups. The percentage change in adjusted lost-time claim rates per 100 FTEs was calculated between 1990 and 2001 and compared between provinces.

The claim rates calculated with LFS denominators tended to be higher than those reported by the respective compensation boards. For example, in 2001, the overall claim rate for British Columbia was reported as 3.6 per 100 workers whereas using LFS data as the denominator led to a rate of 4.1 per 100 FTEs (AWCBC 2005). The Association of Workers' Compensation Boards of Canada report also shows the 2001 Ontario claim rate of 2.4 per 100 workers while the LFS method led to a rate of 2.5 per 100 FTEs. This pattern suggests that LFS denominators, adjusted to directly estimate the hours contributed by part-time and full-time workers, provide a smaller estimate of the provincial workforce than the payroll method of calculating denominators.

**Chart Lost-time claims per 100 full-time equivalent employees, 1990 to 2001**



Sources: Workplace Safety and Insurance Board (Ontario); WorkSafeBC; Statistics Canada, Labour Force Survey

Variation between Ontario and British Columbia in overall work injury trends may be partly explained by differences in patterns of economic change. For example, British Columbia, which had higher initial rates and smaller subsequent declines, continues to have a large primary industry employment base (agriculture, fisheries, forestry, mining). Compared with Ontario, B.C. may have experienced less of a shift away from these higher risk industries toward the relatively safer service and retail sectors (Ostry 2000). This pattern does not appear to be the entire story, however, because even within sectors, declines varied. Most notably, the service industry in British Columbia showed a reduction in claim rates that was less than Ontario's. The extent to which these provincial variations represent differences in hazard exposure or safety improvement warrants further investigation.

### Injury claim rates lower for women and older workers

While injury claim rates were lower for women than for men in both British Columbia and Ontario, the difference was more pronounced in British Columbia (Table). For example, in 2001, the adjusted claim rate for men in B.C. was 5.4 per 100 full-time equivalents and only 3.0 for women. This compares with 2.8 and 2.0 in Ontario. Interestingly, the men's claim rate in B.C. was almost double Ontario's, even after being adjusted for industry and age. Additionally, although claim rates decreased for both men and women in the two provinces between 1990 and 2001, the reduction was more pronounced in Ontario—more than 50% for men and about 40% for women. In British Columbia, the comparable figures were 38% and 10%, suggesting that factors other than changing industry and age composition play a role in injury claim rates.

**Table Adjusted lost-time claims per 100 full-time equivalent employees**

	1990 <sup>1</sup>	2001 <sup>1</sup>	Change
<b>Age group</b>		%	
British Columbia			
15 to 24	9.6	6.7	-30.0
25 to 50	7.2	4.8	-34.1
Over 50	5.5	3.7	-33.5
Ontario			
15 to 24	5.5	3.0	-45.4
25 to 50	5.2	2.5	-51.7
Over 50	4.7	2.3	-50.9
<b>Sex</b>			
British Columbia			
Men	8.8	5.4	-38.3
Women	3.3	3.0	-9.9
Ontario			
Men	6.1	2.8	-53.4
Women	3.3	2.0	-40.6
<b>Industry</b>			
British Columbia			
Goods	9.9	6.0	-39.7
Service	4.5	3.6	-19.8
Ontario			
Goods	5.9	2.7	-53.9
Service	4.5	2.4	-47.3

1 Claim rate adjusted for all other variables included in the table.  
 Sources: Workplace Safety and Insurance Board (Ontario);  
 WorkSafeBC; Statistics Canada, Labour Force Survey,  
 1990 to 2001

Of particular interest are young workers, who historically have had a higher risk of workplace injuries. Several factors may account for this. First, they are relatively inexperienced (Breslin and Smith 2006). Secondly, they are often concentrated in the service and retail industry (NRC/IM 1998), so de-industrialization may not cause their work injury rates to fall to the same degree as for adult workers (Loomis et al. 2004). Finally, they are often in precarious jobs (part-time, temporary or contract work) and may not receive work-safety training, which is often targeted to full-time employees (Quinlan, Mayhew and Bohle 2001). Injury prevention initiatives have been implemented in Canada and the United States to increase young workers' awareness of work safety and hopefully reduce their injury rates.

In both British Columbia and Ontario, injury rates were highest for young workers aged 15 to 24 in 1990. As with overall injury rates, injury rates for these workers were higher in B.C. than in Ontario. In B.C., for every 100 full-time equivalents aged 15 to 24, almost 10 had experienced some type of workplace injury, while the corresponding figure in Ontario was slightly less than 6.

Injury rates for young workers fell significantly between 1990 and 2001—by 30% in B.C. and more than 45% in Ontario. However, the decrease was smaller than for any other age group and their rates remained the highest, indicating that the focus on injury prevention among young workers continues to be important.

Older workers still had the lowest injury rates per 100 full-time equivalents. In 2001, the rate was 3.7 per 100 in British Columbia and 2.3 in Ontario, even after adjusting for differences in industry, age, and male-female composition of the workforce.

### Claim rates lower in the service industry

Industries were broken down into goods-producing and service-producing. Goods-producing industries were agriculture, fishing, forestry, mining and oil, manufacturing, and construction. Service industries were transportation; communication; trade; finance and insurance; real estate; business services; government services; education; health and social services; and accommodation, food and beverages.

Not surprisingly, the service sector had lower injury rates than the goods sector in both provinces in 1990 and 2001, with B.C.'s rates continuing to be slightly higher than Ontario's in each category. Again, although injury rates decreased in both provinces over the period for both goods- and service-producing industries, declines were much more pronounced in Ontario, even after controlling for age and sex. One explanation may have to do with industry mix. For example, the composition of goods-producing industries within each province is significantly different, with employment in British Columbia more concentrated in 'riskier' sectors such as forestry and mining, while Ontario's is centered around manufacturing industries, which have seen many technological improvements.

Traditionally, injury rates have been higher in the goods sector than in services. This holds in both provinces, although substantial declines in injury rates have been

seen, suggesting improved safety measures (Conway and Svenson 1998). However, the adjusted claim rate in B.C. in 2001 for the service sector was 3.6 per 100, while in Ontario the goods-producing industry was lower at 2.7. As well as being a result of differences in industry composition within the goods and service sectors, differences between the provinces may be, in part, a result of different claim reporting practices by employers and compensation boards.

Finally, these overall declines could partly be due to the different nature of injuries in goods and services. Compensation systems may not be as sensitive at picking up chronic injuries, common to service-type work, compared with acute injuries, associated more with resources and manufacturing.

## Summary

Overall, work injury claim rates declined in both Ontario and British Columbia between 1990 and 2001. However, declines were not uniform by province, industry, or demographic group.

Although men's injury rates declined more than women's, women still had lower overall rates in both provinces. Additionally, the youngest age group, which had the highest initial claim rates, had larger absolute declines than the oldest age group. However, the percentage decline for young workers was the lowest of all age groups.

Injury rates declined in both goods and service industries in both provinces. The decline was much more pronounced in Ontario and may be partly a result of greater de-industrialization in the Ontario economy—that is, a move away from goods-producing industries toward services.

The general decline in the overall claim rates of both provinces is encouraging. Nevertheless, differences in trends and relative risks among worker subgroups in the two provinces serve to draw attention to opportunities to reduce the injury risks workers encounter.

This study was supported by a grant from the Workplace Safety and Insurance Board, Research Advisory Council, # 02-007.

## Note

1 Federal government employees in Ontario are indirectly covered by the WSIB. Claims are assessed by the WSIB, but compensation is paid by the federal government.

## References

Association of Workers' Compensation Boards of Canada (AWCBC). 2005. *2001 Key Statistical Measures*. Mississauga, Ont.: AWCBC. [http://www.awcbc.org/english/board\\_data-key.asp](http://www.awcbc.org/english/board_data-key.asp).

Breslin, F. Curtis and Peter M. Smith. 2006. "Trial by fire: A multivariate examination of the relationship between job tenure and work injuries." *Occupational and Environmental Medicine* 63, no. 1 (January): 27-32.

Conway, Hugh, and Jens Svenson. 1998. "Occupational injury and illness rates, 1992-96: Why they fell." *Monthly Labor Review* 121, no. 11 (November): 36-58.

Hennekens, Charles H. and Julie E. Buring. 1987. *Epidemiology in medicine*. Philadelphia: Lippincott, Williams and Wilkins.

Labor Occupational Health Program (LOHP). 1998. *Teens, Work, and Safety: A Curriculum for High School Students*. Center for Occupational and Environmental Health. Berkeley: University of California.

Loomis, D., D.B. Richardson, J.F. Bena and A.J. Bailer. 2004. "Deindustrialisation and the long term decline in fatal occupational injuries." *Occupational and Environmental Medicine* 61, no. 7 (July): 616-621.

Marshall, Katherine. 2001. "Working with computers." *Perspectives on Labour and Income* (Statistics Canada Catalogue 75-001-XPE) 13, no. 2 (Summer): 9-15.

Murphy, Patrice L. and Ernest Volinn. 1999. "Is occupational low back pain on the rise?" *Spine* 24, no. 7: 691-697. April 1.

Mustard, Cameron A., Donald Cole, Harry Shannon, Jason Pole, Terry Sullivan and Richard Allingham. 2003. "Declining trends in work-related morbidity and disability, 1993-1998: A comparison of survey estimates and compensation insurance claims." *American Journal of Public Health* 93, no. 8 (August): 1283-1286.

National Research Council and the Institute of Medicine (NRC/IM). Committee on the Health and Safety Implications of Child Labor. 1998. *Protecting Youth at Work*:

*Health, Safety, and Development of Working Children and Adolescents in the United States*. Washington, D.C.: National Academy Press.

Ostry, Aleck. 2000. "From chainsaws to keyboards: Injury and industrial disease in British Columbia." In *Injury and the New World of Work* edited by Terrence Sullivan. p. 27-45. Vancouver: UBC Press.

Quinlan, Michael, Claire Mayhew and Philip Bohle. 2001. "The global expansion of precarious employment, work disorganization, and consequences for occupational health: A review of recent research." *International Journal of Health Services* 31, no. 2: 335-414.

Silverstein, B., E. Welp, N. Nelson and J. Kalat. 1998. "Claims incidence of work-related disorders of the upper extremities: Washington state, 1987 through 1995." *American Journal of Public Health* 88, no. 12 (December): 1827-1833.

Smith, Peter M. and Cameron A. Mustard. 2004. "Examining the associations between physical work demands and work injury rates between men and women in Ontario, 1990-2000." *Occupational and Environmental Medicine* 61: 750-756.

Smith, Peter M., Cameron A. Mustard and Jennifer I. Payne. 2004. "Methods for estimating the labour force insured by the Ontario Workplace Safety and Insurance Board: 1990-2000." *Chronic Diseases in Canada* 25, no. 3/4 (Summer/Fall): 127-137. (Public Health Agency of Canada)

Statistics Canada. 1986. *Canadian Standard Industrial Classification for Companies and Enterprises, 1980*. Catalogue no. 12-570-XPE. Ottawa.

WorkSmartOntario. 2006. *Ontario Young Worker Health and Safety Initiatives/Programs Inventory*. Toronto: Ontario Ministry of Labour. Contact: sue.boychuk@mol.gov.on.ca.

# The GST credit

*Raj K. Chawla*

**T**he federal goods and services tax (GST) was introduced in 1991. Unlike its predecessor, the manufacturers' sales tax, which was levied only on manufactured goods, the GST applies to almost all goods and services. Initially set at 7%,<sup>1</sup> GST is charged over and above any provincial sales tax.<sup>2</sup>

Unlike income tax where the rate increases with income, the GST is levied at the same rate for everyone. As a result, low-income consumers end up paying relatively more of their income in GST than those with higher incomes. To alleviate some of the burden on low-income Canadians, the federal government introduced a GST tax credit. The credit is tied to personal income rather than the amount of GST paid. Besides personal income, the credit amount depends on marital status, number of children, and spousal net income as reported in the previous year's tax return.<sup>3</sup> The credit is adjusted for inflation as measured by the change in the consumer price index. Recipients are issued a cheque on the 5<sup>th</sup> of January, April, July, and October.

This article looks at issues surrounding the GST and the GST credit. How important is the GST as a source of federal government revenue? How does

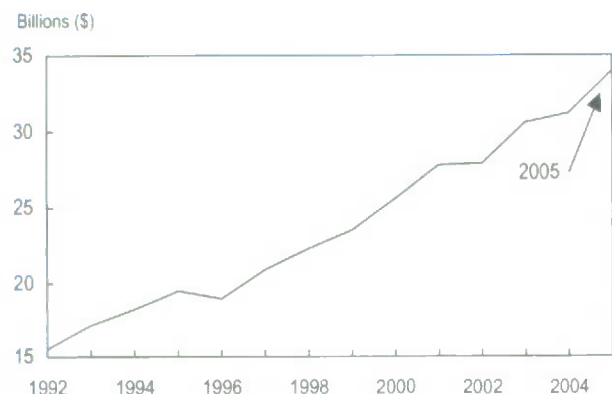
it relate to personal disposable income and other consumption taxes? How much of the entire GST take is paid back to individuals? How many are receiving the GST credit, and who are they? Does the credit help redistribute income? The 2003 Survey of Labour and Income Dynamics (SLID), and federal revenue and expenditure data are used to answer these questions.<sup>4</sup>

## The family perspective

Since the economic well-being of an individual also depends on family income rather than just personal income, those who qualify for the GST credit are not necessarily disadvantaged. An example would be a young adult living with parents and working part time at a low-paying job. Another reason to look at the GST credit in a family income context is that the majority of recipients 16 and over, other than unattached individuals, are from multiple-earner families or those with more than one recipient (for instance, a child and another relative of the major income recipient living in the same family).

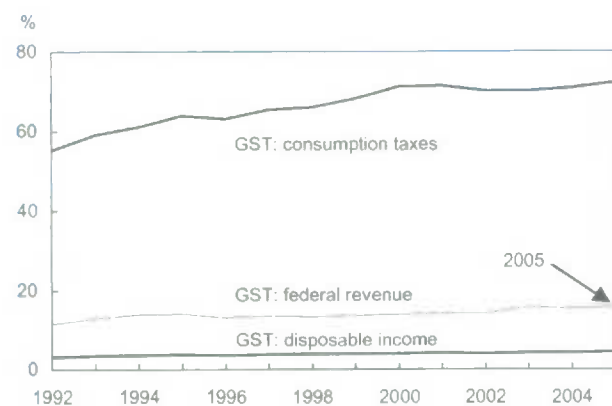
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**Chart A GST revenue has risen steadily since its introduction**

Source: Statistics Canada, Federal government revenue and expenditure

Government revenue from the GST has climbed steadily, from \$15.5 billion in 1991/1992 to \$34.0 billion in 2004/2005 (in current dollars). The rise can be attributed to increased consumer spending, which in turn has been influenced by factors such as population growth, family make-up, favourable economic conditions, higher income levels, easier credit, lower interest rates, and changing spending patterns. A spending spree between 2002 and 2005 alone accounted for 33% of the increase in GST collected since 1991/1992.

**Chart B GST is the major consumption tax and a key source of federal government revenue**

Source: Statistics Canada, Federal government revenue and expenditure

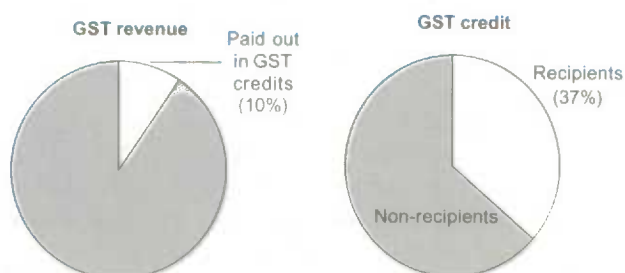
amusement. The GST accounted for 72% of consumption taxes in 2004/2005 compared with 55% in 1991/1992.

While the relative importance of other consumption taxes has declined, the GST share of federal revenue rose from 12% in 1991/1992 to 16% in 2004/2005. However, between 2000 and 2005, GST intake grew almost twice as much as total federal revenue—33% versus 18%.

GST is paid from personal disposable income—that is, total income less income tax, Canada or Quebec Pension plan contributions, and Employment Insurance premiums. Canadians paid 4.4% of their disposable income in GST in 2005 compared with 3.2% in 1992. Over this period, the growth in GST paid also outpaced income growth—120.0% versus 60.9%.

The GST is the main consumption tax in Canada. Others include customs duties as well as taxes on alcoholic beverages and tobacco products, gasoline, and

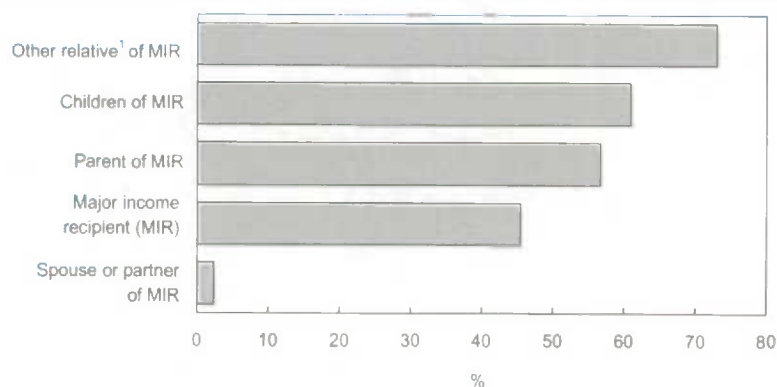
**Chart C Over one-third of persons 16 and older received a GST credit in 2003, accounting for 10% of all GST collected**



GST revenue in 2003 was \$30.6 billion. Of this, \$2.9 billion was paid back as a credit to 9.1 million of the 24.8 million taxfilers aged 16 and older, for an average of \$322 per recipient.<sup>5</sup> SLID treats this credit as a government transfer.

Sources: Statistics Canada, Federal government revenue and expenditure, 2003; Survey of Labour and Income Dynamics, 2003

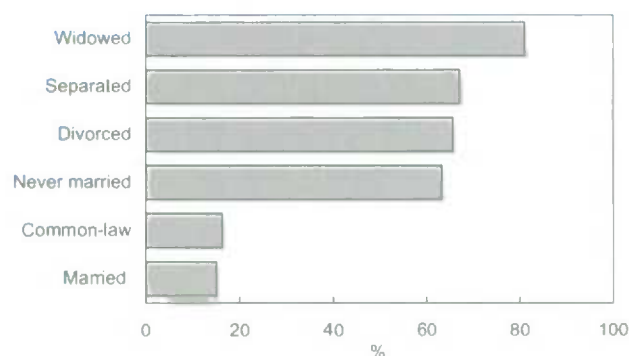
**Chart D Children and parents of major income recipients were more likely to receive a GST credit**



gram stipulates that only the one with the larger income can claim the credit. The high proportions of parents, siblings and grandchildren receiving the credit could be due to their relatively smaller representation among persons 16 and over, since they represented only 11% of all recipients.<sup>7</sup> Nevertheless, major income recipients accounted for 65%, and children for another 22%. These two groups therefore accounted for 87% of all GST credit recipients.

<sup>1</sup> Includes sibling, grandparent, grandchild and other relatives.  
Source: Statistics Canada, Survey of Labour and Income Dynamics, 2003

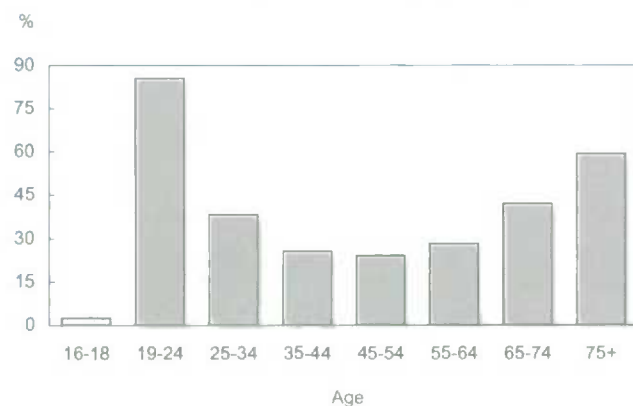
In economic families, major income recipients were less likely to receive a GST credit than children, grandchildren, parents or siblings of major income recipients.<sup>6</sup> Spouses or partners were least likely because the pro-

**Chart E More singles got a GST credit**

Source: Statistics Canada, Survey of Labour and Income Dynamics, 2003

Single individuals (never married) were more likely than married or common-law to receive a GST credit; and the widowed are more likely than single, separated, or divorced. This is largely due to income differences. For instance, married persons had a mean income of \$36,300 compared with \$19,700 for singles.

Among GST credit recipients in 2003, 48% were single; 28% were separated, divorced or widowed; and the remaining 24% were married or living common law. Their shares of the total credit were 41%, 29% and 30% respectively. Those who were not single had a larger credit share than their population representation, largely because some had young children living with them. The credit increases with the number of children in the family under 18.

**Chart F Young adults and seniors were more likely to receive a GST credit**

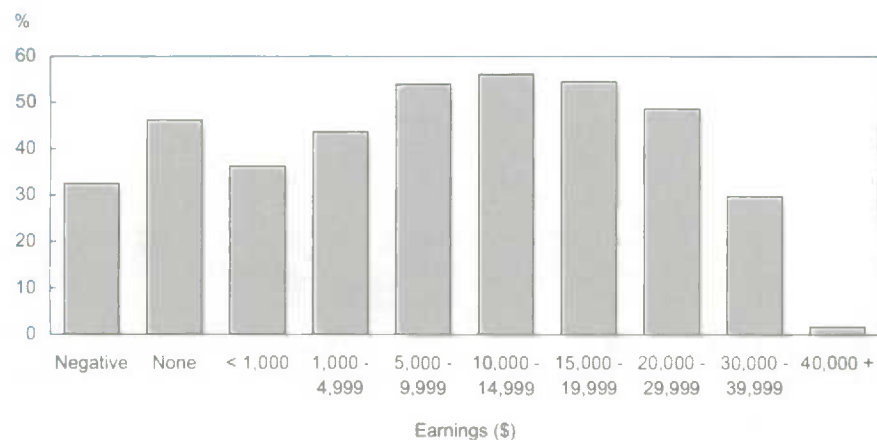
Source: Statistics Canada, Survey of Labour and Income Dynamics, 2003

Since young adults (19 to 24) and seniors (65 and over) both have lower incomes, they are much more likely to receive a GST credit. In 2003, 86% of those

in the 19-to-24 age group received a credit, as did 42% of those aged 65 to 74, and 59% of those 75 or older. One in four recipients was a young adult, and one in five was a senior. These two groups accounted for 45% of all recipients.

In the young adult category, 64% were children of major income recipients, and another 29% were themselves the major income recipient (likely unattached individuals). On the other hand, among seniors, 80% were major income recipients, and just over 10% were parents of major income recipients.

Among the young adults, 40% reported attending school as their major activity during the reference year, while 36% were working at a job or business. Overall though, half of persons 16 and over attending school (most likely a postsecondary institution) in 2003 received a GST credit.

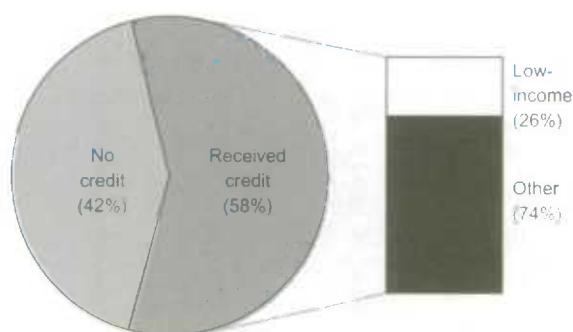
**Chart G** Persons with earnings between \$5,000 and \$20,000 were more likely than others to receive a GST credit

Source: Statistics Canada, Survey of Labour and Income Dynamics, 2003

\$14,999, while the rate for those with no earnings at all was 46%. The rate was under 2% for those with earnings of \$40,000 or more.

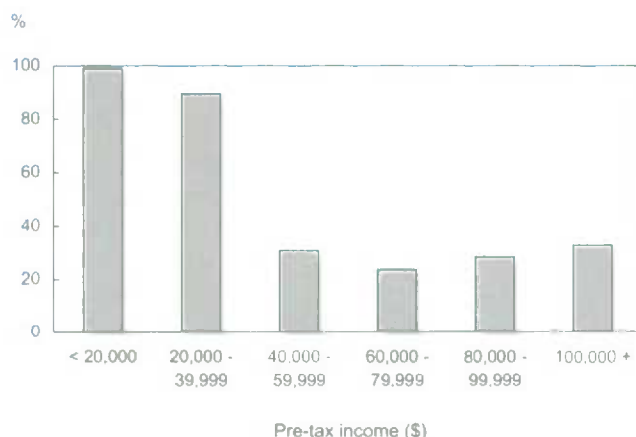
Among all recipients, 36% had no employment earnings, while 24% had earnings less than \$10,000. Among those with no earnings, nearly 70% were senior major income recipients, while 9% were parents and 12% were children of major income recipients. Among those with earnings under \$10,000, 48% were major income recipients, 3% were parents, and 39% were children.

Since the GST credit is tied to personal income, it is not surprising that a higher proportion of low earners received a credit in 2003. The highest receipt rate (56%) was for those with earnings between \$10,000 and

**Chart H** Only a quarter of families receiving a GST credit were in low income

Source: Statistics Canada, Survey of Labour and Income Dynamics, 2003

According to SLID, the 9.1 million GST credit recipients in 2003 came from 7.5 million of the 13.0 million economic families in Canada. Among families receiving a credit, only 26% were classified as low-income according to Statistics Canada's low-income cutoff measures. In other words, the majority of families who received a GST credit were not considered to be in straitened circumstances. Their relative shares of the total \$2.9 billion GST credit were similar to their respective representations, resulting in an average credit of almost \$390 each.

**Chart I One-third of families with income of \$100,000 or more received a GST credit**

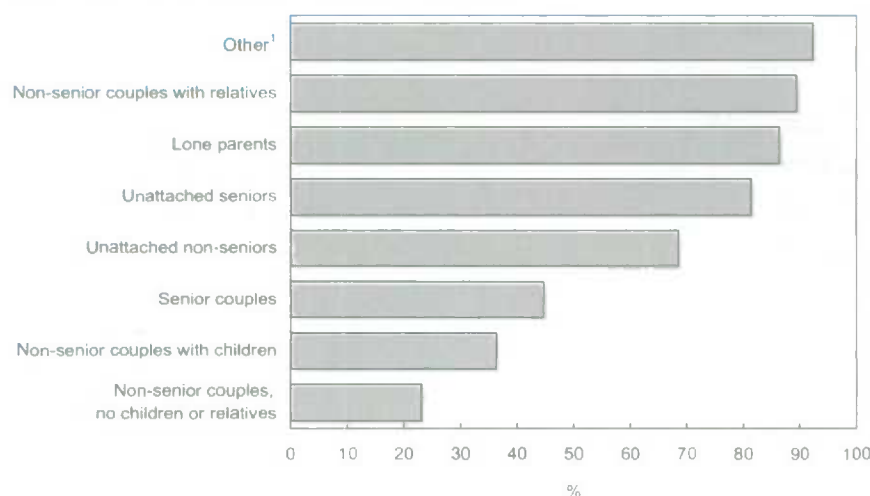
Source: Statistics Canada, Survey of Labour and Income Dynamics, 2003

Almost all families with income under \$20,000 received a GST credit. This compared with 90% of those with income between \$20,000 and \$39,999,

dropping to 24% for families with income between \$60,000 and \$79,999, and then rising to 33% for those with income of \$100,000 and over.

This variability by income is largely due to differences in family make-up. For instance, among those with income under \$20,000, 76% were unattached individuals, 12% were couples, and 8% were lone parents. Among families with income of \$100,000 and over, on the other hand, 85% consisted of couples living with children or other relatives, and another 11% were non-senior, multiple-earner families. This indicates that GST credit recipients in high-income families are children, parents, or other relatives of the major income recipient.

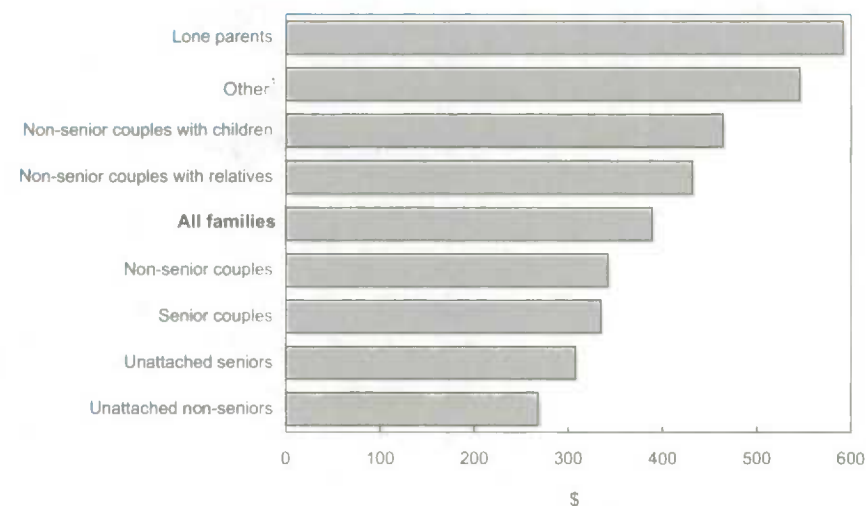
Overall, 72% of families reporting a GST credit had income under \$40,000, 20% had between \$40,000 and \$99,999, and only 8% had \$100,000 or more.

**Chart J Non-senior couples without children or relatives were least likely to receive a GST credit**

<sup>1</sup> Includes families other than those consisting of couples or lone parents.  
Source: Statistics Canada, Survey of Labour and Income Dynamics, 2003

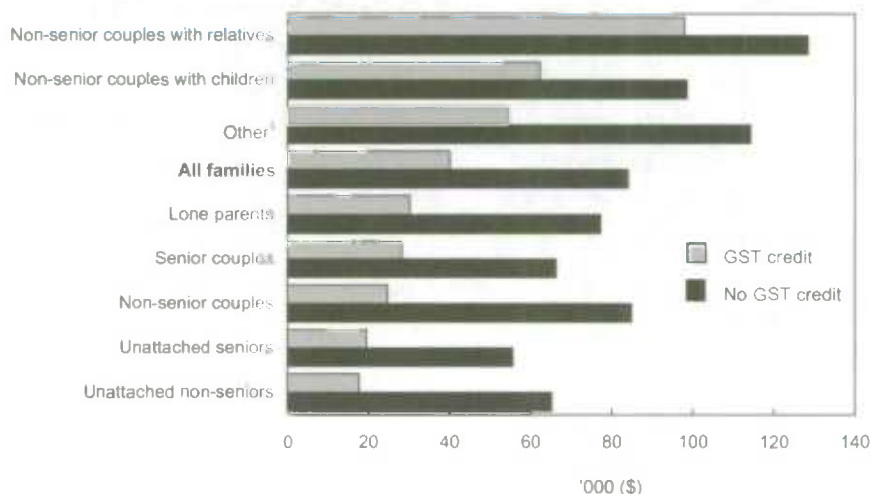
The proportion of families receiving a GST credit differed by family type; for instance, 23% of non-senior couples without children or other relatives received a credit, compared with 69% of non-senior unattached individuals. The senior equivalents of these two groups had higher proportions (45% and 81% respectively). Credits were more common in families composed of a non-senior couple living with relatives, in lone-parent families, and in other families (ranging between 86% and 92%).

Unattached individuals and lone-parent families accounted for about 50% of GST credit recipients and couple families for another 38%, the majority living with relatives other than children.

**Chart K On average, lone-parent families received a larger GST credit than other families**

<sup>1</sup> Includes families other than those consisting of couples or lone parents.  
Source: Statistics Canada, Survey of Labour and Income Dynamics, 2003

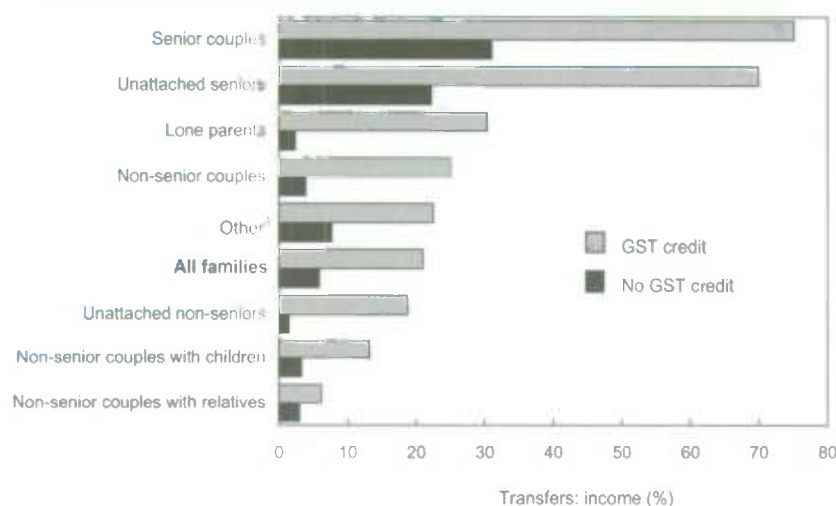
Lone-parent families (headed mostly by women) received the highest GST credit—\$592 compared with the national average of \$389. Their couple counterparts with children received \$464. Non-senior unattached individuals received the least credit (\$268) while their senior counterparts received \$308. The average credit of \$389 increased the purchasing power of recipients by \$1.07 a day.

**Chart L Families receiving a GST credit had lower incomes than other families**

<sup>1</sup> Includes families other than those consisting of couples or lone parents.  
Source: Statistics Canada, Survey of Labour and Income Dynamics, 2003

The average income of families who received a GST credit was \$40,100, compared with \$84,000 for those not receiving a credit. (The lower income for those receiving the credit can be partly attributed to family make-up: more unattached non-seniors and lone-parent families). The GST credit of \$389 thus narrows the income gap between recipients and non-recipients by less than 1%.

Irrespective of family type, the mean income of those with a credit was less than those without, with the largest gap for unattached non-seniors (73%) and the smallest gap for non-senior couples living with relatives (24%).

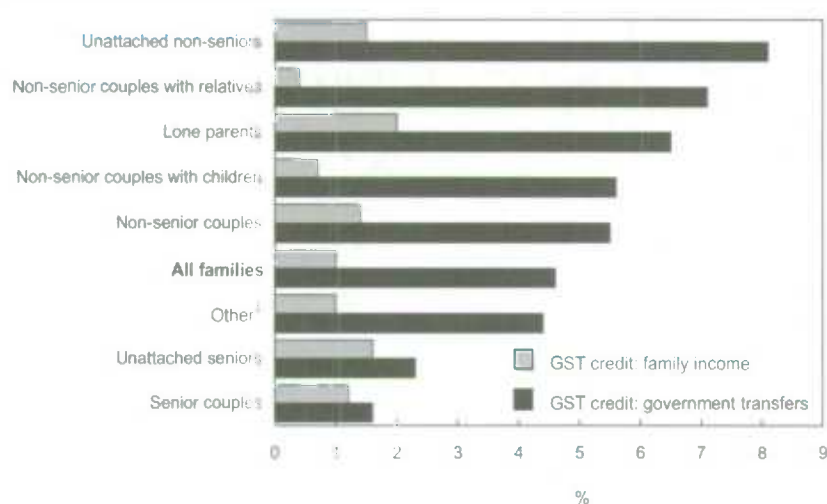
**Chart M Families with a GST credit received more in government transfers**

<sup>1</sup> Includes families other than those consisting of couples or lone parents.  
Source: Statistics Canada, Survey of Labour and Income Dynamics, 2003

\$8,431 compared with \$4,977 to other families. Because of their relatively lower incomes and higher transfers, families with a GST credit drew proportionately more income from government transfers—21% compared with 6% for those not receiving the credit.

The transfer-to-income ratio also varied by family type; for instance, senior couples and unattached seniors who received a GST credit drew most of their income from government transfers (75% and 70%), whereas their counterparts without a credit drew 31% and 22%. The ratio gap was much smaller for non-senior couples.

Of the total \$90.9 billion transferred from governments to families in 2003 (including the \$2.9 billion GST credit), \$63.5 billion (or 70%) was paid to families who received a GST credit.<sup>8</sup> The average transfer was

**Chart N The GST credit is too small to have an effect on income redistribution**

<sup>1</sup> Includes families other than those consisting of couples or lone parents.  
Source: Statistics Canada, Survey of Labour and Income Dynamics, 2003

Compared with total pre-tax family income of \$764.7 billion, the \$2.9 billion GST credit is too small to have much impact on the redistribution of income among families. Overall, the GST credit represented 5% of total government transfers and just 1% of recipient family income.

These ratios varied by family type; for example, for lone-parent families, the GST credit represented 6.5% of government transfers and 2.0% of pre-tax income. The respective estimates for non-senior couples with children were 5.6% and 0.7%. For both non-senior and senior unattached individuals, the GST credit represented just 1.5% to 1.6% of income.

## Summary

In 2002/2003, the federal government collected \$30.6 billion in GST. The GST accounted for 70% of consumption tax revenue and 16% of total government revenue. The government paid out \$2.9 billion in GST credits to 9.1 million persons aged 16 and over (or 7.5 million economic families). Major income recipients in economic families (including unattached individuals) accounted for 65% of all GST recipients, and children of major income recipients for another 21%. Although credits are designed to soften the burden of GST for families with lower incomes, only 26% of the total credit was paid to low-income families. Families with a GST credit received, on average, \$389, which represented 5% of their total government transfers or 1% of pre-tax income. Thus the GST credit has only a minimal effect on the redistribution of income.

## Perspectives

### ■ Notes

- 1 According to the budget of May 2, 2006, the GST will drop to 6% on July 1, 2006. Another decrease to 5% is promised over the next five years. Based on the \$34 billion collected in 2005, a one-point reduction would mean a loss of almost \$5 billion in government revenue.
- 2 Alberta is the only province with no sales tax. Newfoundland and Labrador, New Brunswick and Nova Scotia have integrated their provincial sales tax with the GST, charging their residents only one tax, referred to as the harmonized sales tax, or HST.
- 3 For the year July 2003 to June 2004, the maximum credit was \$216 for an eligible adult and \$114 for each eligible child under 19. A couple with net income of less than \$7,022 and no children received a maximum credit of \$432, while a couple with one child could receive \$546. On the other hand, a family with one child was not entitled to a credit if their income was \$40,000 or more. Only one spouse in a family can claim the credit. For details on credit entitlement by marital status, number of children, and income level, visit the Canada Revenue Agency Web site at [http://www.cra-arc.gc.ca/benefits/gsthst/gstc\\_payment02-e.html](http://www.cra-arc.gc.ca/benefits/gsthst/gstc_payment02-e.html).
- 4 How the GST affects prices of goods and services in a market economy is beyond the scope of this study.
- 5 According to the Canada Revenue Agency, 9.4 million taxfilers received a GST credit between July 2003 and June 2004. The total amount paid was \$3.1 billion, for an average of \$325 per recipient. Since income information in SLID is derived mainly from authorized tax records, global statistics from both sources are very close. This paper uses SLID because it provides more detail on characteristics of individuals and their families.
- 6 This paper looks at persons 16 and older living as unattached individuals or in economic families. Unattached individuals live by themselves or in a household where they are not related to other household members. An economic family is a group of persons sharing a common dwelling and related by blood, marriage, common law, or adoption. Thus, all relatives living together are considered as one family unit, whatever the degree of family relationship.
- 7 The charts show the proportions who received a GST credit, whereas the percentage distributions of recipients are from unpublished data (available on request).
- 8 Besides the GST credit, government transfers include benefits from Old Age Security, the Guaranteed Income Supplement, the Allowance, Employment Insurance, the Canada and Quebec Pension Plans, the Child Tax Benefit, social assistance, provincial assistance and tax credits, and workers' compensation.

**We welcome your views** on articles and other items that have appeared in *Perspectives*. Additional insights on the data are also welcome, but to be considered for publication, communications should be factual and analytical. We encourage readers to inform us about their current research projects, new publications, data sources, and upcoming events relating to labour and income.

Statistics Canada reserves the right to select and edit items for publication. Correspondence, in either official language, should be addressed to *Perspectives on Labour and Income*, 170 Tunney's Pasture Driveway, 9-A5 Jean Talon, Statistics Canada, Ottawa, Ontario K1A 0T6. Fax (613) 951-4179; e-mail: [perspectives@statcan.ca](mailto:perspectives@statcan.ca).

# Increased work stoppages

Ernest B. Akyeampong

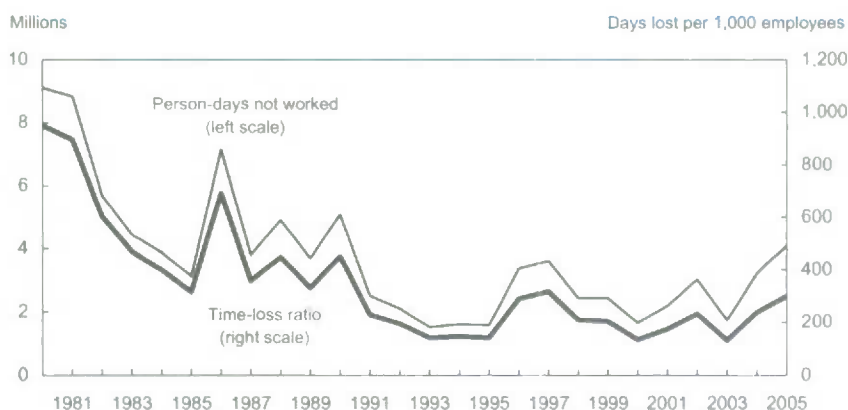
**T**ime lost to strikes and lockouts has always attracted widespread attention because of the economic and social upheavals that often accompany industrial disputes. Given increasing economic globalization and trade liberalization, the interest appears to be gaining strength since international differences can influence corporate decisions on plant or office location (see *Differing collection methods*). Available statistics demonstrate considerable improvement in Canadian industrial relations over the years. However, a surge in strikes and lockouts and the resulting time lost in the past couple of years may be a source of concern.

Using Statistics Canada's Labour Force Survey and information compiled by Human Resources and Social Development Canada, this study briefly examines trends in work stoppages over the past 25 years. Particular attention is focused on the most recent years (2003 to 2005) in an examination of their incidence by industry and jurisdiction (provincial or federal), the main areas of dispute, and how the stoppages ended.

## Downward trend in days lost

Analysis of year-over-year changes and trends in labour-dispute statistics is always problematic. The annual data are affected by many factors, among them collective bargaining timetables (in particular, the

**Chart** Person-days not worked due to labour disputes and the time-loss ratio both trended down over most of the 1980s and 1990s, but appear to be edging up in the 2000s



Sources: Human Resources and Social Development Canada, Workplace Information Directorate; Statistics Canada, Labour Force Survey

number and duration of agreements), size of the parties involved, duration of the stoppages, state of the economy and labour market, changes in industrial relations legislation, and labour-management relations. Other contributing factors include changes in union density (the proportion of employees unionized), and union tactics. Isolating the effects of each of these numerous factors is a statistically daunting task, not attempted in this paper.

Nevertheless, the overall downward trends observed in both the number of industrial disputes and the resulting days lost during the 1980s and 1990s appear to have stalled somewhat in recent years (Chart).<sup>1</sup> Work stoppages due to strikes and lockouts fell from an annual average of 754 in the 1980s, to 394 in the 1990s, to 319 in the 2000s. Workdays lost averaged 5.5 million annually in the 1980s, 2.6 million in the 1990s, but 2.7 million in the 2000s (Table 1).

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Using a time-loss ratio of the number of workdays lost per 1,000 employees enables more meaningful comparisons of annual work-stoppage statistics. After thus controlling for the rise in employee numbers, the time-loss ratio reveals an overall declining trend: from an annual average of 541 workdays lost per 1,000 employees in the 1980s, to 233 in the 1990s, to 203 in the 2000s.

### Time lost surges in 2004 and 2005

Despite the progress achieved in Canada's labour-relations statistics over the past few decades, the slight increase in the number of strikes and lockouts and the proportionately larger increases in the resulting workdays lost and time-loss ratios, especially in the last two years (2004 and 2005), raise concerns.

The number of strikes and lockouts beginning in each of 2004 and 2005 stalled at 261, but this was still slightly more than in the two preceding years. However, the number of workers involved in the disputes, the workdays lost, and the time-loss ratios all witnessed consecutive large increases. For example, workers involved in the 2005 stoppages totalled 429,000 (a five-fold jump from 2003), while the workdays lost, at 4.1 million, was almost 2.5 times the 2003 figure. Similarly, the time-loss ratio in 2005, at 301, was more than twice the level in 2003.

Some of the increase in workdays lost in the past two years can undoubtedly be apportioned to a rise in the number of workers involved (that is, relatively large unions were involved in the recent disputes) and also partly to the long duration of some of the stoppages.

Whatever the reasons, the timing of the latest increases raises questions. Could continuing declines in the unemployment rate and the emergence of pockets of labour shortage have played a part in the resurgence? Could these developments have spurred organized labour to flex its muscle?

Whether this is the beginning of a new trend is uncertain. What can be done now, however, is to look most closely at the nature of the

stoppages in recent years. In which jurisdictions did they occur? What were the major issues? And, how were they resolved? The answers could provide clues for minimizing future labour disputes.

### Most disputes in 2003 to 2005 union initiated

According to Human Resources and Social Development Canada, bargaining timetables vary from union to union, but the average life

**Table 1 Strikes and lockouts and person-days not worked**

	Work stoppages			Employees	Time-loss ratio <sup>2</sup>
	Started	Total <sup>1</sup>	Workers involved	Person-days not worked	
			'000	'000	'000
1980	952	1,028	452	9,130	9,621
1981	943	1,049	342	8,850	9,880
1982	611	679	464	5,702	9,461
1983	576	645	330	4,441	9,479
1984	653	716	187	3,883	9,732
1985	762	829	164	3,126	9,901
1986	657	748	486	7,151	10,313
1987	579	668	582	3,810	10,634
1988	483	548	207	4,901	10,936
1989	568	627	445	3,701	11,195
1990	519	579	271	5,079	11,250
1991	399	463	254	2,516	10,962
1992	353	404	152	2,110	10,803
1993	323	381	102	1,517	10,782
1994	312	374	81	1,607	11,030
1995	282	328	149	1,583	11,212
1996	297	330	276	3,269	11,250
1997	229	284	258	3,608	11,357
1998	341	381	244	2,444	11,641
1999	358	413	160	2,443	11,974
2000	321	379	144	1,657	12,391
2001	324	381	221	2,199	12,670
2002	246	294	168	3,033	12,996
2003	221	266	81	1,736	13,271
2004	261	298	260	3,225	13,494
2005	261	293	429	4,107	13,658

1 Total includes number beginning in year plus those continuing from previous year.

2 The number of workdays lost due to strikes and lockouts per 1,000 employees (*Person-days not worked* divided by *Employees*).

Sources: Human Resources and Social Development Canada, Workplace Information Directorate; Statistics Canada, Labour Force Survey

### Differing collection methods

Because of differences in definitions and statistical coverage, international comparisons of labour dispute statistics must be made with caution.

Many countries rely on voluntary notification of a dispute to a national or local government department. In Canada, the data reflect all work stoppages that come to the notice of Human Resources and Social Development Canada's Workplace Information Directorate. Also, many countries, including Canada, do not measure work time lost at establishments whose employees are not involved in a dispute but who are unable to work because of a shortage of materials supplied by establishments on strike.

In addition, significant differences exist in the threshold used by countries to determine whether a particular stoppage should be entered in the official records. Most countries exclude small stoppages (judged by the number of workers involved, the length of the dispute, or the number of days lost) from the statistics. In particular, the threshold for inclusion is very high in the United States (1,000 workers) and in Denmark (100 workdays lost). In Canada, the threshold is 10 or more person-days lost.

Some countries also exclude disputes in certain industrial sectors. For example, Portugal excludes public-sector strikes. Several others exclude certain types of disputes: Portugal excludes general strikes, Japan excludes days lost in unofficial disputes, and the United Kingdom excludes so-called political work stoppages. No such exclusions exist in Canada.

Finally, the inclusion of workers indirectly involved in a stoppage, namely those who are unable to work because others at their workplace are on strike, varies among countries. Many countries, including the United States, the United Kingdom, France and Australia, attempt to include these workers while others, including Canada, Germany and Italy, exclude them. A complete description of international coverage and methodology differences is contained in a technical note in the journal *Labour Market Trends* (vol. 109, no. 4, p. 201), published by the U.K. Office for National Statistics.

of a collective bargaining contract is roughly three years. To obtain a better appreciation of industrial strife statistics in recent years, one needs to examine a dataset that more fully accommodates the different timetables. For this study, data covering 2003 to 2005 were pooled. Not only is this dataset more statistically robust, but also the chosen period captures information encompassing two different faces of the labour strife cycle: The year 2003 was relatively peaceful, while 2004 and 2005 were less so.

Of the 743 labour stoppages that commenced between 2003 and 2005, 622 (84%) were initiated by unions (strikes), and the rest by employers (lockouts). Approximately 7.9 million of the 9.1 million work-days lost (87%) were attributable to strikes (Table 2).

### Large share of stoppages in Quebec, in manufacturing, and in education and health

Only 41 (6%) of the strikes and lockouts over the period occurred in areas under federal jurisdiction (workers under the Public Service and Staff Relations Act such as the federal public service, and those under the Canada Labour Code such as in banks and other financial institutions, and telecommunications). The rest occurred in areas under provincial jurisdiction. Quebec, the province with the highest union density, posted the largest share of strikes and lockouts (336 or 45%), followed by Ontario (230 or 31%). (For

**Table 2 Strikes and lockouts and person-days not worked by jurisdiction, 2003 to 2005**

	Strikes and lockouts		Days not worked	
		%	'000	%
<b>Canada</b>	<b>743</b>	<b>100</b>	<b>9,068</b>	<b>100</b>
Newfoundland and Labrador	22	3.0	523	5.8
Prince Edward Island <sup>1</sup>	..	..	1	...
Nova Scotia	10	1.4	80	0.9
New Brunswick	19	2.6	177	2.0
Quebec	336	45.2	2,684	29.6
Ontario	230	31.0	1,385	15.3
Manitoba	20	2.7	47	0.5
Saskatchewan	19	2.6	104	1.1
Alberta	8	1.1	113	1.2
British Columbia	38	5.1	1,007	11.1
<b>Total provincial</b>	<b>702</b>	<b>94.5</b>	<b>6,121</b>	<b>67.5</b>
<b>Total federal</b>	<b>41</b>	<b>5.5</b>	<b>2,947</b>	<b>32.5</b>

1 No new work stoppages were reported in Prince Edward Island for 2003 to 2005. The days not worked are from a stoppage that started in 2002.

Note: Data may not add to total due to rounding.

Sources: Human Resources and Social Development Canada, Workplace Information Directorate; Statistics Canada, Labour Force Survey

union densities by province, sector, and industry, see the update on unionization, also appearing in this issue of *Perspectives*.<sup>1</sup>

Despite the small number of stoppages registered, workers under federal jurisdiction recorded the largest share of days lost (33%), followed by Quebec (30%) and Ontario (15%). Areas under federal jurisdiction contain several large unions, and relatively long strikes involving workers in some large bargaining units in 2005 contributed to the high number of workdays lost. Workers in British Columbia witnessed just 5% of strikes and lockouts, but 11% of the total workdays lost during the period.

More than a quarter (29%) of the strikes and lockouts took place in manufacturing, followed by education, health and social services (21%) (Table 3). Information and cultural industries saw only 2%, but accounted for almost a quarter of all workdays lost. A long strike involving a few large unions contributed to the large number of workdays lost in this industry. Manufacturing (17%); education, health and social services (16%); and public administration (17%) also registered relatively large shares of workdays lost.

### Most work stoppages centre on wages

A strike or lockout may be precipitated by more than one factor, but for those that commenced between 2003 and 2005, wages were the main bone of contention. Of respondents reporting a reason for the work stoppage, approximately one-half (51%) gave wages or non-wage benefits as the major one.<sup>2</sup> Another 35% cited delays in the bargaining process or lack of trust in the bargaining sincerity of the opponent. Another 9% saw job security and subcontracting as the major issues, while 5% mentioned poor working conditions, poor labour-management relations, and disrespect of union rights.

### Most stoppages ended by agreement

The resolution of a work stoppage can take many forms. The most common is agreement between the opposing parties. Such agreements are often reached without a third party, but sometimes the services of an arbitrator or adjudicator are called upon. Of the strikes and lockouts resolved between 2003 and 2005, about 77% ended after agreement was reached between the opposing parties. Approximately 18% of stoppages ended by employees voluntarily returning to work, while in 2% of the disputes, special legislation was

**Table 3 Strikes and lockouts and person-days not worked by major industry, 2003 to 2005**

	Strikes and lockouts		Days not worked	
		%	'000	%
<b>All industries</b>	<b>743</b>	<b>100</b>	<b>9,068</b>	<b>100</b>
Primary	19	2.6	454	5.0
Utilities	6	0.8	81	0.9
Construction	13	1.7	102	1.1
Manufacturing	212	28.5	1,572	17.3
Wholesale and retail trade	76	10.2	706	7.8
Transportation and warehousing	51	6.9	275	3.0
Information and cultural industries	12	1.6	2,202	24.3
Finance	48	6.5	82	0.9
Education, health and social services	159	21.4	1,454	16.0
Entertainment and hospitality	103	13.9	567	6.3
Public administration	44	5.9	1,573	17.3

Note: Data may not add to total due to rounding.

Sources: Human Resources and Social Development Canada, Workplace Information Directorate; Statistics Canada, Labour Force Survey

passed or an order from the Labour Relations Board was issued. Only a small proportion of work stoppages end with the closure of a plant or firm. For the 2003-to-2005 period, only 6 suffered this fate. About 13 stoppages were still continuing at the end of 2005.

### Conclusion

The improvements recorded during the 1980s and 1990s in Canada's strike and lockout statistics appear to have stalled somewhat in recent years. Improvements recorded at the beginning of the decade were offset by a deterioration in 2004 and 2005.

Approximately 84% of the 743 work stoppages and 87% of the 9.1 million resulting workdays lost from 2003 to 2005 were initiated by unions, the rest by employers. Areas witnessing disproportionately large shares of stoppages and resulting time lost included Quebec; workers under federal jurisdiction; manufacturing; and education, health and social services. Wage disputes constituted the main reason for about one-half of work stoppages between 2003 and

2005, and lack of faith in the bargaining sincerity of the adversary accounted for about a third. Most of the stoppages (77%) ended through agreements reached between the adversaries (with or without third-party assistance). Only a handful ended through a forced court order or legislation, or plant closure.

At this point it is not possible to determine whether the recent surge in time lost is due to a general change in the labour relations environment or a confluence of workplace-specific factors. Continuing to monitor the situation is important, since a deteriorating labour climate can have broader economic consequences.

### Perspectives

### ■ Notes

1 On the surface, it appears that business cycle effects on strikes and lockouts over the period have been minimal or inconsequential. For example, contrary to expectation, the numbers appear to be generally high during recession years as in the early 1980s, and low during the growth period preceding Y2K. Similarly, union density has been fairly flat, just over 30% for most of the period, even though both the strike statistics and time lost data fluctuated, suggesting that union density has had no perceptible influence on the series. Alternatively, any effects emanating from the business cycle or union density may have been offset by other factors.

2 Answers for the main reason(s) for the dispute were supplied in approximately one-third of the work stoppages observed.

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# What's new?

*Recent reports and studies*

## ■ FROM STATISTICS CANADA

### ■ *Head-office employment*

Domestic firms taken over by foreign firms created about as many new head offices as were closed. On average, head offices that continued to exist after a domestic firm was taken over maintained their level of employment.

Foreign-controlled firms were the dominant force driving growth in the number of head offices and head-office employment in Canada between 1999 and 2005. These firms accounted for about two-thirds of the net increase in head-office employment, and all the growth in the number of head offices.

Toronto has reinforced its position as Canada's leading centre for head offices in the business sector during the past six years, while Calgary experienced the strongest head-office employment growth of Canada's four major head office centres.

Calgary has now surpassed Vancouver by a wide margin as Western Canada's leading head-office centre. Montréal remains Canada's second most important head-office centre, but it has been losing ground to both Toronto and Calgary.

Head-office employment in Canada increased 10.7% to 174,882 from 1999 to 2005, slightly less than the 14% growth rate for the business sector as a whole. The number of head offices in Canada rose 4.2% to 4,161.

For more information, see the July 13, 2006 issue of *The Daily* on the Statistics Canada's Web site ([www.statcan.ca](http://www.statcan.ca)).

### ■ *General Social Survey: Commuting times*

The average Canadian now spends nearly 12 full days a year getting to work and returning home.

Commuters spent an average of 63 minutes a day making the round trip between their place of residence and their workplace in 2005. That's the equivalent of nearly 275 hours of commuting, based on a 260-day work year. In 1992, they spent 54 minutes commuting; by 1998, that had risen to 59 minutes.

Average times were significantly higher in 2005 than in 1992 in five of Canada's six largest urban areas.

The longest commute was in metropolitan Toronto, where the average round trip took 79 minutes—roughly 340 hours, or two solid weeks, per work year.

But the increases were particularly large for residents of Calgary and Montréal. The round trip for people in metropolitan Montréal took 76 minutes last year, up from 62 minutes in 1992, the equivalent of 2.5 extra days a year.

In fast-growing Calgary, the round trip last year took an average of 66 minutes, 14 minutes longer than it did in 1992. In contrast, Vancouver workers spent no more time getting to work in 2005 than they did some 10 years earlier.

The average travel time rose for both car users and public transit users. But, as many people already know, despite problems of congestion, it is in most cases faster to use a car or other vehicle to get to work than public transit.

For more information, see the July 12, 2006 issue of *The Daily* on the Statistics Canada's Web site ([www.statcan.ca](http://www.statcan.ca)).

### ■ *The death of a spouse and the impact on income*

Five years after the death of a spouse, the adjusted family income of senior widows had declined by more than 15%, while that of widowers was 5.8% higher.

Overall, 51% of widowers suffered a loss of adjusted income after five years compared with 72% of widows.

Not only did the adjusted income of widows decline, but more of them fell below the low-income threshold. After five years, 8.7% of widows were living in low income, compared with 5.1% of widowers.

For widows, the loss came mainly from lower pension income and earnings. For widowers, lower earnings contributed the most to the decrease in adjusted income.

For more information, see the July 10, 2006 issue of *The Daily* on the Statistics Canada's Web site ([www.statcan.ca](http://www.statcan.ca)).

### ■ *Education and labour market pathways of young adults*

More and more youth have undertaken postsecondary education, either at college, university or a private institution, and have taken their place in the labour market.

The Youth in Transition Survey (YITS), which tracked movements between high school, postsecondary education and the labour market, interviewed young people and measured their activities at three stages: in 1999, 2001 and 2003.

During this four-year period, nearly three-quarters of the young people underwent some form of transition, either between high school and postsecondary education or between their studies and the workplace.

The proportion of young people aged 22 to 24 who undertook some form of postsecondary education since the start of the survey rose steadily. In 1999, 62% of young people had gone to a postsecondary institution at some point. By 2003, over three-quarters (76%) had done so.

Over time, the proportion of youth who had graduated from a postsecondary institution soared. In 1999, 7% of young people were postsecondary graduates. By 2003, this proportion had increased more than six times to 44%.

As of December 2003, about one in every five young people aged 22 to 24 was still pursuing postsecondary accreditation and had not yet graduated.

For more information, see the July 5, 2006 issue of *The Daily* on the Statistics Canada's Web site ([www.statcan.ca](http://www.statcan.ca)).

### ■ *Employer pension plans (trusteed pension funds)*

The value of retirement savings held in trusteed pension funds approached \$800 billion at the end of 2005.

Funds increased in value for six straight quarters after the low of \$652.2 billion observed in the second quarter of 2004. They accumulated \$799.1 billion in the fourth quarter of 2005, a 2.9% rise over the previous three months. Since 1995, fund assets have more than doubled in value, while in the last five years, they have grown more than 30%.

Fourth quarter 2005 fund revenues and expenditures amounted to \$28.8 billion and \$9.6 billion respectively, for a net cash flow of \$19.2 billion, up 9.3% from the previous quarter.

Year over year, 2005 revenues declined for the first time since 2001. Revenues of \$94.2 billion were down 4.6%, following record-high revenues of \$98.8 billion in 2004. Expenditures for 2005 declined 31.1% due to higher than normal expenditures in 2004 that resulted from an employer cash withdrawal and transfer from an existing plan to a much smaller plan. With reduced expenditures, the cash flow for 2005 amounted to \$57.5 billion, a 26.6% increase over 2004.

Employer contributions increased significantly in the last five years, doubling from \$10.4 billion in 2001 to \$20.7 billion in 2005. For the third straight year, contributions exceeded benefits paid out.

The return on investment for 2005 was 9.0%, the same as in 2004 and double the returns of 4% to 5% achieved in 2001 and 2002.

In 2005, of the 5.7 million Canadian workers belonging to employer pension plans, about 4.6 million were members of trusteed plans. The remainder were covered by the consolidated revenue funds of the federal and provincial governments, or by insurance company contracts or Government of Canada annuities.

For more information, see the June 20, 2006 issue of *The Daily* on the Statistics Canada's Web site ([www.statcan.ca](http://www.statcan.ca)).

### ■ *Culture sector employment in rural Canada*

Proportionately fewer people are employed in the culture sector in rural Canada than in the nation as a whole.

In 2003, less than 3% of Canada's rural workforce was employed in the culture sector, compared with just under 4% of the country's total workforce.

Culture sector employment grew more quickly than overall employment in rural areas between 1996 and 2003. Rural cultural employment rose at about 2.6% per year, whereas overall rural employment increased at a rate of 1.5%.

Some sub-sectors have a higher share of rural residents than others. Between 1996 and 2003, about one-quarter of jobs in the heritage sub-sector and a little over one-fifth of jobs in the visual arts sub-sector were held by rural residents.

Meanwhile, less than one-tenth of jobs in the architecture, advertising and performing arts sub-sectors were held by rural residents.

Compared with both the average rural worker and the average culture worker, rural culture workers were more likely to be employed part time. Between 1996 and 2003, for Canada as a whole, less than 20% of total workers and about 22% of culture sector workers were employed part time. In comparison, 37% of rural culture sector workers were employed part time.

Rural areas of Newfoundland and Labrador reported the strongest growth in culture sector employment, with an average increase of 8% a year from 1996 to 2003. Alberta's rural areas also reported a strong culture sector employment growth of 6% a year on average during the same period.

For more information, see the June 12, 2006 issue of *The Daily* on the Statistics Canada's Web site ([www.statcan.ca](http://www.statcan.ca)).

### ■ **Employment and earnings among lone mothers**

Two major developments have been behind big gains in employment and earnings during the past two decades among lone mothers aged 40 and over.

Rising earnings among these individuals since 1980 were the result of aging among the baby-boom generation and the postwar revolution in the educational attainment of women. Among younger lone mothers, economic outcomes have been relatively stagnant.

Like married mothers, lone mothers were much better educated and significantly older in 2000 than in 1980. Gains in their aggregate employment and earnings reflected this.

In 1980, the population of lone mothers consisted predominantly of women born before 1950. However, during the 1980s and 1990s, they were increasingly replaced by baby boomers born in the 1950s and early 1960s, who had much higher levels of education and labour force attachment.

In 1981, three-quarters (76%) of all lone mothers were born before 1950; by 2001, this proportion had plunged to only 7%. During the same time frame, the proportion of lone mothers with postsecondary education increased from 28% to 49%. Generally speaking, the more highly educated are more likely to work and to earn higher wages than their less-educated counterparts.

Furthermore, during the 1990s, baby-boom mothers began entering their 40s, an age when both employment and earnings tend to be higher. The proportion of lone mothers who were aged 40 to 49 rose from 25% to 38%, while the proportion under 30 declined from 25% to 18%. Older, more experienced workers also tend to earn more than their less-experienced counterparts.

Largely as a result of these changes, employment rates among all lone mothers went up by 12 percentage points. At the same time, annual earnings among those employed rose by 16%, producing a substantial decline in the low-income rate of lone mothers.

For more information, see the June 7, 2006 issue of *The Daily* on the Statistics Canada's Web site ([www.statcan.ca](http://www.statcan.ca)).

### ■ **Canada's labour market at a glance**

Employment in Canada increased for the 13th consecutive year in 2005, the longest stretch of employment gains since the large-scale increases of the 1960s and 1970s. Over the last 13 years, employment growth has averaged 2.0% per year.

About 17.3 million people were in the labour market last year, 67.2% of the working-age population, a decline of 0.3 percentage points from 2004. Previously, the participation rate increased every year between 1996 and 2003, and held steady in 2004. Much of the decline in 2005 was the result of aging baby boomers, adult women and young people leaving the labour force.

With demand for labour strong and supply conditions tightening, the annual unemployment rate fell in 2005, hitting 6.8%, the lowest since 1976.

Other key developments in the labour market have taken place during the past few years. For example, the employment situation for older workers aged 55 and over became increasingly brighter. Last year, 29.9% of this population had jobs, up from 29.0% in 2004. This was the ninth consecutive annual increase in their employment rate since it hit a low of 22.0% in 1996. Some of these gains were due to the influx of baby boomers into this group.

At the same time, more workers than ever before are nearing retirement. In 2005, an estimated 3.6 million workers were within 10 years of (or older than) the median retirement age of 61. They represented 22.1% of the total, up from 10.3% in 1986.

Oil-rich Alberta has consistently enjoyed the highest employment rates in Canada during the past three decades. The province's employment rate fell slightly in 2005, from the record high attained in 2004, to 69.8%. Still, it remained among the highest experienced by the province in nearly three decades. These high employment rates reflect the upward trend in job growth that began in the early 1990s.

For more information, see the June 1, 2006 issue of *The Daily* on the Statistics Canada's Web site ([www.statcan.ca](http://www.statcan.ca)).

### ■ **Census family income**

For the second year in a row, couple families in Oshawa had the highest median total family income among all census metropolitan areas.

The median for couple families in Oshawa reached \$83,100 in 2004, up 1.6% over 2003, after adjusting for inflation. Oshawa remained slightly ahead of Ottawa-Gatineau, where couple families had a median total income of \$82,100, up 1.2% from the previous year.

Nationally, the median total income for couple families rose 1.6% to \$64,800 in 2004. Among census metropolitan areas, the largest increases were observed in Greater Sudbury (+3.7%) and Abbotsford (+2.9%), followed by Edmonton (+2.8%) and Calgary (+2.5%).

Among census agglomerations, the median total income for couple families in Wood Buffalo in northern Alberta remained the highest at \$120,100 in 2004, up 2.6% from 2003. Dominated by the population living in Fort McMurray, this area is recognized for its involvement in oil sands development.

Among lone-parent families in census metropolitan areas, those in Ottawa-Gatineau again showed the highest median family total income in 2004, at \$35,900. The median total income of lone-parent families in Calgary moved ahead of those in Oshawa in 2004, although both followed closely behind Ottawa-Gatineau, at \$35,800 and \$35,700 respectively. The national median total income for lone-parent families was \$29,500, up 1.2% from 2003.

Employment income remained the main source of income for couple families in 2004, accounting for 79 cents of each dollar of total income, a contribution that has remained stable since 2000.

For more information, see the May 25, 2006 issue of *The Daily* on the Statistics Canada's Web site ([www.statcan.ca](http://www.statcan.ca)).

### ■ **Income of individuals**

Median total income for individuals increased for the first time in three years in 2004. The median total income of individuals amounted to \$24,400, up 1.5% from 2003.

Median employment income edged up 0.5% to \$25,400. Only people with employment income were included in the calculation of median employment income.

The Northwest Territories still had the highest median employment income in the country at \$35,400, up 3.7% from 2003 and by far the largest gain among all provinces and territories.

Yukon followed with median employment income of \$28,300 (+1.4%). Ontario was in third place at \$27,900 (-0.1%) followed by Alberta with \$27,500 (+2.2%). Median employment income in Newfoundland and Labrador was the lowest at \$17,000, although it rose 3.0% in 2004, a rate of increase second only to the Northwest Territories.

As in previous years, employment income represented 75% of total income. Government transfers represented the second largest source of income, accounting for 12% of total income at the national level. The main components of transfers were Old Age Security and Canada/Quebec Pension Plan benefits.

At the national level, taxfilers received \$15.68 in government transfers for every \$100 of employment income in 2004, down from \$15.97 in 2003. Among census metropolitan areas, people in Calgary relied least

on transfer payments, receiving only \$7.46 for every \$100 in employment income. Those in Trois-Rivières received the most (\$23.98).

For more information, see the May 23, 2006 issue of *The Daily* on the Statistics Canada's Web site ([www.statcan.ca](http://www.statcan.ca)).

## ■ FROM OTHER ORGANIZATIONS

### ■ *Working time over the 20th century*

From 1870 to 2000, the workweek decreased by 41% in industrialized countries. The employment rate displays large movements but no clear secular pattern. What accounts for the large decrease in the workweek and developments in the employment rate over the past 130 years? A dynamic general-equilibrium model with supervisory and production workers provides the answer. Over time, both types of workers become more productive. In a calibrated version of the model, productivity gains of supervisors account for a large fraction of the decline in the workweek length in Japan, the United Kingdom, and the United States. The model, augmented to include taxes, government spending, and technological progress, captures the movement in the employment rates of the three countries. See "Working time over the 20th century" by Alexander Ueberfeldt, working paper 2006-18, Bank of Canada, May 2006.

### ■ *Accessibility and employment growth*

Various accessibility measures have been proposed over the past 40 years and applied to a wide range of problems. This paper provides a new functional form to represent accessibility using transportation data from the New York/New Jersey metropolitan area. The accessibility function is used as an input to an employment function of several socioeconomic variables. Two main hypotheses are tested: (1) improved accessibility, all other factors remaining the same, will positively affect labour market entry; and (2) this effect will vary by employment type and industry. Both functions are estimated simultaneously with county-level data for the year 2000 using two-stage and three-stage least squares analysis (2SLS and 3SLS). Because the 3SLS results were statistically more robust, while the parameter estimates remained similar in magnitude and sign, the proposed model mainly used these estimates. Main results show that the changes in accessibility have

a noticeable effect on employment. Depending on skill requirements, offered wage rates, household income, and children of specific age groups, participation in the employment sectors considered were proved to be responsive to accessibility improvements. See "Modeling and analysis of the link between accessibility and employment growth" by K. Ozbay, D. Ozmen and J. Berechman, *Journal of Transportation Engineering*, May 2006, Vol. 132, no. 5, p. 385-393.

### ■ *Community unemployment and immigrants' health in Montréal*

This study compares the relationship between community unemployment and the physical and mental health for immigrants and non-immigrants in Montréal under the hypothesis that high unemployment in the community may generate more negative effects on the health of immigrants than on non-immigrants. Montréal residents were studied via multilevel analysis, using both individual survey data and neighbourhood data from 49 police districts. Individual-level data were excerpted from a 1998 health survey of Montréal residents, while neighbourhood data originated from survey data collected in the 49 Montréal police districts and the 1996 Census. The associations between community unemployment and self-rated health, psychological distress and obesity are examined. At the individual level, immigrants do not differ from non-immigrants with respect to the three health indicators, except that second-generation males are slightly heavier. However, when living in areas of high unemployment, immigrants tend to report poor physical and mental health in comparison to non-immigrants. Among first-generation immigrants, community unemployment was associated with psychological distress. Among second-generation immigrants, the probability of obesity and poor self-rated health increased significantly for those living in areas with high unemployment, but these associations reached statistical significance only for men. See "Community unemployment and immigrants' health in Montreal" by Maria-Victoria Zunzunegui, Mathieu Forster, Lise Gauvin, Marie-France Raynault and Willms J. Douglas, *Social Science & Medicine*, July 2006, Vol. 63, no. 2, p. 485-500.

### ■ *Internal labour markets and labour market restructuring*

Since the 1980s, social scientists and economic geographers have stressed that 'standard' forms of employment and internal labour markets (ILMs) which

characterized Fordism have declined and have been displaced by post-Fordist non-standard and contingent employment arrangements. However, some researchers are critical of the assumptions of a universal decline in ILMs and stress that although ILMs have been significantly restructured, they remain an important part of firm employment strategies. On the basis of a postal survey and interviews conducted with ninety firms and institutions in Kitchener-Waterloo and Sault Ste. Marie, Ontario, in 1995 and 1996, this paper assesses the role of ILMs. Although shifts towards non-standard arrangements are evident, employers are clearly aware of the need to maintain if not develop ILM structures. The paper argues that geographers need to reconceptualize the relationships between ILMs and external labour markets (ELMs) as integrated phenomena. See "Requiem or rebirth? Internal labour markets and labour market restructuring in the Kitchener and Sault Ste. Marie regions" by Tod D. Rutherford, *Canadian Geographer*, June 2006, Vol. 50, no. 2, p. 197-216.

### ■ ***Attitudes to work and career progression (in French)***

Based on a sample of federal public servants, this article examines the relationships between the key psychological and attitudinal indicators in the workplace (indicators that are often used to predict employee propensity to quit and the career steps of these same employees. When the career steps are established on the basis of actual career concerns, respondents who are either in the exploration or disengagement phase have generally more negative attitudes towards work than those who are in the middle of establishing or maintaining their careers. The findings raise important issues with respect to human resources management in the public sector, and suggest practical avenues for action aimed at ensuring greater employee mobilization and retention. See « Quand les attitudes au travail sont tributaires de la progression de carrière : analyse dans le cadre de la modernisation de la gestion des ressources humaines » by Renaud Paquet and Eric Gosselin, *Canadian Public Administration*, Summer 2006, Vol. 49, no. 2, p. 125-142.

### ■ ***The ins and outs of poverty in advanced economies***

Comparative analysis of poverty dynamics—transitions and persistence—can yield important insights about the nature of poverty and the effectiveness of

alternative policy responses. This study compares poverty dynamics in Canada, Germany, Great Britain, and the United States for overlapping six-year periods in the 1990s, focusing on the impact of government policies. Relative to measured cross-sectional poverty rates, poverty persistence is higher in North America than in Europe. Most poverty transitions, and the prevalence of chronic poverty, are associated with employment instability and family dissolution in all four countries. However, government tax-and-transfer policies are more effective at reducing poverty persistence in Europe than in North America. See "The ins and outs of poverty in advanced economies: Government policy and poverty dynamics in Canada, Germany, Great Britain, and the United States" by Robert G. Valletta, *Review of Income & Wealth*, June 2006, Vol. 52, no. 2, p. 261-284.

### ■ ***Involuntary unemployment and macroeconomic policy***

The perspective of modern macroeconomic theory, be it new classical or old and new Keynesian, is that unemployment can be reduced only if real wages are cut. The modern Keynesians, using the micro-foundations of efficiency wage theory, argue that real wages cannot and will not be cut by firms for efficiency wage reasons. This generates involuntary unemployment based on a market coordination problem. This paper presents a behavioural model that contrasts with efficiency wage theory, which suggests that reducing real wages need not affect the marginal cost of labour and, therefore, the number of individuals employed. In the behavioural model, wherein some linearity exists in the relationship between real wages and working conditions and labour productivity, a lower real wage rate is not a necessary condition for reducing the unemployment rate nor is a higher real wage an obstacle to reducing it. In this scenario, unemployment, to the extent that it is demand-side induced, is not related to movements in real wages. Therefore, restoring full employment after a negative demand shock becomes a matter for demand management. See "Involuntary unemployment, macroeconomic policy, and a behavioral model of the firm: Why high real wages need not cause high unemployment" by Morris Altman, *Research in Economics*, June 2006, Vol. 60, no. 2, p. 97-111.

### ■ **General/specific skills in the labour market**

Human capital investments are not independent of the aggregate state of labour markets: frictions and slackness of the labour market raise the returns to specific human capital investments relative to general investments. This paper presents a macroeconomic model with two pure strategy regimes. In the pure G-regime, workers invest in general skills. This occurs when they face high turnover labour markets and an absence of employment protection. The pure S-regime in which workers invest in skills specific to their job appears when employment protection is high enough. Implications for a characterization of Europe-United States differences are provided in conclusion. See "General versus specific skills in labor markets with search frictions and firing costs" by Etienne Wasmer, *The American Economic Review*, 06/01/2006, Vol. 96, no. 3, p. 811-

### ■ **Wage differentials, discrimination and efficiency**

This paper analyzes a large labour market where homogeneous firms post wages to direct the search of workers who differ in productivity. The model is shown to have a unique equilibrium. The wage differential depends positively on the workers' productivity differential only when the latter is large. When the productivity differential is small, high-productivity workers get a lower wage than low-productivity workers. This reverse wage differential remains even when the productivity differential shrinks to zero. However, the equilibrium is socially efficient. High-productivity workers always get the employment priority and higher expected wages than low-productivity workers. Although discrimination in terms of expected wages does not exist, conventional measures are likely to incorrectly find discrimination in the model. See "Wage differentials, discrimination and efficiency" by Shi Shouyong, *European Economic Review*, May 2006, Vol. 50, no. 4, p. 849-875.

### ■ **Directed search on the job and the wage ladder**

This study presents a model of a labour market where employed workers search on the job and firms direct workers' search using wage offers and employment probabilities. Applicants observe all offers and face a trade-off between wage and employment probability. Wage dispersion is seen among workers, even though all workers and jobs are homogeneous. Equilibrium wages form a ladder, as workers optimally choose to climb the ladder one rung at a time. This is because low-wage applicants are relatively more sensitive to employment probability than to wage and thus forgo the opportunity to apply for a high wage, with a lower chance of success. See "Directed search on the job and the wage ladder" by Alain Delacroix and Shouyong Shi, *International Economic Review*, May 2006, Vol. 47, no. 2, p. 651-699.

### ■ **Globalization and wage inequality**

The deteriorating economic position of low-skilled workers relative to high-skilled workers appears to be one harmful effect of the economic globalization that took place during the 1980s and 1990s. This paper presents a time series investigation for Canada using as the dependent variable the relative wages of production and non-production workers in the manufacturing sector between 1970 and 2001. The independent variables include R&D, union density, immigration, imports from non-OECD countries, foreign direct investment (FDI), capital-labour ratio, and number of workers in each group. The results show that the R&D expenditures and union density are two important variables in the explanation of the widening wage gap. The effects of immigration, imports, and FDI on wage inequality are found to be moderate. See "Globalization and wage inequality in the Canadian manufacturing sector: A time series analysis" by Gilles Grenier and Akbar Tavakoli, *Global Economy Journal*, 2006, Vol. 6, no. 2, p. 1-25.

# Varia

*In this issue: Updates on unionization and gambling*

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## PREVIOUS UPDATES

Work absences – Summer 2006

Retirement – Summer 2006

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## ECONOMIC AND SOCIAL INDICATORS

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## CONTACTS

### Administrative data

*Small area and administrative data*

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### Business surveys

*Annual Survey of Manufactures and Logging*

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*Annual surveys of service industries*

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*Survey of Labour and Income Dynamics*

*Survey of Financial Security*

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(613) 951-7355 or 1 888 297-7355

### General Social Survey

*Education, work and retirement*

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*Pension Plans in Canada Survey*

Michel Palardy

(613) 951-7559

*Quarterly Survey of Trusteed*

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Gregory Sannes

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### Special surveys

*Survey of Work Arrangements*

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(613) 951-4624

*Adult Education and Training Survey*

Client Services

(613) 951-7608 or 1 800 307-3382

*National Graduates Survey*

Client Services

(613) 951-7608

# Unionization

## Unionization rates in first half of 2005 and 2006

At 13.8 million, average paid employment (employees) during the first half of 2006 was 312,000 higher than during the same period a year earlier (Table 1). On the other hand, union membership increased by only 62,000 to 4.1 million. As a result, the unionization rate (density) fell from 30.0% to 29.7%.

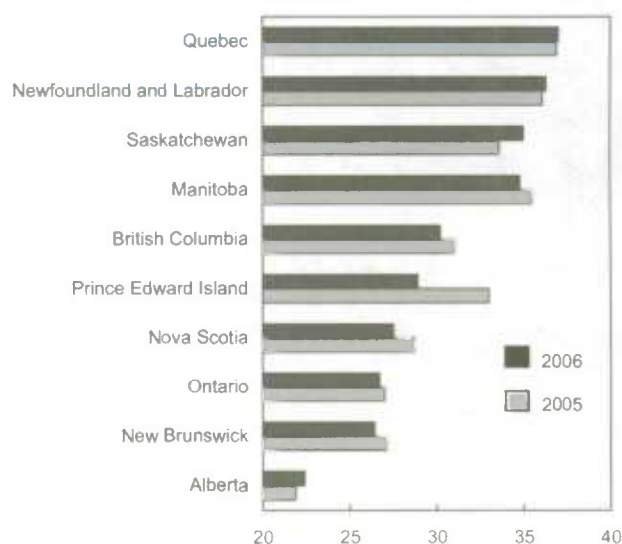
Both men and women registered decreases in unionization rates, with the decline for men being larger. At 30.1%, the women's rate in 2006 continued to exceed the rate for men (29.4%).

Unionization rose slightly in the public sector (to 71.4%) and fell in the private sector (to 17.0%).

Newfoundland and Labrador, Quebec, Saskatchewan and Alberta recorded rate increases, with the other six provinces showing declines (Chart A).

The rate fell from 31.5% to 31.2% for full-time workers and remained virtually unchanged for part-time workers (23.2%).

**Chart A** Quebec, Newfoundland and Labrador remain the most unionized provinces; Alberta, the least



Source: Statistics Canada, Labour Force Survey, January-to-June averages

## Data sources

Information on union membership, density and coverage by various socio-demographic characteristics, including earnings, are from the Labour Force Survey. Further details can be obtained from Marc Lévesque, Labour Statistics Division, Statistics Canada at (613) 951-4090.

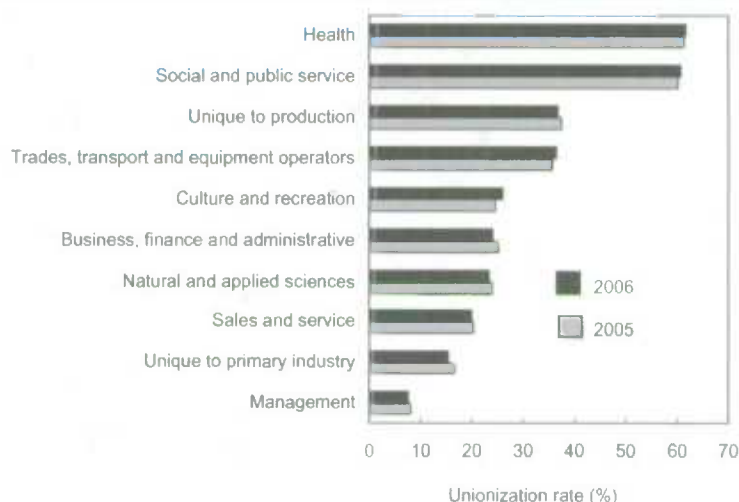
Data on strikes, lockouts and workdays lost, and those on major wage settlements were supplied by Human Resources and Skills Development Canada (HRSDC). Further information on these statistics may be obtained from Client services, Workplace Information Directorate, HRSDC at 1 800 567-6866.

The unionization rate for permanent employees fell to 30.2%, but rose to 26.3% for those in non-permanent jobs. The rate fell in workplaces with 20 to 99 employees, and in those with over 500; it remained unchanged in those with 100 to 500 employees, but rose in those with less than 20.

Unionization rose in 7 of the 16 major industry groups: natural resources, utilities, construction, transportation and warehousing, education, health care and social assistance, and other services. All other industry groups registered declines (Chart B).

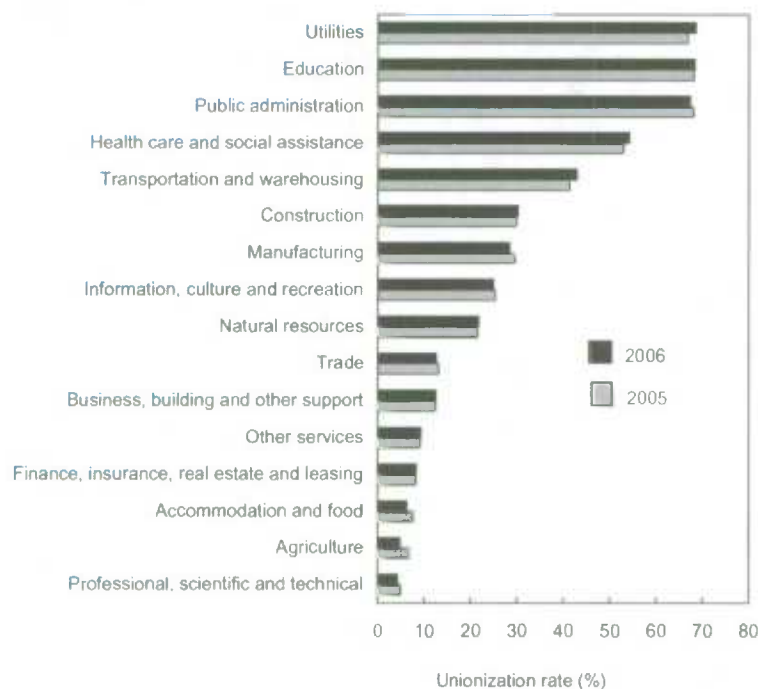
Among the 10 major occupational groups, unionization rose in 4: health, social and public service; culture and recreation; and trades, transport and equipment operation. The rest showed declines (Chart C).

**Chart C Unionization in community service occupations far outpaced that in others**



Source: Statistics Canada, Labour Force Survey, January-to-June averages

**Chart B The highest unionization rates were in public-sector industries**



Source: Statistics Canada, Labour Force Survey, January-to-June averages

The number of employees who were not union members but covered by a collective agreement averaged 316,000, up slightly from 306,000 a year earlier (see Akyeampong 2000 for a description of this group).

**Table 1 Union membership and coverage by selected characteristics**

	2005			2006		
	Total employees	Union density		Total employees	Union density	
		Members	Coverage <sup>1</sup>		Members	Coverage <sup>1</sup>
	'000	%	%	'000	%	%
<b>Both sexes</b>	<b>13,492</b>	<b>30.0</b>	<b>32.2</b>	<b>13,804</b>	<b>29.7</b>	<b>32.0</b>
Men	6,828	29.7	32.1	6,979	29.4	31.9
Women	6,664	30.2	32.3	6,825	30.1	32.1
<b>Sector<sup>2</sup></b>						
Public	3,131	71.3	75.2	3,229	71.4	75.1
Private	10,361	17.5	19.2	10,575	17.0	18.9
<b>Age</b>						
15 to 24	2,287	14.1	15.8	2,369	13.3	15.5
25 to 54	9,655	32.9	35.3	9,798	32.7	35.1
25 to 44	6,530	29.7	31.9	6,559	29.5	31.9
45 to 54	3,125	39.7	42.3	3,238	39.3	41.6
55 and over	1,550	35.2	37.6	1,638	35.5	37.7
<b>Education</b>						
Less than Grade 9	345	26.4	28.1	333	27.6	30.1
Some high school	1,441	22.5	23.9	1,497	21.9	23.5
High school graduation	2,831	26.8	28.7	2,848	27.1	28.8
Some postsecondary	1,255	22.3	24.1	1,214	21.6	23.7
Postsecondary certificate or diploma	4,714	33.7	36.1	4,799	33.4	35.9
University degree	2,906	34.5	37.5	3,113	33.7	36.7
<b>Province</b>						
Atlantic	915	29.9	31.4	931	28.9	30.5
Newfoundland and Labrador	182	36.1	37.8	180	36.3	38.1
Prince Edward Island	56	33.0	34.6	56	28.9	30.2
Nova Scotia	377	28.7	30.3	384	27.5	28.9
New Brunswick	301	27.1	28.4	311	26.4	28.1
Quebec	3,161	36.9	40.4	3,219	37.0	40.9
Ontario	5,420	27.0	29.0	5,494	26.7	28.4
Prairies	2,303	26.7	28.7	2,394	27.0	29.1
Manitoba	488	35.5	37.8	496	34.8	37.5
Saskatchewan	386	33.6	35.1	387	35.0	36.9
Alberta	1,429	21.9	23.8	1,510	22.4	24.4
British Columbia	1,693	31.0	32.7	1,766	30.2	32.0
<b>Work status</b>						
Full-time	10,999	31.5	33.8	11,275	31.2	33.6
Part-time	2,493	23.3	25.1	2,528	23.2	25.2
<b>Industry</b>						
Goods-producing	3,251	29.6	32.0	3,214	28.8	31.0
Agriculture	119	6.8	7.5	129	4.8	5.4
Natural resources	248	21.5	23.2	261	21.7	23.7
Utilities	125	66.8	69.2	119	68.5	72.5
Construction	642	29.9	32.0	685	30.2	32.2
Manufacturing	2,117	29.6	32.2	2,020	28.4	30.7
Service-producing	10,241	30.1	32.3	10,590	30.0	32.3
Trade	2,232	13.1	14.2	2,313	12.6	14.2
Transportation and warehousing	645	41.3	42.8	661	42.9	44.4
Finance, insurance, real estate and leasing	826	8.3	9.6	853	8.3	10.3
Professional, scientific and technical	679	5.0	6.8	717	4.3	5.4
Business, building and other support	481	12.5	14.4	517	12.5	14.8
Education	1,073	68.1	72.6	1,145	68.3	72.7
Health care and social assistance	1,507	53.0	55.5	1,546	54.2	56.5
Information, culture and recreation	600	25.3	27.6	626	24.9	26.9
Accommodation and food	898	7.7	8.5	895	6.3	7.4
Other	470	9.2	11.3	485	9.3	11.1
Public administration	830	68.1	73.5	833	67.3	72.5

Table 1 Union membership and coverage by selected characteristics (concluded)

	2005			2006		
	Total employees	Union density		Total employees	Union density	
		Members	Coverage <sup>1</sup>		Members	Coverage <sup>1</sup>
Occupation	'000	%	%	'000	%	%
Management	914	8.1	11.2	1,013	7.6	10.4
Business, finance and administrative	2,638	25.3	27.5	2,698	24.1	26.3
Professional	337	18.1	21.5	352	14.6	17.3
Financial and administrative	728	22.9	25.0	700	22.5	24.5
Clerical	1,574	28.0	30.0	1,645	26.7	28.9
Natural and applied sciences	953	24.0	26.1	981	23.4	26.1
Health	824	61.4	63.8	854	61.7	64.1
Professional	88	40.5	47.5	94	35.6	41.3
Nursing	265	78.0	80.2	264	81.4	83.2
Technical	199	59.0	61.1	211	59.3	60.9
Support staff	272	53.6	54.9	285	53.8	56.4
Social and public service	1,077	60.2	64.3	1,142	60.7	64.2
Legal, social and religious workers	432	37.3	41.3	452	38.2	40.9
Teachers and professors	645	75.5	79.8	690	75.4	79.5
Secondary and elementary	443	85.9	88.8	472	87.1	89.8
Other	202	52.8	59.9	219	50.2	57.2
Culture and recreation	316	24.6	27.3	331	26.1	28.4
Sales and service	3,454	20.3	21.9	3,444	20.0	21.7
Wholesale	353	7.2	7.9	359	6.1	7.4
Retail	1,034	12.8	13.9	1,013	11.8	12.9
Food and beverage	487	10.6	11.7	497	9.2	9.9
Protective services	218	56.4	62.6	215	54.6	60.7
Child care and home support	258	37.1	39.1	277	39.5	42.3
Travel and accommodation	1,205	24.5	26.2	1,195	25.5	27.3
Trades, transport and equipment operators	1,915	35.7	37.9	1,987	36.5	38.6
Contractors and supervisors	117	28.4	31.1	114	27.1	29.6
Construction trades	232	37.3	40.1	254	37.9	40.1
Other trades	788	37.7	40.0	781	38.4	40.4
Transportation equipment operators	470	35.1	36.7	504	38.1	39.9
Helpers and labourers	310	33.2	35.2	334	31.8	34.5
Unique to primary industry	262	16.7	17.7	273	15.4	17.0
Unique to production	1,036	37.5	39.8	969	36.8	39.4
Machine operators and assemblers	832	37.3	39.5	772	36.5	39.0
Labourers	204	38.3	40.6	198	38.0	41.1
<b>Workplace size</b>						
Under 20 employees	4,396	12.9	14.5	4,473	13.4	15.0
20 to 99 employees	4,433	30.2	32.6	4,548	29.7	32.2
100 to 500 employees	2,873	41.4	44.0	2,946	41.4	44.0
Over 500 employees	1,790	53.1	56.1	1,837	50.9	53.8
<b>Job tenure</b>						
1 to 12 months	3,037	14.8	17.1	3,147	14.6	17.2
Over 1 year to 5 years	4,349	23.3	25.5	4,361	23.0	25.2
Over 5 years to 9 years	2,002	30.9	32.9	2,194	32.1	34.1
Over 9 years to 14 years	1,244	36.5	38.3	1,278	36.7	38.7
Over 14 years	2,860	52.7	55.3	2,823	52.0	54.5
<b>Job status</b>						
Permanent	11,790	30.6	32.8	12,069	30.2	32.4
Non-permanent	1,702	25.4	28.2	1,735	26.3	29.4

1 Union members and persons who are not union members but covered by collective agreements (for example, some religious group members).

2 Public-sector employees are those working for government departments or agencies; Crown corporations; or publicly funded schools, hospitals or other institutions. Private-sector employees are all other wage and salary earners.

Source: Statistics Canada, Labour Force Survey, January-to-June averages

## 2005 annual averages

Approximately 4.1 million (29.8%) employees belonged to a union in 2005 (Table 2). An additional 310,000 (2.2%) were covered by a collective agreement.

Those in the public sector—government, Crown corporations, and publicly funded schools or hospitals—were four times as likely as their private-sector counterparts to belong to a union (71.0% versus 17.5%).

Almost 1 in 3 full-time employees belonged to a union, compared with about 1 in 4 part-time. Also, almost 1 in 3 permanent employees was a union member, compared with 1 in 4 non-permanent.

High unionization rates were found among employees aged 45 to 54 (39.4%); among those with a university degree (34.2%), or a postsecondary certificate or diploma (33.6%); in Quebec (36.7%), and Newfoundland and Labrador (35.7%); in public administration (67.7%), educational services (67.6%), and utilities (66.8%); and in health care occupations (53.6%).

Low unionization rates were recorded among 15 to 24 year-olds (13.8%); in Alberta (21.6%); in agriculture (5.0%) and professional, scientific and technical services (5.3%); and in management occupations (8.5%).

**Table 2 Union membership, 2005**

	Total employees '000	Union member	
		Total '000	Density %
<b>Both sexes</b>	<b>13,658</b>	<b>4,064</b>	<b>29.8</b>
Men	6,949	2,060	29.7
Women	6,709	2,004	29.9
<b>Sector<sup>1</sup></b>			
Public	3,123	2,218	71.0
Private	10,535	1,846	17.5
<b>Age</b>			
15 to 24	2,373	327	13.8
25 to 54	9,708	3,180	32.8
25 to 44	6,557	1,939	29.6
45 to 54	3,152	1,242	39.4
55 and over	1,576	557	35.4
<b>Education</b>			
Less than Grade 9	353	92	26.0
Some high school	1,476	327	22.2
High school graduation	2,869	759	26.5
Some postsecondary	1,233	274	22.2
Postsecondary certificate or diploma	4,752	1,596	33.6
University degree	2,975	1,016	34.2
<b>Province</b>			
Atlantic	937	274	29.3
Newfoundland and Labrador	187	67	35.7
Prince Edward Island	58	18	30.6
Nova Scotia	383	107	28.0
New Brunswick	309	82	26.6
Quebec	3,214	1,179	36.7
Ontario	5,470	1,470	26.9
Prairies	2,323	613	26.4
Manitoba	491	169	34.5
Saskatchewan	385	131	34.0
Alberta	1,447	313	21.6
British Columbia	1,715	528	30.8
<b>Work status</b>			
Full-time	11,225	3,503	31.2
Part-time	2,434	561	23.1
<b>Industry</b>			
Goods-producing	3,316	980	29.5
Agriculture	127	6	5.0
Natural resources	256	58	22.6
Utilities	125	83	66.8
Construction	699	212	30.3
Manufacturing	2,110	620	29.4
Service-producing	10,342	3,085	29.8
Trade	2,262	290	12.8
Transportation and warehousing	662	272	41.0
Finance, insurance, real estate and leasing	822	65	7.9
Professional, scientific and technical	683	36	5.3
Business, building and other support	504	63	12.6
Education	1,051	710	67.6
Health care and social assistance	1,521	815	53.6
Information, culture and recreation	619	156	25.3
Accommodation and food	912	70	7.7
Other	474	43	9.1
Public administration	833	564	67.7

### Differences between the sexes

For the second year in a row, the unionization rate for women in 2005 surpassed that of men (29.9% versus 29.7%).

Among men, part-time employees had a much lower rate than full-time (18.3% versus 31.0%). Among women, the gap was narrower (25.1% versus 31.5%).

The unionization rate of women in the public sector (72.5%) exceeded that of men (68.7%), reflecting women's presence in public administration, and in teaching and health positions. However, in the private sector, only 12.8% were unionized, compared with 21.4% of men. The lower rate among women reflected their predominance in sales and several service occupations.

A higher-than-average rate was recorded among men with a post-secondary certificate or diploma (33.7%). For women, the highest rate was among those with a university degree (39.7%), reflecting unionization in occupations such as health care and teaching.

Among those in permanent positions, the rate for men was identical to that for women (30.6%). Among those in non-permanent positions, women were more unionized than men (25.6% versus 23.0%).

**Table 2 Union membership, 2005 (concluded)**

	Total employees	Union member	
		Total	Density
	'000	'000	%
<b>Occupation</b>			
Management	947	81	8.5
Business, finance and administrative	2,649	656	24.8
Professional	349	61	17.6
Financial and administrative	709	160	22.6
Clerical	1,592	434	27.3
Natural and applied sciences	959	230	24.0
Health	841	515	61.2
Professional	92	36	39.0
Nursing	268	212	78.9
Technical	204	119	58.4
Support staff	277	148	53.6
Social and public service	1,081	644	59.6
Legal, social and religious workers	446	169	37.9
Teachers and professors	636	475	74.7
Secondary and elementary	432	369	85.4
Other	204	107	52.2
Culture and recreation	323	85	26.3
Sales and service	3,453	687	19.9
Wholesale	362	23	6.3
Retail	1,021	123	12.0
Food and beverage	501	54	10.8
Protective services	221	123	55.6
Child care and home support	248	93	37.6
Travel and accommodation	1,202	299	24.8
Trades, transport and equipment operators	1,983	710	35.8
Contractors and supervisors	114	32	28.4
Construction trades	257	94	36.7
Other trades	794	302	38.0
Transportation equipment operators	489	174	35.6
Helpers and labourers	328	107	32.7
Unique to primary industries	283	46	16.1
Unique to production	1,037	384	37.0
Machine operators and assemblers	828	307	37.1
Labourers	209	77	36.9
<b>Workplace size</b>			
Under 20 employees	4,455	582	13.1
20 to 99 employees	4,490	1,338	29.8
100 to 500 employees	2,915	1,194	40.9
Over 500 employees	1,799	952	52.9
<b>Job tenure</b>			
1 to 12 months	3,135	464	14.8
Over 1 year to 5 years	4,374	1,017	23.3
Over 5 years to 9 years	2,051	642	31.3
Over 9 years to 14 years	1,251	452	36.1
Over 14 years	2,847	1,490	52.3
<b>Job status</b>			
Permanent	11,861	3,626	30.6
Non-permanent	1,798	438	24.4

1 Public-sector employees are those working for government departments or agencies; Crown corporations; or publicly funded schools, hospitals or other institutions. Private-sector employees are all other wage and salary earners.

Source: Statistics Canada, Labour Force Survey

## Average earnings and usual hours

Unionized jobs generally provide higher earnings than non-unionized ones (Table 3). However, factors other than collective bargaining provisions play a role as well. These include varying distributions of unionized employees by age, sex, job tenure, industry, occupation, firm size, and geographical location.

Although these factors have not been examined, it is clear that unionized workers and jobs tend to have certain characteristics that are associated with higher earnings. For example, union density is higher among older workers, those with higher education, those with long tenure, and those in larger workplaces. Although differences in earnings and non-wage benefits cannot be attributed solely to union status (Akyeampong 2002), the union wage premium (after adjusting for employee and workplace characteristics) has been estimated at 7.7% (Fang and Verma 2002).

In 2005, the average hourly earnings of unionized workers were higher than those of non-unionized workers. This held true for both full-time (\$22.66 versus \$19.13) and part-time (\$19.10 versus \$11.62) employees.

In addition to having higher hourly earnings, unionized part-time employees generally worked more hours per

**Table 3 Average earnings and usual hours by union and job status, 2005**

	Hourly earnings			Usual weekly hours, main job		
	All employees	Full-time	Part-time	All employees	Full-time	Part-time
	\$					
<b>Both sexes</b>	<b>19.09</b>	<b>20.31</b>	<b>13.45</b>	<b>35.6</b>	<b>39.6</b>	<b>17.5</b>
Union member	22.17	22.66	19.10	36.0	38.7	19.3
Unon coverage <sup>1</sup>	22.15	22.66	18.95	36.0	38.8	19.2
Not a union member <sup>2</sup>	17.65	19.13	11.62	35.4	40.0	16.9
<b>Men</b>	<b>20.74</b>	<b>21.71</b>	<b>12.45</b>	<b>38.3</b>	<b>40.8</b>	<b>16.5</b>
Union member	22.98	23.35	17.52	38.4	39.8	18.3
Unon coverage <sup>1</sup>	22.96	23.35	17.36	38.5	39.9	18.1
Not a union member <sup>2</sup>	19.69	20.88	11.19	38.2	41.3	16.1
<b>Women</b>	<b>17.38</b>	<b>18.58</b>	<b>13.87</b>	<b>32.9</b>	<b>38.0</b>	<b>17.9</b>
Union member	21.33	21.81	19.59	33.5	37.3	19.7
Unon coverage <sup>1</sup>	21.30	21.81	19.45	33.5	37.3	19.6
Not a union member <sup>2</sup>	15.54	16.94	11.81	32.6	38.3	17.3
<b>Atlantic</b>	<b>15.94</b>	<b>16.84</b>	<b>11.35</b>	<b>36.7</b>	<b>40.5</b>	<b>17.4</b>
Union member	20.59	20.80	18.69	37.5	39.4	19.8
Unon coverage <sup>1</sup>	20.58	20.81	18.61	37.4	39.5	19.6
Not a union member <sup>2</sup>	13.88	14.89	9.61	36.3	40.9	16.9
<b>Quebec</b>	<b>18.43</b>	<b>19.48</b>	<b>13.69</b>	<b>34.7</b>	<b>38.3</b>	<b>18.1</b>
Union member	20.89	21.16	19.16	35.4	37.7	20.2
Unon coverage <sup>1</sup>	20.74	21.05	18.73	35.4	37.8	20.1
Not a union member <sup>2</sup>	16.88	18.31	11.56	34.2	38.7	17.2
<b>Ontario</b>	<b>20.06</b>	<b>21.50</b>	<b>13.26</b>	<b>35.8</b>	<b>39.7</b>	<b>17.2</b>
Union member	23.39	24.12	18.74	36.3	39.0	18.6
Unon coverage <sup>1</sup>	23.43	24.18	18.67	36.3	39.1	18.5
Not a union member <sup>2</sup>	18.69	20.35	11.70	35.6	40.0	16.8
<b>Prairies</b>	<b>18.80</b>	<b>19.97</b>	<b>13.31</b>	<b>36.5</b>	<b>40.6</b>	<b>17.3</b>
Union member	21.67	22.25	18.45	36.3	39.4	19.4
Unon coverage <sup>1</sup>	21.76	22.32	18.67	36.4	39.5	19.3
Not a union member <sup>2</sup>	17.62	19.00	11.58	36.5	41.0	16.7
<b>British Columbia</b>	<b>19.36</b>	<b>20.48</b>	<b>14.71</b>	<b>35.2</b>	<b>39.4</b>	<b>17.5</b>
Union member	22.99	23.46	20.64	35.6	38.8	19.1
Unon coverage <sup>1</sup>	23.04	23.56	20.41	35.6	38.9	19.1
Not a union member <sup>2</sup>	17.58	18.91	12.53	35.0	39.7	17.0

1 Union members and persons who are not union members but covered by collective agreements (for example, some religious group members).

2 Workers who are neither union members nor covered by collective agreements.

Source: Statistics Canada, Labour Force Survey

week than their non-unionized counterparts (19.3 hours versus 16.9). As a result, their average weekly earnings were nearly double (\$375.99 versus \$200.46).

On average, unionized women working full time received 93% as much in hourly earnings as their male counterparts. In contrast, women working part time earned 12% more.

## Wage settlements, inflation and labour disputes

Wage gains in 2005 (2.3%) almost matched the rate of inflation (2.2%), as was the case in the previous year (Table 4). During the first four months of 2006, wage gains averaged 2.4%, also virtually matching the rate of inflation (2.5%).

Wage gains in the public sector in 2005 (2.2%) fell slightly short of those in the private sector (2.4%). The corresponding figures in the first four months of 2006 were 2.4% and 2.6%.

Annual statistics on strikes, lockouts and person-days lost are affected by several factors, including collective bargaining timetables, size of the unions involved, strike or lockout duration, and state of the economy. The number of collective agreements up for renewal in a year determines the potential for industrial disputes. Union size and strike or lockout duration determine the number of person-days lost. The state of the economy influences the likelihood of an industrial dispute, given that one is legally possible.

The estimated number of person-days lost through strikes and lockouts almost doubled from 1.7 million in 2003 to roughly 3.2 million in 2004, and rose again to 4.1 million in 2005.

**Table 4 Major wage settlements, inflation and labour disputes**

Year	Average annual increase in base wage rates <sup>1</sup>			Annual change in consumer price index <sup>1</sup>	Labour disputes and time lost <sup>3</sup>			
	Public sector employees <sup>2</sup>	Private sector employees <sup>2</sup>	Total employees		Strikes and lockouts <sup>4</sup>	Workers involved	Person-days not worked	Proportion of estimated working time
			%			'000	'000	%
1980	10.9	11.7	11.1	10.1	1,028	452	9,130	0.37
1981	13.1	12.6	13.0	12.4	1,049	342	8,850	0.35
1982	10.4	9.5	10.2	10.9	679	464	5,702	0.23
1983	4.6	5.5	4.8	5.8	645	330	4,441	0.18
1984	3.9	3.2	3.6	4.3	716	187	3,883	0.15
1985	3.8	3.3	3.7	4.0	829	164	3,126	0.12
1986	3.6	3.0	3.4	4.1	748	486	7,151	0.27
1987	4.1	3.8	4.0	4.4	668	582	3,810	0.14
1988	4.0	5.0	4.4	4.0	548	207	4,901	0.17
1989	5.2	5.2	5.2	5.0	627	445	3,701	0.13
1990	5.6	5.7	5.6	4.8	579	271	5,079	0.17
1991	3.4	4.4	3.6	5.6	463	254	2,516	0.09
1992	2.0	2.6	2.1	1.5	404	152	2,110	0.07
1993	0.6	0.8	0.7	1.8	381	102	1,517	0.05
1994	...	1.2	0.3	0.2	374	81	1,607	0.06
1995	0.6	1.4	0.9	2.2	328	149	1,583	0.05
1996	0.5	1.7	0.9	1.6	330	276	3,269	0.11
1997	1.1	1.8	1.5	1.6	284	258	3,608	0.12
1998	1.6	1.8	1.7	0.9	381	244	2,444	0.08
1999	2.0	2.7	2.2	1.7	413	160	2,443	0.08
2000	2.5	2.4	2.5	2.7	379	144	1,657	0.05
2001	3.4	3.0	3.3	2.6	381	221	2,199	0.07
2002	2.9	2.6	2.8	2.2	294	168	3,033	0.09
2003	2.9	1.2	2.5	2.8	266	81	1,736	0.05
2004	1.4	2.2	1.8	1.9	298	260	3,225	0.09
2005	2.2	2.4	2.3	2.2	293	429	4,107	0.11
2006 <sup>5</sup>	2.4	2.6	2.4	2.5				

1 Involving 500 or more employees.

2 Public-sector employees are those working for government departments or agencies; Crown corporations; or publicly funded schools, hospitals or other institutions. Private-sector employees are all other wage and salary earners.

3 Involving 1 or more workers.

4 Ten person-days not worked.

5 2006 data refer to January to April only.

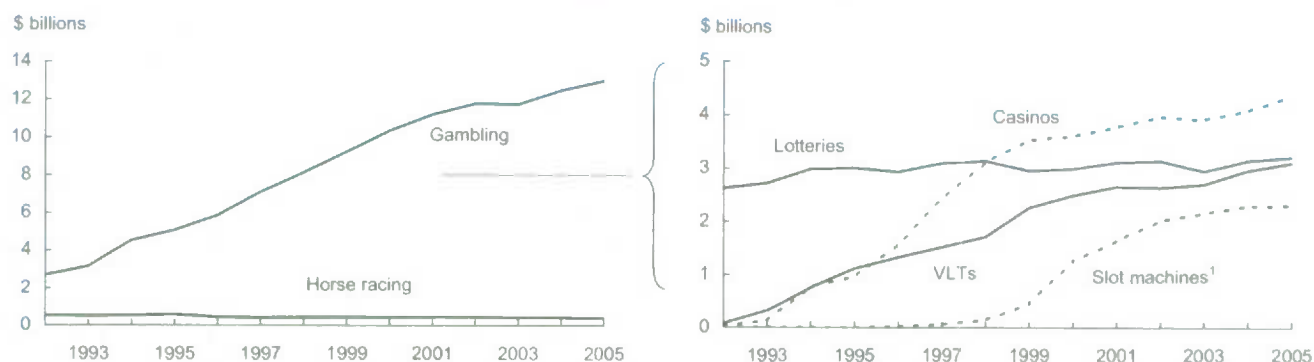
Sources: Statistics Canada, Prices Division; Human Resources and Skills Development Canada, Workplace Information Directorate

# Gambling

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- Net revenue from government-run lotteries, video lottery terminals (VLTs), and casinos rose from \$2.7 billion in 1992 to \$12.9 billion in 2005.<sup>1</sup> Of this \$12.9 billion, \$7.3 billion was profit.
- Net revenue from pari-mutuel betting (horse racing) dropped from \$532 million to \$399 million over the same period (1992 to 2005).
- In 2005, lotteries accounted for 25% of all net non-charity gambling revenue, casinos 34%, VLTs 24%, and slot machines not in casinos 18%.
- Average gambling revenue per person 18 and over in 2004 ranged from \$112 in the three territories to \$680 in Saskatchewan, with a national average of \$497.<sup>2</sup>
- Compared with workers in non-gambling industries, those in gambling were more likely to be women (54% versus 47%), under 35 (44% versus 37%), paid by the hour (80% versus 65%), and paid less (\$17 hourly versus \$19).
- Employment in the gambling industry rose from 11,000 in 1992 to 45,000 in 2005.
- One in seven women and men living alone reported spending money on casinos, slot machines or VLTs; however, the men spent more than four times as much as the women—\$1,390 compared with \$304.<sup>3</sup>
- Gambling participation and expenditure rates increased with household income. For example, 55% of households with incomes of less than \$20,000 gambled in 2004 and spent an average of \$283, while equivalent figures for those with incomes of \$80,000 or more were 79% and \$847.

## Net revenue from government-run gambling has increased steadily



1 Refers to ones found outside government-run casinos.  
Source: Statistics Canada, National Accounts

## Gambling revenues and profits

	Gambling revenue <sup>1</sup>		Gambling profit <sup>2</sup>		Share of total revenue <sup>3</sup>		Revenue per capita (18+) <sup>4</sup>	
	1992	2004	1992	2004	1992	2004	1992	2004
	\$ millions (current)				%		\$	
<b>Canada</b>	<b>2,734</b>	<b>12,416</b>	<b>1,680</b>	<b>6,637</b>	<b>1.9</b>	<b>5.5</b>	<b>128</b>	<b>497</b>
Newfoundland and Labrador	80	218	42	112	2.3	5.5	189	527
Prince Edward Island	20	34	7	17	2.7	3.2	209	319
Nova Scotia	125	376	72	173	2.8	5.6	180	505
New Brunswick	117	218	49	122	2.7	3.7	209	364
Quebec	693	2,837	472	1,561	1.8	4.8	128	473
Ontario	853	4,644	529	1,908	1.9	6.2	106	483
Manitoba	153	485	105	254	2.5	5.0	186	547
Saskatchewan	62	510	39	309	1.1	6.5	86	680
Alberta	225	1,716	125	1,180	1.6	6.3	118	702
British Columbia	403	1,371	239	770	2.2	5.0	153	411
Yukon, Northwest Territories and Nunavut	5	8	1	4	0.3	0.3	82	112

1 Total revenue from wagers on government-controlled lotteries, casinos and VLTs, minus prizes and winnings.

2 Net income of provincial governments from total gambling revenue, less operating and other expenses (see *Data sources and definitions*).

3 The 2004 share of total revenue calculation is based on 2004 gambling revenue and 2003 total provincial revenue. The 2004 provincial revenue will be available autumn 2006.

4 Persons 18 and over were selected as this is the legal age of gambling in most provinces.

Sources: Statistics Canada, National Accounts, Public Institutions (Financial management statistics) and post-censal population estimates.

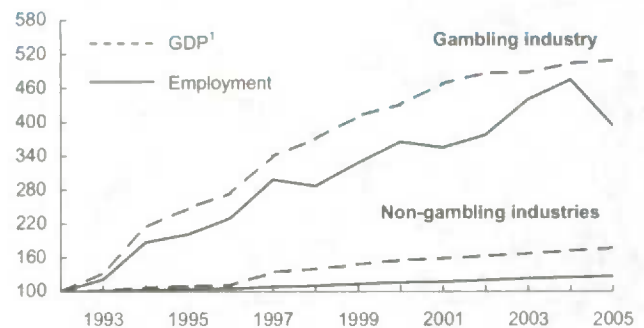
### Characteristics of workers

	Gambling		Non-gambling	
	1992	2005	1992	2005
<b>Total employed</b>	<b>11</b>	<b>45</b>	<b>12,720</b>	<b>16,125</b>
			'000	
<b>Sex</b>				
Men	35	46	55	53
Women	65	54	45	47
			%	
<b>Age</b>				
15 to 34	57	44	45	37
35 and over	43	56	55	63
<b>Education</b>				
High school or less	66	51	57	43
Postsecondary certificate or diploma	21	36	27	35
University degree	13	13	16	22
<b>Work status</b>				
Full-time	60	81	81	82
Part-time	40	19	19	18
<b>Provinces</b>				
Atlantic provinces	8	4	7	7
Quebec	F	16	24	23
Ontario	28	44	39	40
Prairie provinces	30	18	17	18
British Columbia	25	17	13	13
<b>Class of worker</b>				
Employee	99	100	85	84
Self-employed	F	F	15	15

Source: Statistics Canada, Labour Force Survey

### Gambling outpaced other industries

1992=100



1 The price, at basic prices, of the goods and services produced. The GDP figures for the gambling industry refer strictly to wagering activities, such as lottery ticket sales, VLT receipt sales, and bets at casinos. Other economic spinoffs, such as hotel and restaurant business, security services, or building and equipment maintenance are not included.

Sources: Statistics Canada, Labour Force Survey; National Accounts

### Characteristics of jobs

	Gambling		Non-gambling	
	1997	2005	1997	2005
<b>Employees<sup>1</sup></b>	<b>33</b>	<b>45</b>	<b>11,323</b>	<b>13,613</b>
			'000	
			%	
Unionized <sup>2</sup>	29	32	34	32
Non-unionized	71	68	66	68
Permanent job	91	91	89	87
Temporary job	9	9	11	13
Usually receive tips	27	32	7	7
No tips	73	68	93	93
Paid by the hour	80	80	61	65
Not paid hourly	20	20	39	35
<b>Average hourly earnings<sup>3</sup></b>				
			\$	
Men: full-time	13.51	20.17	17.83	21.71
Women: full-time	13.04	16.11	14.79	18.59

1 More detailed questions on employees were introduced with the 1997 revision of the Labour Force Survey.

2 Includes persons who are not union members, but whose jobs are covered by collective agreements.

3 Includes tips and commissions.

Source: Statistics Canada, Labour Force Survey

## Household expenditures on gambling activities

	At least one gambling activity		Government lotteries		Other lotteries/raffles, etc.		Casinos, slot machines and VLTs		Bingos	
	\$	%	\$	%	\$	%	\$	%	\$	%
<b>All households</b>										
1999	499	76	246	67	76	32	631	20	655	10
2000	492	74	245	64	84	31	546	21	743	9
2001	513	72	257	62	98	30	554	20	815	9
2002	570	73	263	63	129	30	679	21	905	8
2003	506	74	243	66	96	29	670	19	799	8
2004	514	71	265	61	101	28	664	19	805	6
<b>One-person households<sup>1</sup></b>	457	60	216	50	74	17	856	14	664	5
Men	648	61	277	53	96	15	1,390	16	503	2
18 to 44	538	58	164	47	92	14	1,180	19	134	1
45 to 64	840	68	331	63	80	18	2,262	15	616	2
65 and over	501	58	407	51	144	14	335	13	572	4
Women	296	59	160	47	59	18	304	13	698	7
18 to 44	137	54	91	39	52	23	181	13	113	2
45 to 64	271	66	160	58	66	18	277	14	515	7
65 and over	391	56	191	44	59	16	396	12	868	9
<b>All households</b>										
Newfoundland and Labrador	502	70	298	60	72	37	407	9	724	15
Prince Edward Island	484	69	283	55	86	44	156	9	1,068	12
Nova Scotia	509	72	255	59	92	43	496	17	901	10
New Brunswick	418	72	252	61	70	37	322	10	691	13
Quebec	405	75	251	70	50	15	486	16	654	7
Ontario	620	70	295	59	107	30	791	23	932	5
Manitoba	655	67	315	52	71	37	731	24	862	9
Saskatchewan	504	74	212	53	95	49	655	24	712	8
Alberta	524	70	229	56	159	36	670	16	1,195	6
British Columbia	420	68	239	59	110	30	581	17	408	3
<b>Income after tax</b>										
Less than \$20,000	283	55	192	46	57	12	223	9	586	7
\$20,000 to \$39,999	504	68	245	60	76	23	705	16	947	7
\$40,000 to \$59,999	420	75	252	65	94	30	437	20	658	5
\$60,000 to \$79,999	495	79	274	69	96	37	491	24	989	5
\$80,000 and over	847	79	362	67	148	43	1,130	29	797	4

1 Using one-person households allows examination of individual characteristics. Persons 18 and over were selected as this is the legal age for gambling in most provinces.

Note: Expenditures are per spending household. Unless otherwise indicated, figures are for 2004.

Source: Statistics Canada, Survey of Household Spending

## Data sources and definitions

**Labour Force Survey:** a monthly household survey that collects information on labour market activity, including detailed occupational and industrial classifications, from all persons 15 years and over.

**National Accounts:** The quarterly Income and Expenditure Accounts (IEA) is one of several programs constituting the System of National Accounts. The IEA produces detailed annual and quarterly income and expenditure accounts for all sectors of the Canadian economy, namely households, businesses, governments and non-residents.

**Survey of Household Spending (SHS):** an annual survey that began in 1997 and replaced the Family Expenditure Survey and the Household Facilities and Equipment Survey. The SHS collects data on expenditures, income, household facilities and equipment, and other characteristics of families and individuals living in private households.

**Gambling industries:** This industry group covers establishments primarily engaged in operating gambling facilities, such as casinos, bingo halls and video gaming terminals; or providing gambling services, such as lotteries and off-track betting. It excludes horse race tracks and hotels, bars and restaurants that have casinos or gambling machines on the premises.

**Gambling profit:** net income from provincial and territorial government-run lotteries, casinos and VLTs, after prizes and winnings, operating expenses (including wages and salaries), payments to the federal government and other overhead costs are deducted.

**Gambling revenue:** all money wagered on provincial and territorial government-run lotteries, casinos and VLTs, less prizes and winnings. Gambling revenue generated by and for charities and on Indian reserves is excluded.

**Government casino:** a government-regulated commercial casino. Permits, licences and regulations for casinos, both charity and government, vary by province. Government casinos, now permitted in several provinces, also vary by the degree of public and private involvement in their operations and management. Some government casinos are run entirely as Crown corporations, while others contract some operations—for example, maintenance, management or services—to the private sector.

**Video lottery terminal (VLT):** a coin-operated, free-standing, electronic game of chance. Winnings are paid out through receipts that are turned in for cash, as opposed to cash payments from slot machines. Such terminals are regulated by provincial lottery corporations.

## Household expenditure on all gambling activities by income groups, 2004

	Average expenditure		Percentage reporting	Gaming as % of total income	
	All households	Reporting households		All households	Reporting households
	\$	\$	%	%	%
<b>Income after tax</b>	<b>364</b>	<b>514</b>	<b>71</b>	<b>0.6</b>	<b>0.8</b>
Less than \$20,000	155	283	55	1.2	2.0
\$20,000 to 39,999	345	504	68	1.2	1.7
\$40,000 to 59,999	313	420	75	0.6	0.8
\$60,000 to 79,999	390	495	79	0.6	0.7
\$80,000 and over	665	847	79	0.6	0.8

Source: Statistics Canada, Survey of Household Spending

## ■ Notes

1 Refers to total money wagered on non-charity lotteries, casinos and VLTs, minus prizes and winnings.

2 Survey of Household Spending (SHS) and National Accounts rankings of provincial expenditures differ, in part because the SHS includes both charity and non-charity gambling activity.

3 The expenditure figures are not adjusted for any winnings. As well, households consistently under-report the amount of money they spend on gambling. Comparisons with Lottery Corporation figures, for example, have shown that households under-report their government lottery purchases by more than 50%.

*For further information on any of these data, contact Katherine Marshall, Labour and Household Surveys Analysis Division. She can be reached at (613) 951-6890 or [katherine.marshall@statcan.ca](mailto:katherine.marshall@statcan.ca).*

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