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PERSPECTIVES

ON LABOUR AND INCOME

AUTUMN 1998
Vol. 10, No. 3

- SHIFT WORK
- TRENDS IN PARTICIPATION
- JOB SEARCH
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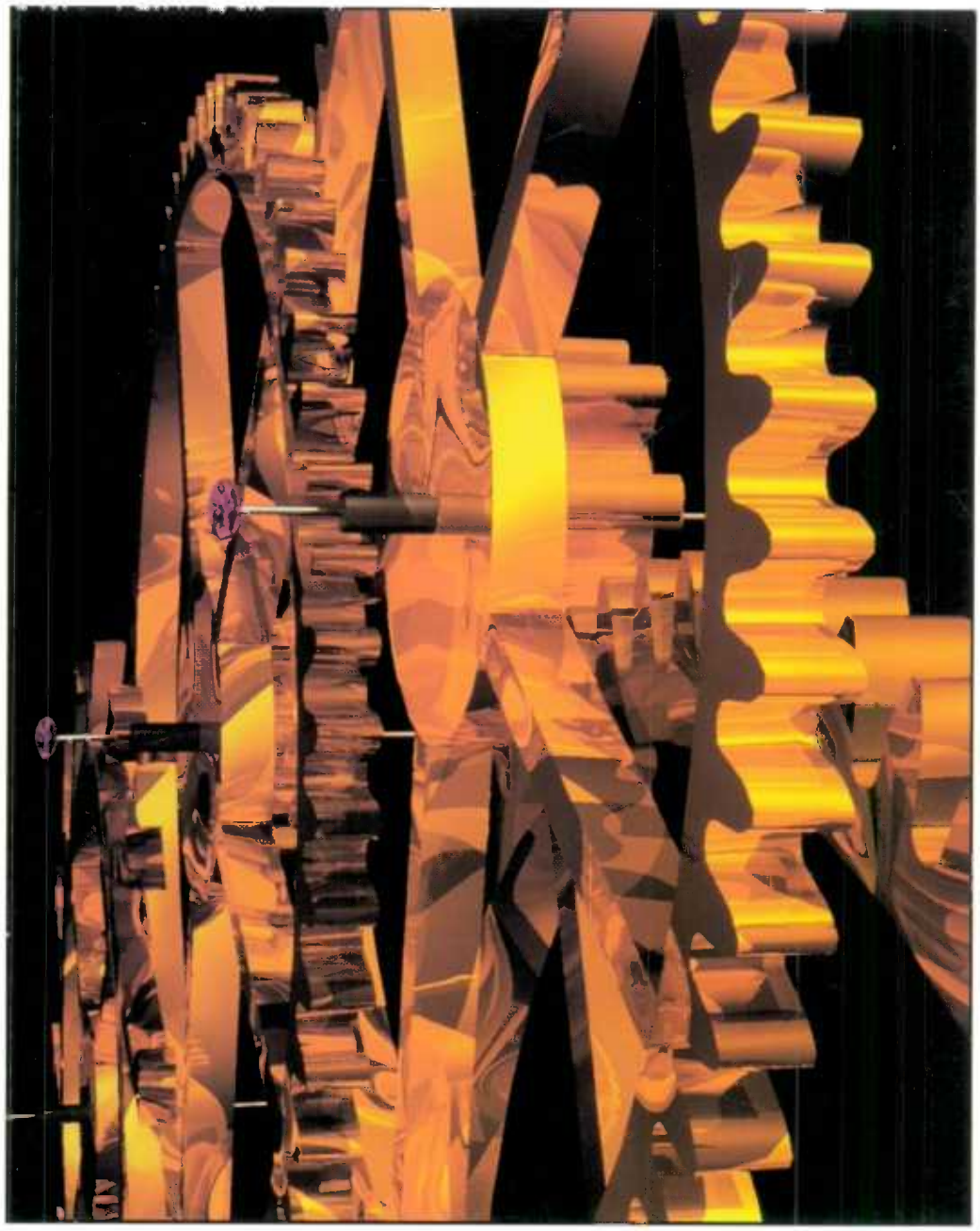
- HOME BUSINESSES



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Unemployed job seekers have changed their approach to looking for work. This article, which presents data for 1977 to 1997, examines job search methods by age, sex, education and duration of unemployment.

Perspectives on Labour and Income (Catalogue no. 75-001-XPE; aussi disponible en français: *L'emploi et le revenu en perspective*, nº 75-001-XPF au catalogue) is published four times a year under the authority of the Minister responsible for Statistics Canada. ©Minister of Industry 1998. SUBSCRIPTION RATES: $58 a year in Canada, US$58 for all countries outside Canada. Single issue $18 in Canada, US$18 for all countries outside Canada. ISSN: 0840-8750. **All prices exclude sales tax.**

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PERSPECTIVES
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Editor-in-Chief
Ian Macredie
(613) 951-9456
macrian@statcan.ca

Managing Editor
Henry Pold
(613) 951-4608
poldhen@statcan.ca

Marketing Co-ordinator
Marie-Paule Robert
(613) 951-4628
robemar@statcan.ca

What's new? Co-ordinator
Heather Berrea
(613) 951-8613
berrhea@statcan.ca

Editors
Gary L. Cohen
Catherine Hardwick
Bruce Rogers

Data Services
Pierre Bérard
Joanne Bourdeau
Mary McAuley

Production and Composition
Cynthia Fortura
Diane Joanisse
Annamma John
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Printing
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27 Retirement patterns of working couples
Dave Gower

In this study, a link is established with spouses' retirement dates to determine how age, age difference, education and post-retirement income influence couples in their decisions to retire.

31 Home-based entrepreneurs
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As a complement to "Working at home," published in the Summer 1998 issue, this study focuses on the self-employed who work from home. Who are they? What do they do? Why do they work from home? These are some of the questions addressed.

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: Heather Berrea, What's new? Co-ordinator, *Perspectives on Labour and Income*, 5-D Jean Talon Building, Statistics Canada, Ottawa K1A 0T6. Telephone (613) 951-8613; fax (613) 951-4179; e-mail: berrhea@statcan.ca.

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Forum

Letter from the Managing Editor

■ We always hope that the topics we select and the analysis we present are of interest to readers. And most of our efforts appear to be well received. But, every once in a while, an article draws an exceptional response. Such was the case with Dave Gower's article "The booming market for programmers" in our Summer 1998 issue.

Of course, we had expected better-than-average feedback, given the continued public interest in computer developments, generated by issues such as the Y2K problem. But, frankly, even we were surprised by the strong response from both the media and our general readers: our phones just kept ringing.

We appreciate your interest in this subject and your need for timely information. And so we asked Dave to prepare the brief update that follows.

Henry Pold
Managing Editor
E-mail: poldhen@statcan.ca □

Computer programmers

This note updates employment data for computer programmers and systems analysts, to the second quarter of 1998.[1]

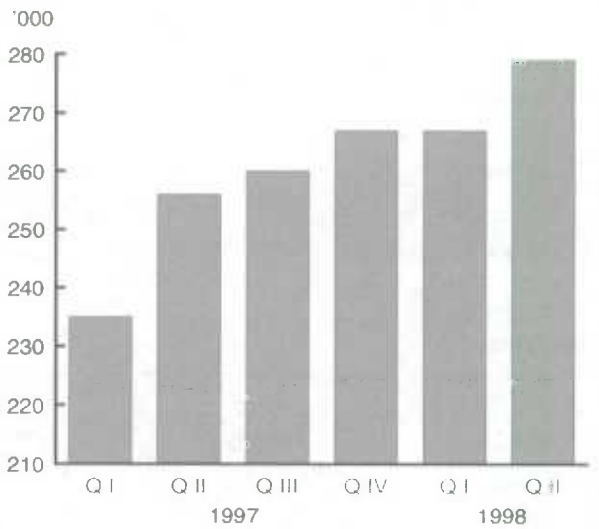
The previous study focused on trends to the end of 1997. In the preceding five years, the number of jobs had risen by over 90%. In spite of this sharp increase in demand, average weekly hours were about the same for programmers as for other scientific and technical workers. At the end of 1997, programmers' average pay ($843 per week or $22.24 an hour) was close to that of comparable workers.

Employment was flat at the beginning of 1998. By the second quarter, however, growth had resumed, and employment had risen to nearly 280,000 (Chart). Since the end of 1992, the number of jobs for software workers has now doubled.

Not surprisingly, the number of programmers reporting unemployment has remained low. During the first two quarters of 1998, the rate hovered around 2%, about half that of other scientific and technical workers, and less than one-quarter the rate for the labour force as a whole.

Pay for programmers and systems analysts continues to keep pace with that of comparable workers. In the second quarter of 1998, software workers averaged $863 per week, slightly less than that of other scientific and technical workers ($894), but much higher than that of the Canadian workforce as a whole ($583). This continues the trend seen since the beginning of 1997 (when earnings data first became available from the Labour Force Survey). □

Employment for computer programmers levelled off, then rose again in 1998.



Source: Labour Force Survey

■ *Note*

1 For definitions and a detailed look at past trends, see "The booming market for programmers," *Perspectives on Labour and Income* (Statistics Canada, Catalogue no. 75-001-XPE) 10, no. 2 (Summer 1998): 9-15.

Dave Gower is with the Labour and Household Surveys Analysis Division. He can be reached at (613) 951-4616.

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Highlights

Couples working shift ... p. 9

- According to the 1995 Survey of Work Arrangements, in 1.7 million dual-earner couples both husband and wife worked full time. In nearly 4 out of 10 such couples (634,000) at least one spouse worked shift (not a regular "9 to 5" job).
- Couples working shift were much more likely to report varying start and end times for at least one spouse's job (74% versus 32% for non-shift couples). And when they worked fixed hours, they did not have as much time to be together (11.5 hours versus almost 16 hours for non-shift couples).
- Non-shift couples with fixed hours (68% or 695,000) reported the greatest average period during which both partners were at work (7 hours and 45 minutes per day). In contrast, among 25% of shift couples (40,000), both partners worked at completely different times of the day.
- The likelihood of working shift varied by occupation. Blue-collar occupations (in which men were more prominent) had above-average incidence rates for shift work, as did jobs in medicine and service. Professional and sales occupations both registered high rates of shift work for women.
- Unionized workers were more likely than others to work shift. Some 32% of husbands and 23% of wives who belonged to a union worked shift, compared with 20% and 18% of non-unionized workers.
- Working in the public sector greatly reduced the incidence of shift work among wives (10% worked shift, compared with 23% in the private sector), but only slightly reduced it for husbands (22%, compared with 27%), mainly because of the male predominance in law enforcement and firefighting, in which shift work is prevalent.
- The presence of children was associated with the likelihood of working shift. When full-time dual-earner couples had children under 16, the husband was more likely to work shift and the wife to work regular days (56%). These couples also had, on average, the highest number of preschoolers at home (1.4).

Labour force participation in the 1990s ... p. 15

- Some analysts attribute the drop in labour force participation in recent years to labour market discouragement. However, for the two age groups that account for the decline, discouragement plays only a minor role.
- More than 90% of the shortfall between the expected and the actual participation rates can be attributed to those aged under 25 or over 54. Between 1989 and 1997, youths (15 to 24) accounted for 64% of the overall shortfall and persons aged 55 or over accounted for a further 27%.
- An upswing in school attendance accounts for half of the decline in young people's participation. A further 38% is due to a drop in the proportion of full-time students in the labour force. The remaining 11% is attributable to a decline in participation among non-students or part-time students.
- Persons aged 55 and over have been the second greatest contributor to the overall decline in labour force participation in the 1990s, mainly because of earlier retirement. The participation rate for men aged 55 to 64 declined from 77% in 1976 to 59% in 1995 (edging up slightly in 1996 and 1997). Even though the rate for women increased over the 20-year period, it was not sufficient to reverse the overall trend.

Looking for work ... p. 22

- Over the past two decades, the unemployed have modified their job search patterns. Their use of public employment agencies has dropped by about half, as they have come to rely more on job advertisements and personal networks. They are also increasingly using either four or more search methods or just one.
- The most significant change has been the declining use of public employment agencies. In 1977, during a typical four-week period, 60% of all unemployed job seekers used a public employment agency. By 1997, this had dropped to 32%. Young people (15 to 24) in particular have moved away from this method, down from 62% to 26%.

- Contacting employers directly remains the most common job search method. Nevertheless, this approach diminishes with the duration of unemployment. In 1997, some 71% of job seekers unemployed for 5 to 26 weeks contacted an employer at least once during the four-week reference period, compared with 63% of those out of work more than a year.
- The incidence of looking at job advertisements increased until recently. In 1977, the proportion of unemployed job seekers who looked at job advertisements in a four-week period was 40%. By 1993, it had reached 59%, but then dropped back to 47% in 1997.
- Offering to provide labour by placing or answering an advertisement has become more common in the 1990s. The proportion of job seekers who did so over a four-week period increased from 15% in 1977 to 19% in 1997. Since 1977, for every 100 job seekers who have looked at advertisements, between 31 and 40 have placed or answered one.
- Enlisting the help of friends and family grew in frequency between 1977 and 1997, from 13% to 22%. This approach is used more commonly by university graduates and those aged 25 to 34.
- The use of private employment agencies has remained relatively low since 1977, being the choice of just 3% to 5% of all job seekers. However, 10% of university graduates looking for work used such agencies in 1997.
- Over the past 20 years, the percentage of unemployed job seekers who approached a union for help finding work has dropped from 4% to 2%. Contacting a union is a method used almost solely by men. Job seekers with a postsecondary certificate or diploma, such as a trade certificate, also make more use of unions.

Retirement patterns of working couples ... p. 27

- Among 312,000 retired working couples in April 1997, one-third had retired "together" (within a year of one another). This was most likely to happen when the husband was just one or two years older than his wife, and least likely when the husband was five or more years older (30%) or when the wife was older (28%).
- Despite the fact that they were on average two years younger than their husbands, women were somewhat more likely to retire first. In 37% of couples, wives retired at least one year ahead of their husbands; husbands preceded their wives in 30% of couples.
- Women joined their retired husbands sooner than men followed their wives into retirement. This is best illustrated by same-age couples. Among the 14,000 same-age couples in which the husband retired first, wives waited only three-and-a-half years to retire; among the 16,000 in which the wife retired first, men waited an average five-and-a-half years.
- Data suggest that wives are more likely than husbands to take the timing of a spouse's retirement into account when making their own decision to retire.

Home-based entrepreneurs ... p. 31

- In November 1995, more than half of the 2.1 million self-employed individuals in Canada operated their business from home.
- The Survey of Work Arrangements found that entrepreneurs aged 55 and over and women aged 25 to 44 were the most likely to base their business at home. Moreover, in dual-earner families, women were more likely to do so than men (61% versus 51%). The proportion for women reached 77% when a preschool-aged child was at home.
- One-third of the self-employed worked in goods-producing industries – mainly in agriculture and construction – and generally worked from home: some 91% of self-employed agricultural workers and 68% of construction entrepreneurs were home-based. The remaining two-thirds of the self-employed were in services. Home-based entrepreneurs in this sector were concentrated in trade (12%), business services (11%) and personal services (9%).
- Home-based workers were more likely than other self-employed persons to work varying hours per week, or to work six or seven days per week.

What's new? ... p. 35

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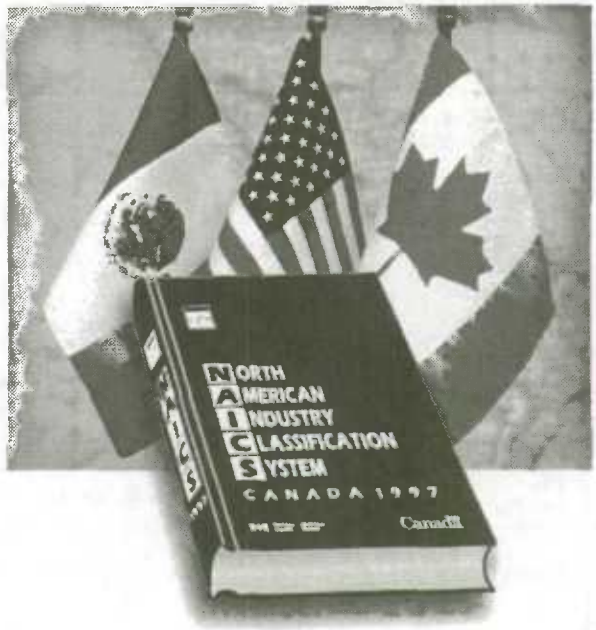

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Couples working shift

Katherine Marshall

A great deal of attention has been paid to the phenomenal growth in dual-earner families, and the difficulty such families face in balancing work and family life. Often, the focus is on the number of hours, both full- and part-time, worked by these couples. However, little is known about *which* hours of the day they work. The work schedules of family members, particularly those who work shift,[1] can add further complexity to family life. In general, family conflict tends to be greater if at least one spouse works shift (Presser, 1987; Staines and Pleck, 1983).

Schedules that are not "9 to 5" can increase the difficulty of coordinating work and family life. On the other hand, staggered employment schedules can be an advantage for families with young children who need, or prefer, to reduce their reliance on paid child care.

When workers have some choice or control over their shifts, problems relating to shift work and family life are reduced (Staines and Pleck, 1983). The November 1995 Survey of Work Arrangements (SWA), used for this study, asked why people worked shift, but did not collect detailed information on choice or control (see *Data source and definitions* and *Choosing shift*).

This article examines the prevalence of shift work among full-time dual-earner couples. In order to determine which husbands and wives are likely to work shift, it analyzes several job and life-cycle characteristics. It also examines the degree of work schedule overlap among shift and non-shift couples with fixed work hours.

Katherine Marshall is with the Labour and Household Surveys Analysis Division. She can be reached at (613) 951-6890.

Data source and definitions

The Survey of Work Arrangements (SWA), sponsored by Human Resources Development Canada, was conducted as a supplement to the November 1995 Labour Force Survey (LFS). It collected, among other things, data on the work schedules and hours of work of all paid workers.

Full-time dual-earner couples : married or common-law couples in which, at the time of the survey, both partners were paid workers who usually spent 30 or mor e hours a week at their main job. The rationale behind selecting such couples is that two full-time work schedules are more likely to have an onerous effect on family life than are one or more part-time schedules.

Employee: any person who receives remuneration, usually in the form of a wage or salary from an employer.

Shift work: a regular evening, night or graveyard shift, rotating or split shift, on-call, casual or other form of irregular work arrangement.

Non-shift work: a regular daytime schedule.

Choosing shift

All shift employees were asked for the main reason they worked this kind of schedule. Although the majority of both husbands and wives said it was the requirement of the job, 7% of husbands and 11% of wives reported something else. The most common non job-related reason reported by husbands was to earn more money. For wives, half of those who reported reasons other than job requirement said that care for children and other family members was their main motive for working shift.

Respondents were asked to select only the main reason for shift work. For those who reported a reason other than job requirement, shift schedule was probably the preferred arrangement. However, for those who stated requirement of the job as the main reason, the arrangement may or may not have been preferred, and for those who did prefer the schedule, their reason is not known.

Shift work among dual-earners common

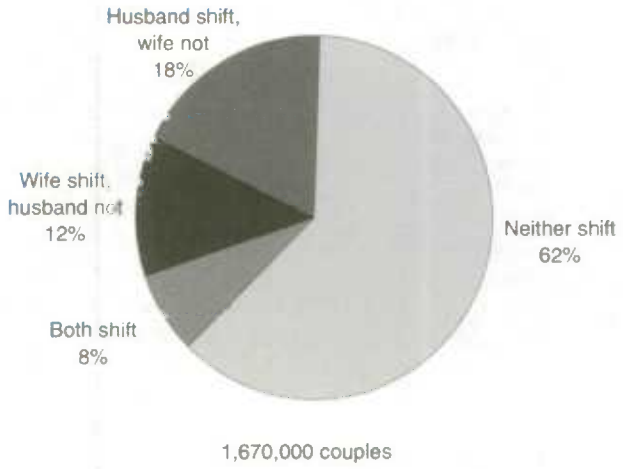
According to the SWA, in 1.7 million dual-earner couples both the husband and wife worked full time[2] in November 1995. In 62% of these couples (just over one million) both partners worked a regular daytime schedule (Chart A). For the remaining 38% (634,000) at least one spouse worked shift.

In 18% of dual-earner couples husbands worked shift while wives had a regular day job; in 12%, wives worked shift while husbands worked regular days; and in 8%, both worked shift.

Time is of the essence

The 1992 General Social Survey found that full-time dual-earner couples were among the most "time-crunched" groups in society (Frederick, 1993). Both the number of hours these couples spend at work and their schedules affect potential time available for

Chart A
In 4 out of 10 dual-earner couples at least one partner works shift.



Source: Survey of Work Arrangements, November 1995

Chart B
In one out of 4 shift couples both spouses have fixed work hours.

Average overlap time for couples with fixed hours	
Total	7 hr 5 min
Shift	4 hr 17 min
Non-shift	7 hr 45 min
Husband shift/ wife not	3 hr 56 min
Wife shift/ husband not	4 hr 7 min
Both shift	6 hr 2 min

Source: Survey of Work Arrangements, November 1995
Note: Excluded are couples who did not state their hours.
** Full-time dual-earner couples in which at least one spouse works shift.*
*** Excludes 0 hours.*

family activities. Theoretically, spouses who work the same hours can spend more time together than those who work two different schedules. However, couples with different schedules can increase the amount of time at least one partner could be at home, which may be a positive trade-off if there are children or elderly relatives in need of care.

According to the 1995 SWA, shift couples were more likely than non-shift couples to have one or both spouses with varying start or end times for their job (74% or 465,000 couples, compared with 32% or 335,000 couples) (Chart B). Slight variations, such as one- or two-hour differences at the end or start of each workday, might not cause too much disruption to family life. Wide variations, however, or not knowing from week to week what hours one or more family members will be working, could put extra strain on the family because making leisure plans and/or arranging child care becomes more difficult. (Because their hours were varied, neither the degree of variation experienced nor their employment overlap could be determined for some 800,000 couples.)

Couples with fixed hours

Non-shift couples with *fixed* hours (68% or 695,000) reported the greatest average period during which both partners were at work (7 hours and 45 minutes per day). Of the shift couples with fixed hours (26% or 165,000), those in which both partners worked shift had the next highest employment overlap at just over 6 hours, and couples in which only one partner worked shift while the other worked a regular daytime schedule had the least overlap, at approximately 4 hours. About one-quarter of shift couples with fixed hours had no overlap, meaning about 40,000 full-time dual-earner couples worked at completely different times of the day.[3]

Table 1
Average daily work and overlap hours of full-time dual-earner couples with fixed hours

		Work hours			Total daily hours			
						Only one spouse at work		
	Number	Total	Husbands	Wives	Both at work *	Husband at work	Wife at work	Neither at work **
	'000	hours:minutes						
Total	**860**	**16:05**	**8:16**	**7:49**	**7:05**	**1:11**	**0:44**	**15:00**
Non-shift	695	15:55	8:10	7:45	7:45	0:25	-	15:50
Shift	165	16:46	8:38	8:08	4:17	4:21	3:51	11:31
Husband shift Wife not	96	16:28	8:36	7:52	3:56	4:40	3:56	11:28
Wife shift Husband not	45	16:28	8:16	8:12	4:07	4:09	4:05	11:39
Both shift	24	18:33	9:25	9:08	6:02	3:23	3:06	11:29

Source: Survey of Work Arrangements, November 1995
* *The time per day that both husband and wife are at work at the same time (employment overlap).*
** *The time per day that both husband and wife are* not *at work at the same time. This is calculated by subtracting work times from 24 hours.*

Among the full-time couples in which both partners had usual work start and end times, non-shift couples had the least average combined employment hours (15 hours, 55 minutes), while those in which both partners worked shift had the most (18 hours, 33 minutes) (Table 1). Furthermore, because non-shift couples experienced the greatest employment overlap, they reported the longest period when neither spouse was working (roughly 16 hours). On the other hand, shift couples had an average 4 hours and 20 minutes less shared time off each day, because their employment overlap was less, and their average workdays were longer.[4]

Determinants of shift work...

One in four husbands and one in five wives in full-time dual-earner couples worked shift in November 1995. A number of factors govern the decision to work shift. Some people may do so because their job requires it. Others may because of family responsibilities. Shift work may also be taken on for financial reasons (as it allows someone to work at a second job, or to work unusual hours that can sometimes command extra pay). And some people may simply prefer an irregular and/or non-day schedule, or have other personal reasons for selecting this arrangement.

Therefore, job and life-cycle characteristics are broad proxies for "no choice" and "preference" as reasons for working shift. The two explanations are not mutually exclusive. For example, many workers in service occupations, which have high rates of shift work, may be working shift because of the nature of the job; others may have chosen the job because it enables them to work shift.

...can be job-related...

The 1991 SWA found that shift work was typically more common for those who were single, male, young and engaged in essential service or blue-collar jobs (Sunter, 1993). Similarly, the 1995 data show that occupation[5] is a good indicator for predicting the likelihood of working shift. All the broad blue-collar occupations – primary, processing, machining, fabricating, transport equipment operating, material handling and other crafts – had above-average rates for shift work, as did occupations in medicine and service (Table 2). Because 4 out of 10 husbands were employed in blue-collar occupations, compared with only one in 10 wives, their overall rate of shift work was higher. In only two occupational groups did wives have higher rates of shift work: professional (24% versus 18% for husbands) and sales (30% versus 17%). Within these broad groups, two sizeable sub-groups, nursing and commodity sales, both of which are female-dominated, had high rates of shift work.

Shift work was also associated with job characteristics related to occupation and industry. Working in a unionized job increased the likelihood of working shift for both sexes,

Table 2
Full-time dual-earner couples by occupation and selected job characteristics

	All workers		Proportion working shift	
	Husbands	Wives	Husbands	Wives
	'000			
Total	**1,670**	**1,670**	**428**	**329**
	%			
Occupation	**100**	**100**	**26**	**20**
Managerial and administrative	19	20	11	10
Professional	18	26	18	24
Medicine and health	2	10	56	48
Other professional *	16	16	13	10
Clerical	6	29	22	9
Sales	7	7	17	30
Service	8	9	56	47
Primary **	2	--	38	--
Processing, machining and fabricating	22	7	33	26
Processing	5	2	54	40
Machining	4	--	28	50
Fabricating	13	6	27	21
Construction	8	--	--	--
Transport equipment operating	5	--	39	--
Material handling and other crafts	5	2	50	--
Union coverage	**100**	**100**	**26**	**20**
Unionized †	47	42	32	23
Non-unionized	53	58	20	18
Multiple jobholder	**100**	**100**	**26**	**20**
Yes	4	3	30	34
No	96	97	25	19
Sector	**100**	**100**	**26**	**20**
Public	21	24	22	10
Private	79	76	27	23
Job tenure	**100**	**100**	**26**	**20**
12 months or less	15	13	24	20
13 to 60 months	24	29	28	22
61 to 120 months	20	27	25	22
More than 120 months	41	31	25	15

Source: Survey of Work Arrangements, November 1995

* *Includes natural sciences, social sciences, religion, teaching, and artistic and literary.*

** *Includes farming, fishing, forestry and mining.*

† *Includes both union members and persons who are not union members, but who are covered by collective agreements.*

though more so for husbands than for wives. Some 32% of husbands and 23% of wives who belonged to a union worked shift, compared with 20% and 18% of those who did not.

Multiple jobholders (particularly wives) were also more likely to work shift. (Approximately one in three multiple jobholders had a main job in which he or she worked shift.)

Working as a public employee greatly reduced the incidence of shift work among wives (10% worked shift, compared with 23% in the private sector), and slightly reduced it for husbands (22%, compared with 27%). On the other hand, essential service work, such as law enforcement or firefighting, increased the likelihood of shift work. Men were more likely than women to hold such jobs. Finally, seniority appeared to have little effect on whether men worked shift, and only a slight influence on the situation of women. Only 15% of wives who had been at their job for 10 years or longer worked shift.

...or life-cycle related

On average, younger husbands and wives were more likely to work shift (Table 3). For example, husbands who worked shift were an average six months younger than those who did not, and wives who worked shift were an average one-and-a-half years younger than those who did not.

Also, couples with children under 16 at home were somewhat more likely than others to have at least one spouse working shift. Some 26% of couples who both worked shift had at least one preschool aged child at home, compared with only 23% of non-shift couples.

The presence of children under 16 was highest among couples in which the husband worked shift and the wife worked regular days (56%); these couples also had, on average, the highest number of preschoolers at home (1.4). These findings support earlier research that suggests couples with children may try to stagger their schedules, preferring the husband to work shift: "...it may be that both spouses prefer for the husband rather than wife to work a non-day shift – if the options are there – because of the children" (Presser, 1984).

Statistical determinants

In order to determine which job or life-cycle factors better predict shift work among husbands and wives, this study used multivariate analysis (see *Logistic regression*). This technique isolates each variable and reveals its relationship with the probability of shift work while holding all other variables constant. Thus, it is possible to learn, for example, whether unionization still influences shift status when

Table 3
Full-time dual-earner couples by selected personal characteristics

		Shift work			
	No shift work	Total	Husband only	Wife only	Both
			years		
Average age					
Husbands	41	40	40	39	39
Wives	38	37	38	37	36
			%		
With children at home					
At least one under 16	50	51	56	45	49
At least one under 6	23	24	24	23	26
			number		
Average number of children at home					
Children under 16	1.66	1.68	1.66	1.65	1.77
Children under 6	1.29	1.32	1.41	1.23	1.27

Source: Survey of Work Arrangements, November 1995

occupation, other job characteristics and life-cycle variables are the same for everyone.

Regression analysis shows that class of worker, union coverage, job tenure, occupation and partner's employment status were each significantly associated with shift work for both husbands and wives when all other variables were held constant (Appendix). For example, those who had jobs in the private sector in November 1995 had significantly higher odds of working shift than public employees – 1.7 times greater for husbands and 2.6 for wives. Also, workers who belonged to a union were just over 2 times more likely to work shift than those who did not.

Although cross-tabulations revealed only a slight relationship between shift work and job tenure, regression analysis shows significantly increased odds of working shift for both husbands and wives who had spent 10 years or less at their job, compared with those who had tenure of 20 years or more. Husbands and wives in service jobs and professional medical positions had the highest odds of working shift. Husbands working in service occupations, for example, were 9.0 times more likely to work shift than those in managerial and administrative jobs.

Multiple jobholding was found to be significantly related to the probability of shift work for wives but not for husbands: wives with more than one job were 2.1 times more likely to work shift than wives who had only one job.

The number of children at home did not significantly influence the likelihood of shift work, with one exception. For wives with two children under 16 at home, the odds of working shift were 0.6, or 40% lower than for those with no children under 16 at home. Also, the odds of working shift were twice as high for both husbands and wives if the other spouse worked shift. Finally, age proved to be statistically significant only for wives, whose chance of working shift decreased with age.

Summary

In November 1995, one in four husbands and one in five wives in full-time dual-earner couples worked shift. This translated into 634,000 couples in which at least one spouse worked shift. Shortage of time was more acute among these couples, who worked longer hours, on average, than non-shift couples, and had less potential time off together as a result of their staggered work schedules.

A number of job and life-cycle characteristics – occupation, public or private employment, union coverage, age, presence and age of children at home – were related to shift status, some more strongly than others.

Roughly one in 10 shift workers, proportionally more women than men, worked shift for reasons other than job requirement. The remaining 90% said their schedule was job-related, which may or may not mean their shift schedule was a preferred work arrangement. □

Logistic regression

Logistic regression models the probability of a certain condition or outcome as a function of one or more discrete or continuous variables. The coefficients from a fitted logistic model are frequently used to estimate the odds of the condition occurring for a particular level of a variable, compared with a reference level of the variable, when all other independent variables in the model are held constant. In this article, the odds ratios were calculated using SUDAAN,[6] a software package that can take account of some of the complexities of the design of the SWA. Here, the statistic indicates whether certain variables increase or decrease the chances (odds) of working shift.

Acknowledgement

The author wishes to thank Georgia Roberts, Social Survey Methods Division, for her time and assistance with the logistic regression models.

Notes

1 In this article shift work refers to all schedules that are full-time, but are not regular daytime. (See *Data source and definitions* for more detail.)

2 The analysis is based on only those couples in which both spouses were employees.

3 These 40,000 couples are among the 26% of shift couples with regular work hours. More shift couples probably have zero employment overlap, but in the remaining 74% at least one partner has varying work hours, so employment overlap time cannot be calculated.

4 Shift work sometimes requires people to work fewer, but longer, days per week; for example, jobs requiring four consecutive days of 10-hour shifts, and then three days off.

5 Although not presented, industry, too, was found to be correlated with shift work. For men, high rates of shift work were found in primary industries and transportation, and for women, in trade and services.

6 SUDAAN is a trademark of the Research Triangle Institute. See Shah, Barnwell and Bieler (1997) for more details.

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Appendix

Odds ratios from logistic regression of the shift status of full-time dual-earner couples

Explanatory variables (1)	Husband works shift	Wife works shift
Job characteristics	Odds ratio	
Private employee	1.7 ***	2.6 ***
Public employee	1.0	1.0
Unionized (2)	2.1 ***	2.2 ***
Non-unionized	1.0	1.0
Multiple jobholder	1.3 ns	2.1 *
Not a multiple jobholder	1.0	1.0
Job tenure		
12 months or less	1.6 *	2.2 **
13 to 60 months	1.8 **	2.2 **
61 to 120 months	1.4 *	2.4 ***
121 to 240 months	1.4 *	1.4 ns
More than 240 months	1.0	1.0
Occupation		
Managerial and administrative	1.0	1.0
Medicine and health	7.9 ***	6.6 ***
Other professional	1.1 ns	1.0 ns
Clerical	2.0 **	0.8 ns
Sales	1.4 ns	3.3 ***
Service	9.0 ***	6.8 ***
Primary occupations	3.7 ***	--
Processing, machining and fabricating	2.9 ***	2.2 ***
Construction	--	--
Transport equipment operating	4.7 ***	--
Material handling	5.0 ***	--
Other crafts	7.5 ***	--
Personal characteristics		
No children under 16	1.0	1.0
One child under 16	1.2 ns	0.9 ns
Two children under 16	1.2 ns	0.6 ***
Three or more children under 16	1.2 ns	1.3 ns
Spouse does not work shift	1.0	1.0
Spouse works shift	2.0 ***	1.7 ***
15 to 24 years old	1.0	1.0
25 to 34 years old	1.1 ns	0.7 *
35 to 44 years old	1.3 ns	0.7 ns
45 to 54 years old	1.2 ns	0.5 **
55 to 69 years old	1.1 ns	0.3 **

Source: SUDAAN Survey Data Analysis

(1) The shaded category for each variable represents the reference category, with which all other categories are compared.

(2) Includes both union members and persons who are not union members, but who are covered by collective agreements.

* *Difference with reference category significant at the .05 level.*

** *Difference with reference category significant at the .01 level.*

*** *Difference with reference category significant at the .001 level.*

ns *Not statistically significant.*

Labour force participation in the 1990s

Deborah Sunter and Geoff Bowlby

This decade opened with the longest economic downturn since the 1930s, and a recovery that appeared at first to be almost "jobless." Strong employment gains and improvements to family income in 1994 seemed to signal the end of the "jobless" recovery. However, job growth was again slow in 1995 and for most of 1996. Only since the beginning of 1997 has there been sufficiently strong job creation to nudge up the employment rate and average family incomes.

The labour force participation rate has not followed suit (Chart A). Some view its 1989 peak as the "norm," and attribute the failure of the rate to return to this norm primarily to labour market discouragement in the face of slack demand. This view has been reinforced by comparison with the U.S. participation rate, which dipped slightly during the early 1990s recession in that country, recovered to pre-recession levels by 1994, and continued to move higher in subsequent years (Chart B). The failure of the Canadian rate to match that pattern appears to some to be evidence that weak labour demand here is suppressing both the participation rate and the unemployment rate.

However, that assumption warrants closer scrutiny. An examination of the age structure of the decline in participation suggests that various forces have played an important role; in particular, the growing incidence of higher education, and the trend toward earlier retirement. Moreover, available measures of labour market discouragement indicate that this phenomenon, when defined as the shortfall between current and pre-recession participation rates, is greatly overestimated (see *Measuring discouragement*).

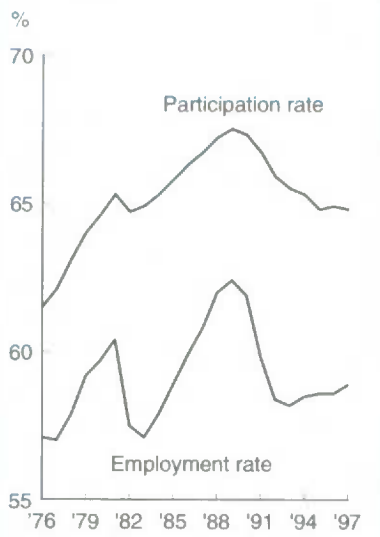
Deborah Sunter and Geoff Bowlby are with the Household Surveys Division. They can be reached at (613) 951-4740 and (613) 951-3325, respectively.

Participation rate and age

Using the 1989 participation rate as a benchmark, some observers argue that over half a million would-be workers have given up looking for work in the belief that no suitable jobs are available. With sustained job growth, they say, this larger group would be drawn back into the labour force, keeping the unemployment rate high, at least in the short term.

Yet when this comparison with 1989 is made for three broad age groups, fully 90% of the shortfall between the expected and the actual participation rates can be attributed to those aged under 25 or over 54.

Chart A
Labour force activity remains below 1989 peak.



Source: Labour Force Survey

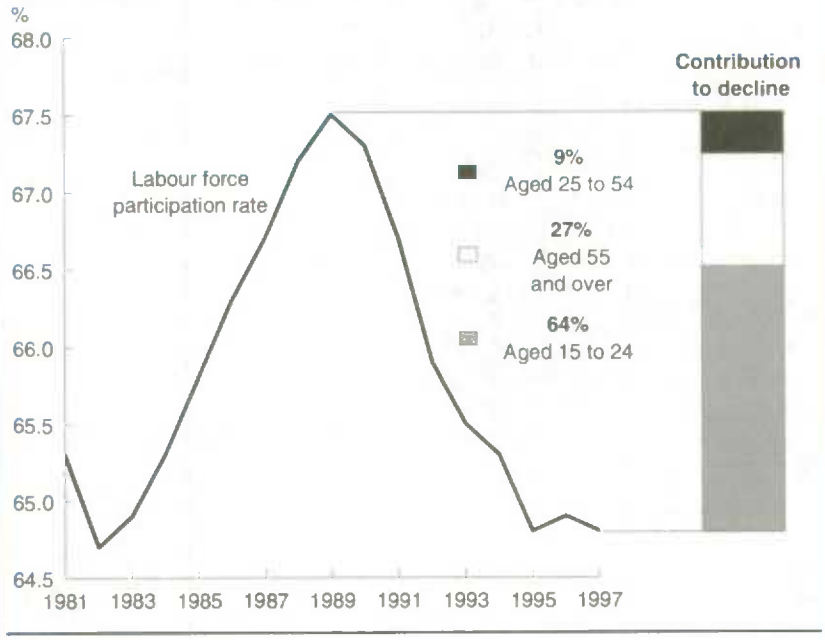
Chart B
U.S. participation now exceeds Canada's.

Sources: Canada, Labour Force Survey; United States, Current Population Survey

Between 1989 and 1997, youths (15 to 24) accounted for 64% of the overall shortfall and persons aged 55 or over accounted for a further 27%. The core working-age group of 25 to 54 year-olds explained only 9% (Chart C).

Furthermore, if the United States is used as a benchmark for the "normal" 1997 participation rate for Canada, these same two age groups contributed most to the difference between the two countries. In fact, the rate for 25 to 54 year-olds was only 0.3 percentage points lower in Canada than in the United States (Chart D). Therefore, any explanation of the shortfall in the participation rate, compared with either the 1989 benchmark or the current American figures, must focus on the younger and older age groups.

Chart C
Most of the drop in the overall participation rate reflects falling youth participation.



Source: Labour Force Survey

Youths, school and labour force participation

How much of youths' contribution to the shortfall between 1989 and 1997 is the result of a long-term trend toward more schooling, and how much is the result of relatively poor labour market conditions?

Labour market conditions in the 1990s have been generally difficult for youths. Their employment rate plunged in the early 1990s, reflecting a drop in hiring and a rise in layoffs for those with lower skills and little seniority. Yet six years after recovery began, youth unemployment remained stubbornly high, while their employment and participation rates lingered at or near their recession troughs. Compared with the late 1980s, when they were more active in the labour force than adults, only 61% participated in 1997. Some 66% of adults did so.

Over the same period, full-time school attendance rates rose sharply, from 48% in 1989 to 55% in 1993 and a record 58% in 1997. While the surge in the early 1990s may have reflected some degree of discouragement with labour market conditions, the upward trend is far from new. Full-time rates rose strongly throughout the expansion years of the late 1980s, when the labour market situation for youths was robust.

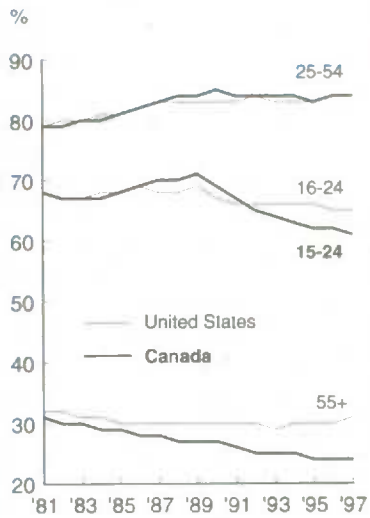
Available data also indicate that school attendance rates for Canadian youths were greater than the comparable 1997 U.S. rates, and have also grown more sharply since 1989. This probably explains some of the difference between the trends in the two countries' youth participation rates (Table 1).

Clearly, youths understand that labour market success is increasingly tied to both initial educational attainment and skills developed through work experience and ongoing training. Young people seeking entry into almost any field of work today require much higher qualifications than their parents did 20 years ago (Crompton, 1995).

Whatever the reason for the upward shift to more schooling, the result is a direct dampening effect on labour force participation, since students are much less likely to be working or looking for work than their non-student counterparts (Table 2).

Over half of the decline in young people's participation between 1989 and 1997 can be attributed to the upswing in school attendance.[1] (Had their attendance rates remained the same as those of 1989, their participation rates would have been much closer to that of adults.) A further 38% is due to a drop in the proportion of full-time students in the labour force. (It is much less common now than a

Chart D
Younger and older workers account for the Canada-U.S. participation gap.



Sources: Canada, Labour Force Survey; United States, Current Population Survey

Table 1
October school attendance * rates

		1989	1997	Percentage-point increase
		%		
16 to 19 years	Canada	73.9	80.9	*7.0*
16 to 19 years	United States	73.6	78.4	*4.8*
20 to 24 years	Canada	28.0	38.9	*10.9*
20 to 24 years	United States	27.0	34.3	*7.3*

Sources: Canada, Labour Force Survey; United States, Current Population Survey
Note: Includes full- and part-time students.
** The U.S. rates, which are based on enrolment, may be overstated.*

decade ago for youths to be working or looking for work if they are studying full time. Between 1989 and 1997, the participation rate of full-time students dropped by 7 percentage points.) Only 11% can be attributed to a decline in participation among non-students or part-time students (Chart E).

Table 2
Youth participation rates

	1980	1989	1993	1997
		%		
Students	36.0	47.3	42.6	40.3
Non-students	85.2	87.2	84.6	85.2

Source: Labour Force Survey
Note: Data are eight-month averages (January to April, September to December).

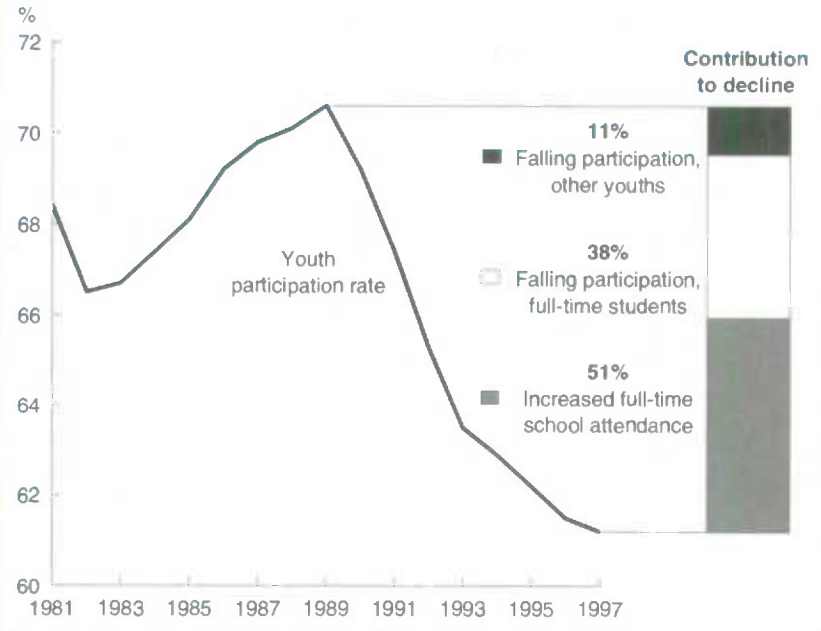
Increased school attendance has also had a dampening effect on youth participation during the summer. Growth in the proportion of youths who are between school years (that is, planning to return to school in September) accounts for about 30% of the overall decline in the youth participation rate from May to August. Almost 60% of the shortfall is accounted for by lower participation of these returning students, probably because summer jobs have been relatively hard to come by in the 1990s. Only 12% of the drop is associated with those who have left school (Chart F).

Provincial variations in school attendance

Factors underlying the drop in the youth participation rate in the 1990s have varied across provinces. For example, in spite of rising participation among full- and part-time students and non-student youths, young people's overall rate in Saskatchewan actually dropped between 1989 and 1997, accounted for entirely by school attendance. A growing number of full-time students drove the rate down (Table 3).

A similar story prevailed in Manitoba, where participation by full-time students barely changed. About 84% of the drop in youth participation in that province can be attributed to higher full-time school attendance. In Newfoundland, the school attendance rate increased by 12 percentage

Chart E
The decline in youth labour force participation reflects mostly a rise in full-time school attendance.



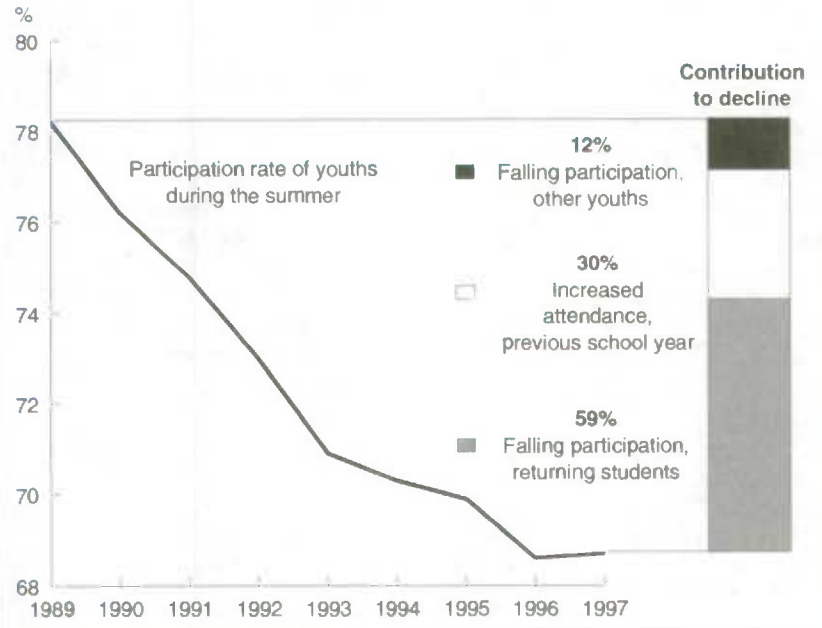
Source: Labour Force Survey

Table 3
Factors of decline in youth participation rates by province

	1997 rates			Change from 1989			Contribution to decline		
		Labour force participation			Labour force participation			Labour force participation	
	Full-time school attendance	Full-time students	Part-time and non-students	Full-time school attendance	Full-time students	Part-time and non-students	Full-time school attendance	Full-time students	Part-time and non-students
		%			percentage points			%	
Canada	**58.2**	**37.7**	**85.1**	***10.5***	***-6.8***	***-2.3***	**51**	**38**	**11**
Newfoundland	61.1	15.1	68.6	*12.0*	*-0.7*	*-2.4*	82	5	14
Prince Edward Island *	53.6	34.3	90.2	*5.8*	*-2.8*	*7.0*	...	...	...
Nova Scotia	57.8	35.2	83.1	*8.3*	*-3.7*	*-1.2*	61	31	9
New Brunswick	53.6	27.4	78.7	*6.5*	*-1.9*	*-2.0*	63	18	19
Quebec	60.6	31.4	83.1	*14.1*	*-5.7*	*-2.2*	63	28	9
Ontario	61.5	42.4	86.0	*10.9*	*-9.6*	*-4.0*	38	47	15
Manitoba	50.4	47.2	88.0	*5.5*	*-0.4*	*-0.5*	84	8	10
Saskatchewan	53.0	38.8	86.8	*6.4*	*0.6*	*1.5*	100	-	-
Alberta *	52.0	42.4	89.6	*7.1*	*-1.7*	*1.9*	...	...	...
British Columbia	53.4	36.1	85.1	*10.1*	*-11.2*	*-5.0*	36	43	20

Source: Labour Force Survey
Note: Data are eight-month averages (January to April, September to December).
* *In these two provinces the participation rate for some groups of youths rose while that for others fell. This produces non-meaningful results.*

Chart F
Summer jobs have been relatively hard to find in the 1990s.



Source: Labour Force Survey

points between 1989 and 1997, accounting for 82% of the decline in labour force participation by young people. In Quebec, school attendance rates rose by 14 percentage points, the source of almost two-thirds of the drop in youth participation.

By contrast, large drops in the participation rates of full-time students contributed most to the overall decline in youth participation in both Ontario and British Columbia (11 and 10 percentage points, respectively).

Effect of earlier retirement

Persons aged 55 and over have been the second greatest contributor to the overall decline in the labour force participation rate in the 1990s. This group was also the source of the greatest difference between U.S. and Canadian rates in 1997, a gap that opened in the mid-1980s and has widened since.

Measuring discouragement

The Labour Force Survey measures discouragement directly through a series of explicit questions. Respondents to the survey who are not currently employed and are not looking for work are asked:

"Did you want a job last week? What was the main reason you did not look for work last week? Could you have worked in the last week if a suitable job had been offered?"

The following table presents a breakdown of the Canadian working-age population (15 and over) by labour force status, and then further subdivides those not in the labour force according to their responses.

Working-age population, 1997

	'000
Population 15+	**23,687**
Employed	**13,941**
Unemployed	**1,414**
Not in the labour force	**8,333**
Not able to work	654
May be able to work	7,678
Wanted a job if suitable work had been offered	458
Non-economic reasons for not looking	**269**
Illness	48
Personal/family reasons	64
School	93
No reason/other	64
Economic reasons for not looking	**188**
Discouraged, believed no work available	108
Waiting for recall	56
Waiting for replies	24

Those who wanted a job, and were available for work but did not look because they believed no suitable work was available are classified, in accordance with international standards, as **discouraged**. While not included in the official estimates of the labour force and unemployment, they are closely monitored, since they represent potential labour supply and provide a barometer of labour market conditions. Similarly, those who wanted a job and were available, but did not look because they were waiting for replies or recall from employers, while not discouraged, are also on the margins of the labour force and are not active for economic reasons (Jones and Riddell, forthcoming).

If the shortfall between the "expected" and the actual participation rates in 1997 were the result of hidden unemployment, the estimate of those not active in the labour force for economic reasons should be over half a million. However, on average, only 188,000 persons were not in the labour force for economic reasons, and within this group, just 108,000 were discouraged workers.

The relative magnitude of discouragement can be looked at in two ways. Expressing discouragement as a percentage of the labour force reflects the potential effect of the discouraged on unemployment figures. On the other hand, using those not in the labour force as the denominator identifies the population at risk, since only this group can be considered as discouraged.

Expressed as a percentage of the labour force, discouragement is relatively low, at 0.7%. It is most prevalent for those aged 55 and over, and lowest for core-aged workers (25 to 54). This pattern also holds when the measure is broadened to include all those on the margins of the labour force because of economic reasons.

When the non-labour force (that is, the number of people not classified as employed or unemployed) is used as the denominator, the pattern changes. Since most 25 to 54 year-old men and many women in this age group have few alternatives to participating in the labour force, those who are not active are more likely to be discouraged or marginally attached in some way than are older and younger groups.

Education greatly influences the discouraged-to-labour force ratio. At 3.1%, it is over six times greater for persons with no more than a Grade 8 education than for those with a postsecondary certificate or diploma (0.4%) or university degree (0.2%).

In relative terms, labour market discouragement tends to be greater in areas with chronically high unemployment rates, most notably Newfoundland. Rates are also above the national average in the other Atlantic provinces and Quebec, and below average in Ontario and the western provinces.

Discouraged workers by province, 1997

	Total	As % of labour force	As % of non-labour force
	'000	%	
Canada	**108**	**0.7**	**1.3**
Nfld.	21	8.9	9.9
P.E.I.	1	0.8	1.7
N.S.	6	1.3	2.0
N.B.	6	1.5	2.3
Que.	31	0.9	1.4
Ont.	26	0.4	0.9
Man.	2	0.4	0.8
Sask.	3	0.5	1.0
Alta.	3	0.2	0.6
B.C.	9	0.5	0.8

Marginal labour force attachment, 1997

		Not in the labour force for economic reasons *			
		Total as % of		Discouraged as % of	
		Labour force	Non-labour force	Labour force	Non-labour force
		%			
15+	**Both sexes**	**1.2**	**2.3**	**0.7**	**1.3**
15-24	Men	1.5	2.6	0.9	1.5
	Women	1.3	1.8	0.8	1.1
25-54	Men	1.0	10.6	0.5	4.9
	Women	1.1	3.7	0.7	2.3
55+	Men	1.9	0.9	1.2	0.6
	Women	2.3	0.5	1.7	0.3

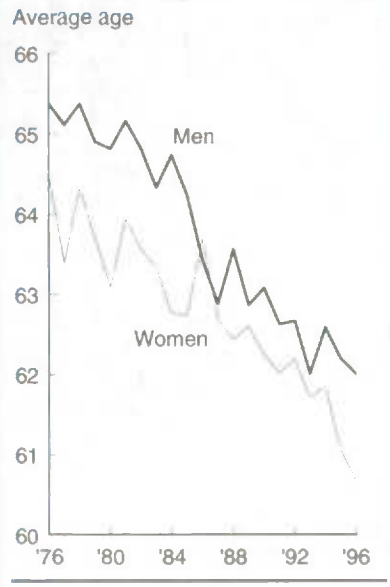
* *Includes discouraged, and those waiting for replies or recall.*

The labour force participation rate of men aged 55 to 64 has been on a long-term decline, falling from 77% in 1976 to 59% in 1995. (In 1996 and 1997, the rate actually edged up slightly for the first time in over 20 years.) In contrast to older men, older women have been increasingly likely to participate in the labour force: their participation rates have risen from 32% in 1976 to 36% in 1997.

The decline in men's participation in the 1970s and 1980s reflected the growing numbers who were retiring earlier, perhaps taking advantage of early retirement incentives (see *Retirement*). In the 1990s, the average age at retirement has continued to fall, although at a slower pace (Gower, 1997) (Chart G).

However, the continued decline in participation among older men has led to concern that this group may now face a greater risk of involuntary job loss than younger workers – in a labour market that increasingly values postsecondary education, technological skill and flexibility.

Chart G
People are retiring younger.



Source: Labour Force Survey

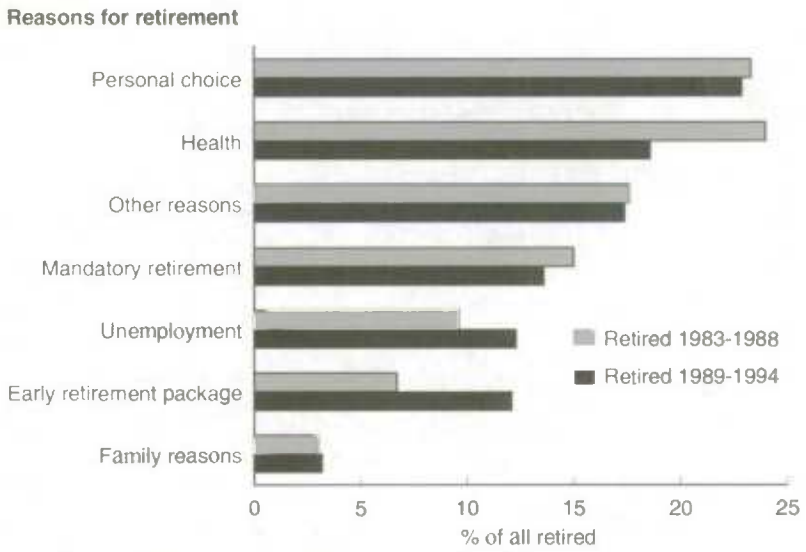
So, how much of this decline is due to voluntary retirement, and how much is a reflection of discouragement following involuntary job loss? The data suggest that both factors have contributed.

Between the late 1970s and early 1990s, the risk of permanent layoff changed very little for the overall working population (Picot, Lin and Pyper, 1997). But the risk actually increased slightly for older workers over this period. While least likely to experience an involuntary job loss in the late 1970s, older workers were more likely to be permanently laid off in the 1980s, and slightly more at risk than workers aged 35 to 54 by 1994. However, the increase has not been strong: the permanent layoff rate for older men rose from 6.9% in 1978 to 8.6% in 1994. For women, the increase was even smaller, from 3.9% to 4.5%.

Retirement

Reasons for retirement are complex and diverse, so the continued drop in the average age of retirement is not solely the result of forced exits from the labour force. In fact, the reasons for retirement, as measured by Statistics Canada's General Social Survey, changed only marginally between the expansion years of the 1980s and the recession-dominated years of the early 1990s. While the proportion of persons who retired because of early retirement incentives almost doubled, from 7% to 12%, the proportion reporting unemployment as their main reason for retirement rose only slightly, from 10% to 12%. Personal choice and health remained the leading reasons in the early 1990s.

Incentives may have spurred early retirement in the 1990s.



Source: General Social Survey, 1994

While the risk of layoff has risen only slightly, some groups of older workers have been especially vulnerable: those with relatively low levels of education, and those in the higher unemployment areas of the Atlantic provinces and Quebec. Once laid off, older workers, especially those who lack postsecondary qualifications, have had a much harder time finding a replacement job than younger adults (Statistics Canada, 1998).

Job loss has affected older workers in different ways. For example, a considerable proportion who lost jobs in the 1990s were government workers, many of whom may have been eligible for early retirement packages that provided a bridge to their normal retirement benefits. Those who experienced job loss without such compensation have been at a disadvantage, at least until old enough to receive C/QPP benefits. In the interim, they have most likely faced serious barriers to re-employment.

Conclusion

The failure of the labour force participation rate to match or exceed 1989 levels has sparked a great deal of interest and debate. Many observers attribute the shortfall between the current participation rate and that of 1989 as an indicator of the extent of labour market discouragement. However, an examination of the age structure of the decline suggests that other structural forces such as education and early retirement have played an important role. These findings are further supported by the direct measure of discouragement from the LFS, which, at 108,000 in 1997, is a great deal lower than an estimate based on the difference between the current and pre-recession participation rates. □

Note

1 Another study (Jennings, 1998) reached a similar conclusion.

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Looking for work

Lee Grenon

Over the past two decades, the unemployed have changed their approach to looking for work. Unemployed job seekers make greater use of job advertisements and personal networks, and less use of formal institutions such as public employment agencies and unions. As well, they are increasingly engaged in either a comprehensive job search involving four or more methods over a typical four-week period, or a restricted job search using just one method. These changes have been most pronounced among the long-term unemployed (see *Data source and definitions*).

Finding a job involves gathering information on jobs and employers, and offering to provide labour to an employer. Employers, employment agencies, friends or relatives, unions, and job advertisements are all potential sources of information. Tapping into these sources can be an active and formal exercise, or a passive and informal one. Despite the trend away from using institutions (Chart), the annual average number of methods used by unemployed job seekers over a typical four-week period has been relatively stable since 1977: between 1.9 and 2.1.

Direct contact most common

Contacting employers directly has, with few exceptions, remained the most common method of job search over the past 20 years (Table 1), regardless of job seekers' duration of unemployment, age, sex or educational attainment (Table 2).

But the longer the period of unemployment, the less common is direct contact with an employer. Some people may begin to experience job search "burnout" as their list of

Lee Grenon is with the Labour and Household Surveys Analysis Division. He can be reached at (613) 951-5254.

Data source and definitions

Labour Force Survey

The Labour Force Survey (LFS) is a household survey carried out monthly by Statistics Canada. It divides the working-age population into three mutually exclusive classifications – employed, unemployed, and not in the labour force – and provides descriptive and explanatory data on each of these categories.

Duration of unemployment refers to a continuous period of unemployment.

Unemployed job seekers are those who, during the reference week, were without work, had actively looked for work in the past four weeks, and were available for work. Not all of the unemployed are job seekers; those on temporary layoff, who had an expectation of recall and were available for work, and those who had a new job to start within four weeks from the reference week and were available for work, are not required to look for work in order to be classified as unemployed.

The **long-term unemployed** are persons continuously unemployed for more than a year.

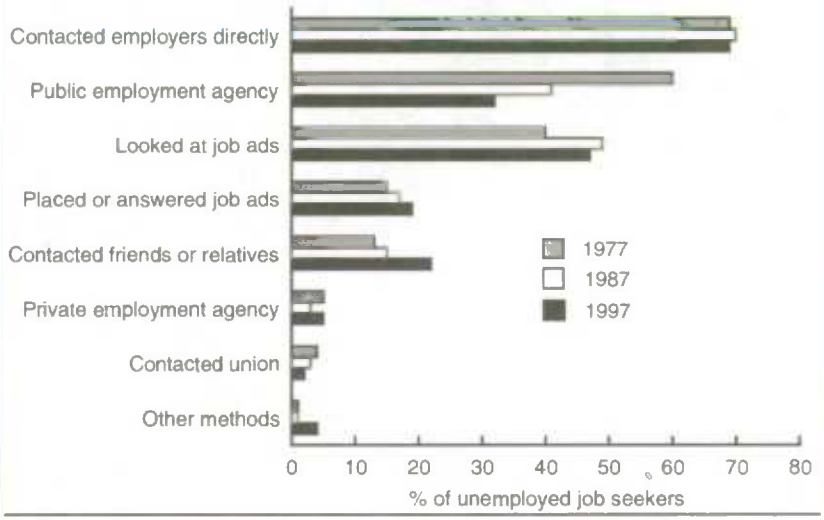
Methods of job search

The LFS identifies eight methods of job search undertaken by unemployed persons in the previous four weeks. If more than one method was used, each one is recorded. Search methods are

- checked with public employment agency such as Canada Employment Centre;
- checked with private employment agency;
- checked with union;
- contacted employers directly;
- contacted friends or relatives;
- placed or answered advertisements;
- looked at advertisements; and
- other methods, such as checked with school placement offices.

Chart

Use of public employment agencies has declined sharply.



Source: Labour Force Survey

Table 1
Job search methods used by unemployed job seekers

	1977	1982	1987	1992	1997
			'000		
Job seekers	**783**	**1,214**	**1,120**	**1,528**	**1,284**
Employers directly	537	863	785	1,060	882
Public employment agency	470	604	459	582	408
Looked at job ads	313	560	550	893	608
Placed or answered job ads	114	175	187	294	241
Friends or relatives	99	158	173	301	279
Private employment agency	40	47	32	55	67
Union	31	41	30	44	24
Other methods	8	10	15	26	47
			%		
Job seekers	**100**	**100**	**100**	**100**	**100**
Employers directly	69	71	70	69	69
Public employment agency	60	50	41	38	32
Looked at job ads	40	46	49	58	47
Placed or answered job ads	15	14	17	19	19
Friends or relatives	13	13	15	20	22
Private employment agency	5	4	3	4	5
Union	4	3	3	3	2
Other methods	1	1	1	2	4

Source: Labour Force Survey
Note: Numbers and percentages do not add to totals because of multiple responses.

potential employers shrinks (Canada, 1986). In 1997, some 71% of job seekers unemployed for 5 to 26 weeks contacted an employer at least once in the LFS four-week reference period, compared with 63% of those out of work for more than a year.

Over the years, direct contact with employers has become more common among men and younger unemployed job seekers (aged 15 to 24). In contrast, women are now less likely to contact employers directly.

(Most other job search methods precede direct contact with an employer. Because respondents may not be reporting some intermediate activities leading to this contact, these may be understated [Clemenson, 1987].)

Use of public agencies down

The most substantial change in job search patterns over the past 20 years has been the declining use of public employment agencies. In 1977, during a typical four-week period, 60% of all unemployed job seekers used a public employment agency. By 1987, this figure had dropped to 41%, and by 1997, to 32%. The use of such agencies dropped from the second most common job search activity in 1977 to the third most common in 1984. Since then, job seekers have been more likely to look at job advertisements than to contact a public employment agency.

This decline is striking, especially since many job seekers are legally required to contact a public employment agency. Those who wish to claim Employment Insurance (EI) benefits must register at a Canada Employment Centre. On the other hand, the number of EI regular beneficiaries without earnings has declined steadily since the early 1990s. The drop in beneficiaries and in the use of public employment agencies has occurred during a period of employment growth and substantial change to employment services from all levels of government.[1] As well, not all unemployed job seekers are eligible for programs such as Employment Insurance, and not all EI claimants are necessarily unemployed job seekers.[2]

During the first year of unemployment, contact with a public employment agency becomes more common as the duration of unemployment increases. However, as with other formal job search methods, use of these agencies declines after a year of continuous unemployment. Young people (aged 15 to 24) in particular have moved away from this source, from 62% in 1977 to 26% in 1997. Men have been more likely than women to contact a public agency, although this difference has diminished over time.

Help wanted

For many years employers have publicized their hiring intentions in newspapers and other publications. This practice now extends to the Internet.

The percentage of unemployed job seekers who looked at job advertisements in a four-week period rose until recently. In 1977, 40% did so. The rate increased steadily for more than a decade, reaching 59% in 1993 before dropping back to 47% in 1997.

Not surprisingly, this method becomes more common as other methods are exhausted, and as the job seeker approaches "bumout." In fact, the incidence of passive job search (only looking at job notices) has increased steadily over the past 20 years, from 3% in 1977 to 8% in 1997.[3] This growth has been most evident among the long-term unemployed (increasing from 4% to 12%).

Table 2
Use of job search methods by selected characteristics, 1997

	Employers directly	Public employment agency	Looked at job ads	Placed or answered job ads	Friends or relatives	Private employment agency	Union	Other methods
				%				
Both sexes	**69**	**32**	**47**	**19**	**22**	**5**	**2**	**4**
Men	71	34	45	18	22	5	3	3
Women	66	29	50	20	21	5	-	4
Age								
15 to 24	75	26	43	16	21	3	-	3
25 to 34	68	36	50	21	23	6	2	4
35 to 44	67	35	49	19	22	6	2	4
45 to 54	65	32	49	19	22	6	3	4
55 to 64	60	29	47	17	20	6	4	3
65 and over	62	--	48	--	--	--	-	--
Education								
Less than Grade 9	69	28	37	9	18	3	2	2
Some secondary	70	28	45	15	22	3	1	3
High school graduation	68	34	51	21	23	6	1	3
Some postsecondary	71	33	49	20	22	6	--	5
Postsecondary certificate or diploma	68	35	49	20	21	6	4	4
University degree	67	31	49	26	25	10	--	8
Duration of unemployment								
4 weeks or less	69	28	39	16	18	5	2	3
5 to 13 weeks	71	33	49	20	22	5	2	4
14 to 26 weeks	71	34	51	21	24	6	3	4
27 to 52 weeks	67	35	53	20	23	6	2	4
53 weeks or more	63	32	54	18	23	4	1	4

Source: Labour Force Survey
Note: Percentages do not add to 100 because of multiple responses.

Women are more likely than men to consult job advertisements. This could be because some jobs sought by women tend to be advertised more than those traditionally sought by men. As well, this approach may be more convenient for women with family responsibilities (Clemenson, 1987).

Job seekers with limited educational attainment (less than Grade 9) are the least likely to consult job advertisements. This may be partly a consequence of lower literacy skills, which are closely related to educational attainment (Statistics Canada, 1996). It may also reflect the types of job sought by this group.

Skills for hire

Job advertisements can be used both to gather information and to declare one's availability for work.[4] Offering to provide labour by placing or answering an advertisement has become more common in the 1990s.[5] The proportion of job seekers who did so over a four-week period increased from 15% in 1977 to 19% in 1997. This practice was more common among women than men, and more likely among people with at least some postsecondary education. However, in contrast to the practice of looking at advertisements, the placing or answering of such notices actually declined among the long-term unemployed.

Since 1977, for every 100 job seekers who have looked at advertisements, between 31 and 40 have placed or answered one. This ratio reached its highest level to date in 1997.

Friends and relatives play a role

Enlisting the help of friends and family doubled in frequency between 1977 and 1994, from 13% to 26%. Despite a decrease in this method to 22% in 1997, friends and family have continued to be a major source of information and prospects for many job seekers.

Over the past 20 years, the pattern of using personal contacts has changed. In 1977, the rate declined after six months of unemployment. In 1997, the likelihood of using this approach increased during the first six months of unemployment, and thereafter remained stable. The change may reflect the growing emphasis placed on networking. This job search method is used more commonly by university graduates and those aged 25 to 34.

Use of private agencies increases with education

The declining use of public employment agencies has not led to an increased use of private employment agencies. The latter has remained relatively low since 1977 (some 3% to 5% of job seekers). The proportion declines after a year of continuous unemployment.

Contact with private agencies increases with educational attainment. Among unemployed job seekers, 10% of university graduates used a private employment agency, compared with 3% of those who had just some high school. Although some private employment agencies offer placements for manual and semi- or low-skilled work (International Labour Conference, 1994), most provide services to job seekers with technical or professional expertise requiring postsecondary education.

Do unions help?

Most unions do not offer a job placement service. So, even though one in three Canadian workers is a union member, only a small number of job seekers have traditionally sought help from this source. Over the past 20 years, the percentage of unemployed job seekers who approached a union for help finding work has dropped from 4% to 2%. Workers in occupations such as construction and processing have been among the few served in this manner.

The number of job seekers served by unions fluctuates with the business cycle of each industry. People who contacted a union during a typical four-week search period reached 63,000 in 1983, dipping and then rising to 45,000 by 1993.

Contacting a union is almost solely an activity of men, reflecting their continuing predominance in trade, craft and manual occupations. This approach is also more common among older workers (aged 55 to 64), very likely because they enjoy seniority privileges. Job seekers with a postsecondary certificate or diploma, such as a trade certificate, also make more use of unions.

How many methods are used?

Overall, the number of job search methods used has been remarkably stable, despite changing patterns over the past two decades. In a typical four-week period, unemployed job seekers used an average of two job search methods.

The overall stability in the average masks the increasing percentage of job seekers using either only one method over a four-week period, or using four or more methods. The former increased from 36% in 1977 to 45% in 1997, and the latter from 10% to 12%. The percentage of single-method job searches that were passive (looking at notices only) doubled from 8% in 1977 to 17% in 1997.

Summary

Job seekers are relying less on organizations such as public employment agencies and unions and more on job advertisements and networking with friends and family. A growing proportion are using just one search method in a typical four-week period; others, in contrast, are employing many methods.

Several trends may be contributing to the changing patterns. The growing incidence of long-term unemployment has led to an overall increase in the use of advertisements. Changes to services and benefits provided by public employment agencies may be related to the declining use of organizations. And greater emphasis on networking in the job search literature may be linked to the increased use of family and friends.

Overall, the evolving patterns may reflect broader changes in the labour force over the past two decades, such as the increased participation of women, persons with higher educational attainment, and older age groups. As well, these shifts may be related to a higher proportion of managerial, administrative, professional and technical occupations. □

Notes

1 For further information on changes to the Employment Insurance program and Canada Employment Centres see Human Resources Development Canada (1995).

2 The LFS does not identify individual claimants of EI. As well, EI beneficiaries are not necessarily unemployed as defined by the LFS. A Statistics Canada study illustrates the statistical and conceptual differences between these two sources (Lévesque, 1989).

3 Passive job seekers (that is, those who only looked at job advertisements) are classified as unemployed in Canada, but as not in the labour force in the United States. This difference affects the number of unemployed, particularly the number of long-term unemployed. For further information on the effect of passive job search on measures of unemployment see Macredie (1997).

4 Information on using job advertisements is categorized into looking at, and placing or answering an advertisement.

5 Placing and answering notices are categorized together, since both are methods of offering labour, and because the number of persons placing job advertisements is relatively small.

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Retirement patterns of working couples

Dave Gower

Retirement trends have changed in the past couple of decades. The average Canadian now retires at age 62, compared with 65 in the 1970s. Behind these averages lies a more complex picture, however. For both men and women a much higher percentage of workers are retiring in their fifties, while a substantial proportion are still working well past age 65.

For working couples, one partner's decision to retire often depends on the other's situation. One person may postpone retirement until the other is ready to do so. Alternatively, one spouse may be able to leave work if the other continues to bring home a paycheque.

A few U.S. studies have examined the relationship between women's retirement patterns and their family and personal situations. Generally, women tend to delay their retirement while their husband is working, or when their own earning potential is strong. In the case of men, studies on retirement patterns pay little or no attention to the spouse's status because it is not seen as a major influence on their decision.[1] Rather, age, work history and pension entitlement are viewed as key factors.

A restricted subset

Retirement is not a simple concept to identify and measure. Some people come to the end of a lengthy career with one employer and retire. Some simply leave employment temporarily, while others transfer to part-time or intermittent work.

Dave Gower is with the Labour and Household Surveys Analysis Division. He can be reached at (613) 951-4616.

Many measurements

In this article "couples" refers to legally married persons or those living common law.

Most retirement studies that have taken family status into account have focused on the behaviour of individuals, and have treated the family situation as an individual characteristic. For example, retirees are classified as married, spouse working; married, spouse not working; or not married. This approach has the advantage of simplicity, but it does not capture partners' combined profiles.

Trying to measure joint behaviour is more complex. The number of possible combinations increases considerably. The following definitions describe the types of measurement used in this article.

Age of retirement relates to the individual, meaning that two ages are assigned to each couple.

Age difference refers to the number of years between the spouses' ages.

Difference in retirement dates is the number of months separating the retirements of the spouses.

Retirement sequence means the combined retirement events experienced by a couple (wife retires first, both retire together, or husband retires first).

Because the two partners in a couple may retire at different dates, this study looks at both retirement events (see *Many measurements*). The data set captures only the date last worked. Though not the ideal measure of "date of retirement," it is the best available. In the future, the Survey of Labour and Income Dynamics (SLID) may be able to produce more complete information.

In April 1997, about 2 million married people in Canada aged 55 to 74 were neither working nor looking for work, and had not worked in the past year. This study is restricted to couples in which both partners meet these criteria. An additional requirement is that both partners must have worked past the age of 50. This is intended to help eliminate cases in which one spouse had not worked late enough in life to "retire." Some 312,000 retired working couples, or over 624,000 individuals, make up this data set (see *The data set: A backward look*).

Retirement patterns vary

In one-third of couples (103,000) surveyed in April 1997, spouses had retired "together," that is, less than a year apart. Partners in about one-third (38,000) of these had left within the same month (Table 1). One U.S. study found that older couples had a greater tendency to retire together (Henratta and O'Rand, 1983), although the Canadian data offer no evidence of this. Those who retired together did so at ages similar to those of all retiring couples: 60.7 versus 60.9 for husbands, and 58.5 versus 58.4 for wives.

Two-thirds of couples retired a year or more apart. Among these, wives were somewhat more likely to stop working first. In 37% of couples (116,000) wives retired at least one year ahead of their husbands. In 30% of couples (93,000) the husband preceded the wife. In 47,000 couples (15%) wives retired five or more years ahead of husbands. In 33,000 couples (11%) husbands left work five or more years ahead of wives.

The data set: A backward look

This study considers couples in which both partners were aged 55 to 74,[2] had not worked in the past year, and were not currently looking for work. The 1997 Survey of Consumer Finances provides income data for 1996.

Because of these age cut-offs, the sample is biased against couples whose ages are very different. (The greater the age difference, the smaller the chance of both partners' falling within the specified range.) Therefore, these data should not be taken as a full measure of the distribution of age among couples.

As well, couples are measured at the date of the survey rather than at the date of retirement. Some people may have married after they retired, and well after they made their decision to do so. In 1995, about 2,800 marriages took place in which both the bride and groom were aged 55 to 74 (Statistics Canada, 1996). With 2 million people in this age range, however, this represents a marriage rate of well under 1%, and should not distort the analysis.

The month and year when last worked is taken as the date of retirement. This may miss possible future work episodes for a few people, but such employment tends to be short-term or part-time (Gower, 1998).

The methodology chosen for this study produces results that differ from those noted in an earlier *Perspectives* article (Gower, 1997). In that study, the average retirement age was 62.4 for men and 61.8 for women, compared with 60.9 and 58.4 in the current analysis.

At least two possible explanations exist for this difference. First, this sample is biased against people who retire late. (The closer these people are to 75, the less likely their chance of being captured by the survey.) Second, the earlier study was able to select people who gave "retirement" as the reason for leaving their last job, which tended to limit the data set to people with longer careers, who often retire later.

For technical reasons, the data set in the earlier article, though more reliable as a source of information on retirement age, could not capture the retirement events of couples that this one provides.

Not surprisingly, wives who retired first tended to do so at a relatively young age (56.4), four years younger than women who retired after their husbands (60.7). Men who retired before their wives did so at age 59.6 on average – only two-and-a-half years younger than those who retired later than their spouses (62.2).

Age difference a major factor

Among all retired working couples, wives were an average two years younger than their husbands. In spite of this, wives tended to retire first. Their average retirement age was two-and-a-half years lower than husbands' (58.4 versus 60.9).

Among the 116,000 couples in which the wife retired first, wives were an average six years younger at retirement than husbands (56.4 versus 62.2). This was the result of two factors: wives left work an average five years earlier, and they were an average one year younger than their mates (Table 2).

Among the 93,000 couples in which the husband retired first, husbands' average retirement age was slightly lower than wives', but by a much smaller margin (59.6 versus 60.7). In such cases, husbands retired almost four-and-a-half years sooner than their wives, but were an average three years older.

Table 1
Retirement sequence and average retirement age of working couples

	Couples		Average retirement age	
			Husband	Wife
	'000	%	years	
Total	**312**	**100**	**60.9**	**58.4**
Wife retired first (1 year or more)	**116**	**37**	**62.2**	**56.4**
60 months or more before husband	47	15	63.0	54.6
24 to 59 months before husband	47	15	61.7	57.4
12 to 23 months before husband	22	7	61.5	58.1
Retired together	**103**	**33**	**60.7**	**58.5**
Wife 1 to 11 months before husband	35	11	60.5	58.3
Same month	38	12	61.1	58.9
Husband 1 to 11 months before wife	31	10	60.4	58.3
Husband retired first (1 year or more)	**93**	**30**	**59.6**	**60.7**
12 to 23 months before wife	21	7	60.3	58.9
24 to 59 months before wife	39	12	60.2	60.6
60 months or more before wife	33	11	58.4	62.0

Source: Survey of Consumer Finances, April 1997

How does age difference affect retirement sequence?

Simple averages hide many subgroups of interest. For example, do couples in which the wife is older have distinctive retirement patterns? At the

Table 2
Difference in retirement dates and ages of working couples, by retirement sequence

	Average difference in retirement dates	Average age difference
	years	
Total	**0.5**	**2.0**
Wife retired first (1 year or more)	**4.9**	**0.9**
60 months or more before husband	8.1	0.3
24 to 59 months before husband	3.3	1.0
12 to 23 months before husband	1.3	2.0
Retired together	**-**	**2.1**
Wife 1 to 11 months before husband	0.4	1.8
Same month	-	2.2
Husband 1 to 11 months before wife	0.4	2.5
Husband retired first (1 year or more)	**4.4**	**3.2**
12 to 23 months before wife	1.3	2.8
24 to 59 months before wife	3.2	2.8
60 months or more before wife	7.6	4.0

Source: Survey of Consumer Finances, April 1997

Table 3
Retirement sequence of working couples, by age difference

	Retirement sequence			
	Total	Wife first	Together	Husband first
	'000			
Total	**312**	**116**	**103**	**93**
Wife older	65	36	18	11
Same age	44	16	13	14
Husband older	204	63	72	69
1 to 2 years	73	28	28	17
3 to 4 years	64	19	24	21
5 years or more	67	16	20	31
	%			
Total	**100**	**37**	**33**	**30**
Wife older	100	55	28	16
Same age	100	38	31	31
Husband older	100	31	35	34
1 to 2 years	100	38	38	24
3 to 4 years	100	30	37	33
5 years or more	100	24	30	46

Source: Survey of Consumer Finances, April 1997

other extreme, when the husband is much older, do decisions to retire differ radically from those of other couples?

Some 65,000 wives were older than their husbands at the time of the survey, and of these, 55% had retired first. This compares with 38% of the 44,000 wives who were the same age as their husbands. Of the 204,000 retired couples in which the husband was older, only 31% of wives had retired first, a proportion that diminished as the age difference grew. It fell to only 24% when the age difference was five years or more (Table 3).

The propensity of spouses to retire within a year of each other varied only moderately with age difference. The likelihood was lowest when the wife was older (28%), or when the husband was five or more years older than his wife (30%). Retiring together was most common when the husband was one to two years older.

Wives wait longer

If the husband retires first, how soon does his wife join him? How does this compare with cases in which the wife retires first?

Table 4
Average difference in retirement dates

	Retirement sequence	
	Wife first	Husband first
	years	
Wife older	5.3	4.3
Same age	5.5	3.5
Husband older	4.5	4.6
1 to 2 years	4.7	3.8
3 to 4 years	5.0	4.7
5 years or more	3.5	4.8

Source: Survey of Consumer Finances, April 1997

Among the 16,000 same-age couples in which the wife retired first, wives waited an average five-and-a-half years for their partners to join them. In contrast, among the 14,000 cases in which the husband retired first, wives retired only three-and-a-half years later (Table 4). This suggests that, as in the United States, wives are more likely than husbands to base their retirement decision on their spouses' employment situation.

Sequence not tied to income or education

Who is most able to take early retirement? According to a related study published last year, individuals with higher education often retire at relatively young ages (Gower, 1997). Can the same be seen in the retirement patterns of couples?

The association is not clear cut. In couples with lower educational attainment and low income, wives are somewhat more likely to leave first (Table 5). In other income or education groups, however, there seems to be less correlation. This does not mean that such measures are completely unrelated to family retirement decisions, merely that other factors may be more dominant.

Conclusion

Wives appear more likely than husbands to take their spouses' career and retirement into account when making their own decision to retire.

Economic status and retirement patterns of couples are not strongly linked. It is quite possible, however, that a more in-depth study could reveal significant patterns.

The population examined here varies in some important ways from the generation to follow. Women now approaching retirement age are more likely to have had long-term careers than those of a generation ago. This creates sources of post-retirement income not available to their predecessors. Recent strong growth in equity values may also allow couples retiring in the next few years a freedom of choice not enjoyed by this study group. Changes in family decision-making processes may also change the dynamics. □

Table 5
Retirement sequence of working couples, by education and post-retirement income

	Total		Wife first	Together	Husband first
	'000		%		
Total	**312**	**100**	**37**	**33**	**30**
Education of wife					
Less than Grade 9	77	100	45	35	20
Some secondary	63	100	31	33	36
High school graduation / some postsecondary	82	100	38	30	32
Postsecondary certificate or diploma / university degree	90	100	34	34	32
Education of husband					
Less than Grade 9	82	100	42	32	26
Some secondary	55	100	29	40	31
High school graduation / some postsecondary	58	100	34	31	35
Postsecondary certificate or diploma / university degree	118	100	39	32	30
Combined income					
Under $25,000	107	100	42	34	24
$25,000 to $39,999	93	100	35	30	35
$40,000 and over	112	100	34	35	31

Source: Survey of Consumer Finances, April 1997

Notes

1 See, for example, Henratta and O'Rand (1983).

2 Choosing a cutoff age of 55 offers a reasonable guarantee that the person will stay out of the workforce. Age 74 is used as the upper limit to protect against natural attrition of the sample. This age limit does miss many retired people over age 74, and biases the sample against those who work later in life. For these and other reasons the average retirement dates in this article may differ from those published in other studies (see *The data set: A backward look*).

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Home-based entrepreneurs

Dominique Pérusse

More and more Canadians are going into business for themselves. Fully two-thirds of employment growth since the beginning of the 1990s is attributable to persons who have created their own business. According to the Labour Force Survey, the self-employed grew from 10% of employment in 1976 to 14% in 1995. In November 1995, more than half (1,126,000) operated their business from home (see *Data sources and definitions*). (In contrast, just 9% of employees worked some of their hours at home.[1])

Pros and cons

A home office presents both advantages and disadvantages to someone launching a business (Codère, 1995). Home-based entrepreneurs incur lower fixed costs to start up a business, which decreases financial risk. The home can also be an ideal choice for those who often work outside the office. As is the case for employees working from home, home-based entrepreneurs are able to reduce the time and expense of commuting, and may save money on clothing and meals. The time saved and the flexibility in work schedule often make it easier to balance work and family life. On the other hand, working at home can create a sense of personal and professional isolation. In response, some home-based entrepreneurs have formed associations to maintain visibility and deal with common concerns.

Who operates home-based businesses?

The 1995 Survey of Work Arrangements (SWA) found that 60% of self-employed workers aged 55 or over were based at home, compared with 52% of those 25 to 54.

Of those aged 25 to 44, home was the place of work for 58% of women and 49% of men. Women in this age group are more likely to be raising children and hence may prefer to work from home.

Family status can make it possible – or necessary – to work at home. Self-employed single parents were most likely to operate a business at home in November 1995, fathers more so than mothers (69% versus 52%) (Table 1). Some 54% of business owners with a working spouse (dual-earner families) were home-based. A wide gap separated men and women: 51% of men and 61% of women were home-based, although the latter rose to 77% when a preschool-aged child was present.

Self-employed workers with a university degree were less likely to operate their business from home. Just 40% did so, compared with 60% of those with only some high school or less. (In contrast, among employees, more university graduates worked at home.)

Some jobs more likely to be home-based

In November 1995, one-third of the self-employed worked in goods-producing industries, primarily in agriculture and construction, and they generally operated their businesses from home. Not surprisingly, some 91% of self-employed agricultural workers and 68% of construction entrepreneurs were home-based (Table 2).

Data sources and definitions

The **Labour Force Survey**, a monthly survey involving about 55,000 households, yields statistics on employment and unemployment.

The **Survey of Work Arrangements (SWA)**, sponsored by Human Resources Development Canada, was conducted in November 1995 as a supplement to the Labour Force Survey. It asked self-employed workers whether they operated their business from home. (Employees were asked whether they performed part or all of their work at home.)

Most SWA questions concerned the worker's **main job**, that is, the one to which most hours were devoted during the week of the survey, in cases in which a respondent held more than one job. In addition, all workers (paid or self-employed) who held more than one job, and who were self-employed in the second, were asked if this business was conducted from home.

The **Home-based Business Survey**, conducted in April 1997, covered 300 Ontario companies that began operations in the first quarter of 1996.

The **self-employed** are working owners of a business, farm or professional practice, incorporated or not, with or without paid help. Also included are those who do not have a business (for example, babysitters and newspaper carriers) and persons who work without pay on a farm or in a business or professional practice owned and operated by another family member living in the same dwelling.

Home-based self-employed workers include, among others, entrepreneurs in trucking or construction who use their home as a place of business while working outside it, as well as those (such as family daycare operators) who work only at home.

Dominique Pérusse is with the Labour Division. She can be reached at (613) 951-4064.

Table 1
Self-employed workers based at home, by sex and family type

	Both sexes	Men	Women
		%	
All self-employed workers	**53**	**51**	**57**
Youngest child under 6	59	50	77
Youngest child between 6 and 15	54	50	60
No children under 16	52	53	50
In a couple	**53**	**50**	**60**
Youngest child under 6	59	50	77
Youngest child between 6 and 15	52	47	62
No children under 16	52	52	52
Single-earner couples	**47**	**46**	**52**
Youngest child under 6	53	51	--
Youngest child between 6 and 15	41	38	--
No children under 16	47	47	47
Dual-earner couples	**54**	**51**	**61**
Youngest child under 6	60	48	77
Youngest child between 6 and 15	54	49	62
No children under 16	53	53	53
Lone parents	59	69	52
Unattached individuals	54	53	57

Source: Survey of Work Arrangements, November 1995

Services accounted for the other two-thirds of self-employed workers; 44% of these businesses were operated from home. Trade accounted for 12% of all home-based businesses; business services 11%; and personal services 9%. While they were fewer in number, self-employed workers in education, and membership organization and other services were more likely to use their home as a workplace.

Some occupations do not seem to lend themselves as readily to home-based work. Unlike workers in farming, horticulture and animal breeding, of whom 91% called home their place of work, only one-third of directors, managers and administrators operated their business from home. (By definition, they often had more than a few employees, thus making a home office less feasible.) As well, only 38% of those in sales operated a business from home, while about half of clerical and service workers did so.

With or without employees?

Entrepreneurs with one or no employees were more likely than those who had several, to operate their business from home. In fact, 82% of those who operated a business in their home had no employees (Table 2), compared with 48% of those who were based outside the home. Self-employed workers in services (86%) and agriculture (82%) were less likely to have employees; by contrast, only 64% of those in manufacturing had no employees.

Main reason

Being able to work at home is apparently not the main reason for becoming self-employed. According to the 1995 SWA, only one home-based business owner in 10 said the main reason was a desire to work at home. Home-based business owners with at least one child under six were more likely to start a business for this reason (18%).

The SWA did not ask home-based self-employed workers why they operated their business from home. The findings of another survey are more revealing. The Home-based Business Survey asked Ontario entrepreneurs who had reeently started their business why they had chosen to operate from home. Half said they had done so to reduce business operating costs (Taylor, 1997).

Self-employed workers with more than one job were more likely than others to work at home in either their main or second job. Among these 128,000 multiple jobholders, 66% were home-based in their main job. In addition, among the 30,000 self-employed workers whose primary job was based at home and who also had a second business, 86% ran that business from home.

Operating a business from home is no easy matter. Although home-based entrepreneurs put in fewer hours per week on average than other self-employed workers, one-quarter worked between 40 and 49 hours per week and one-third put in 50 hours or more (Table 3). They were also more likely to have work weeks that varied in length, or work weeks of six or seven days. One home-based worker in three worked both Saturday and Sunday, compared with one in five who worked away from home.

More prevalent in rural areas

For several reasons business owners who live in urban areas are less likely than those in rural areas to operate their business from home. In the city, homes may be too small to accommodate an office, commercial space for lease is easier to find, and zoning regulations regarding mixed land use are stricter. So, while less than half of business owners (46%) who lived in urban areas operated their business from home in November 1995, some 72% in rural or remote areas did so. Even excluding farmers, the gap was still significant: 44% of urban entrepreneurs were based at home,

Table 2
Self-employed workers based at home, by industry and occupation

	Self-employed				
			Work at home		
	Total		Number	Distribution	Proportion
	'000	%	'000	%	%
All industries	**2,139**	**100**	**1,126**	**100**	**53**
Goods-producing *	**684**	**32**	**482**	**43**	**71**
Agriculture	284	13	257	23	91
Other primary	50	2	32	3	63
Manufacturing	119	6	37	3	31
Construction	229	11	157	14	68
Service-producing	**1,455**	**68**	**643**	**57**	**44**
Transportation, storage and communication	94	4	45	4	48
Trade	402	19	135	12	34
Finance, insurance and real estate	112	5	54	5	48
Business services	243	11	129	11	53
Educational services	36	2	25	2	71
Health and social services	116	5	43	4	37
Accommodation, food and beverage services	92	4	18	2	20
Recreational services	53	2	24	2	45
Personal services	199	9	98	9	49
Miscellaneous services **	109	5	72	6	66
All occupations	**2,139**	**100**	**1,126**	**100**	**53**
Directors, managers and administrators	217	10	77	7	35
Professionals †	318	15	148	13	46
Natural sciences, engineering and mathematics	55	3	35	3	63
Teaching	44	2	32	3	72
Artistic, literary and recreational	101	5	62	5	61
Clerical	62	3	30	3	49
Sales	393	18	148	13	38
Service	356	17	180	16	51
Primary	337	16	293	26	87
Farming, horticulture and animal breeding	292	14	265	24	91
Processing, machining and fabricating	153	7	61	5	40
Construction trades; transport equipment operating; material handling; and other skilled workers	302	14	189	17	62
Number of employees	**2,091**	**100**	**1,123**	**100**	**54**
None ††	1,381	66	917	82	66
1	191	9	98	9	51
2 to 4	268	13	77	7	29
5 or more	251	12	32	3	13

Source: Survey of Work Arrangements, November 1995

* *Includes utilities.*

** *Membership organization and other services.*

† *Includes social sciences, religion, medicine and health.*

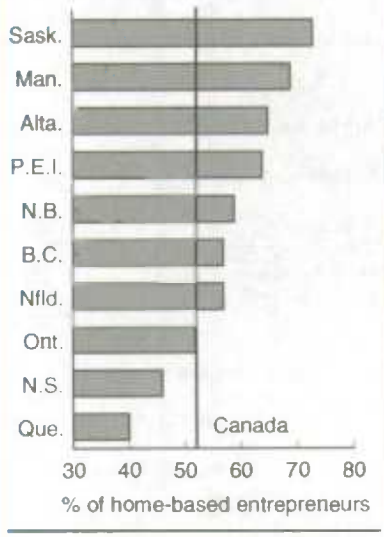
†† *Refers to own-account workers or employers with no employees at the time of the survey.*

Table 3
Self-employed workers' place of business, by work hours and schedule

		Self-employed	
	Total	At home	Elsewhere
		%	
Usual work hours	**100**	**100**	**100**
Part-time			
1 to 19	12	16	8
20 to 29	7	10	4
Full-time			
30 to 39	15	17	13
40 to 49	28	25	33
50 or more	37	32	43
Schedule	**100**	**100**	**100**
Variable days	18	22	12
Regular days	82	78	88
1 to 4 per week	6	5	7
5 per week	36	30	43
6 or 7 per week	41	43	38
Weekdays only	38	32	44
Monday to Friday	34	29	40
Some weekdays	4	3	4
Including weekends/weekends only	45	46	44
Saturday but not Sunday	16	11	23
Saturday and Sunday	28	34	21

Source: Survey of Work Arrangements, November 1995

Chart
Many entrepreneurs are home-based on the Prairies and in Prince Edward Island.



Source: Survey of Work Arrangements, November 1995

compared with 59% of those in rural or remote areas. This also explains why business owners in the Prairie provinces and Prince Edward Island were more often home-based (Chart).

Summary

Self-employed workers are a growing segment of the workforce. More than half of these workers have chosen to run a business from home, especially if they are older or have young children.

In November 1995, self-employed single parents were more likely to have a home-based business, especially if the parent was a father. And women in dual-earner families were more likely to operate a business from home, particularly if they had preschool-aged children.

Home-based entrepreneurship was lower among university graduates than among those with less education.

One-third of the self-employed worked in goods-producing industries (mainly in agriculture and construction) and tended to run their business from home. The other two-thirds were involved in service-producing industries. Of these, workers who ran a home-based business were concentrated in trade, business services and personal services. Most operated their business without the help of an employee. □

Note

1 Employees working at home are discussed in a previous *Perspectives* article (Pérusse, 1998).

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What's new?

JUST RELEASED

Family income after tax, 1996

After-tax family income remained essentially unchanged in 1996 for a second consecutive year, after adjusting for inflation (as measured by changes in the Consumer Price Index). Apart from a modest increase in 1994, average income declined throughout the early 1990s.

Average after-tax family income in 1996 (based on estimates derived from the annual Survey of Consumer Finances) was $45,000, about 5% less than in 1989, the peak year for income. Transfer payments averaged $6,600, down 7% from the peak in 1993, while income tax was $11,600, 1% above the previous peak in 1990.

The combination of personal income taxes and government transfer payments narrows the after-tax income gap between those at the top and those at the bottom of the income scale. Before taxes and transfers, families in the highest quintile (the top 20%) had $22 for every $1 received by those in the lowest. After taxes and transfers, the gap was reduced to $5 for every $1. Although the pre-transfer income ratio has grown substantially since 1980, the after-tax and transfer ratio has remained stable.

Income After Tax, Distributions by Size in Canada, 1996 (Catalogue no. 13-210-XPB, $31) presents statistics for families of two or more persons, for unattached individuals, for all units (families and unattached individuals combined) and for persons with income. Custom tabulations of the data are also available. To order, or for further information on this release, contact Client Services, Income Statistics Division at (613) 951-7355; 1 888 297-7355; fax (613) 951-3012; e-mail: income@statcan.ca. □

Latest news for market researchers

The 1998 edition of the *Market Research Handbook* (Catalogue no. 63-224-XPB, $125) is now available. Since 1975, this handbook has provided socioeconomic information reflecting key characteristics of local and national markets in Canada.

The 1998 edition contains the latest data from the 1996 Census and a wide range of other surveys. Features include a user's guide, annotated charts, helplines for each of the data sources, and references to CANSIM (Statistics Canada's Canadian Socio-economic Information Management System, accessible online at http://www.statcan.ca).

To order the *Market Research Handbook* contact your nearest Statistics Canada Regional Reference Centre or call 1 800 700-1033; fax (613) 951-1584 or 1 800 889-9734; e-mail: order@statcan.ca. For general information about this publication, contact Jenny Grenier at (613) 951-1020; fax (613) 951-1572; e-mail: grenjen@statcan.ca. □

Labour turnover, 1978 to 1995

Worker turnover continues to be high. Roughly one in five workers separates from his or her company each year.

The overall rate at which workers permanently separate from their employers (including quits, layoffs and other separations) has been generally stable since 1978, although it tends to fall in recessions, as quits drop off more than permanent layoffs increase.

Quit and layoff rates have varied considerably by industry. Goods-producing industries generally have had higher temporary layoff rates than service industries. Over the period covered (1978 to 1995), permanent layoff rates were highest in primary and construction industries, while quit rates were highest in low-wage consumer services.

Worker turnover, especially permanent layoffs, was higher in small firms. The permanent layoff rate in large firms was one-quarter that of small firms in 1994. However, the hiring rate was almost three times higher in small firms that year.

Although affected by cyclical variations in the economy, permanent layoffs remained relatively high in both recessions and expansions. They were also unrelated to an industry's overall job creation.

Permanent Layoffs, Quits and Hirings in the Canadian Economy, 1978 to 1995 (Catalogue no. 71-539-XPB, $35; or 71-539-XIB, $26) is now available. To order this publication, contact your nearest Statistics Canada Regional Reference Centre or call 1 800 700-1033; fax (613) 951-1584 or 1 800 889-9734; e-mail: order@statcan.ca. For further information,

contact Richard Dupuy at (613) 951-361; e-mail: dupuy@statcan.ca. or Garnett Picot, Business and Labour Market Analysis Division, at (613) 951-8214; e-mail: picogar@statcan.ca. □

■ Latest on the labour force

The sixth issue of *Labour Force Update* (Catalogue no. 71-005-XPB, $29) looks at employee wages. Following are highlights:

- In 1997, Canadian employees earned, on average, $15.60 per hour. Women earned $13.93 and men, $17.10. About 61% of employees were paid on an hourly basis.
- With an average weekly wage of $614 in 1997, employees in British Columbia tended to make more than workers in other parts of the country. At $605, Ontario was the only other province to exceed the national average ($574). Wages were lowest in Prince Edward Island ($441) and relatively low in the other three Atlantic provinces.
- In the first quarter of 1998, 545,000 Canadian workers, or 5% of the total, worked at or below the minimum wage. More than half (58% or 316,000) of those employees were youths (aged 15 to 24). Among 25 to 54 year-olds, two-thirds of minimum wage workers were women.

For additional information on this publication, contact Geoff Bowlby at (613) 951-3325; e-mail: bowlgeo@statcan.ca or Martin Tabi at (613) 951-3010; e-mail: tabimar@statcan.ca; fax: (613) 951-2869. □

■ New report on small business

The latest issue of Western Economic Diversification's *Western Canada Small Business Overview* is now available on its website. This chart package offers information on job numbers and many other key performance indicators on western small business. It also contains an overview of the services offered by the Western Canada Business Service Network.

For further information, contact John Young at (403) 495-6882; e-mail: john.young@wd.gc.ca; website: http://www.wd.gc.ca/eng/content/toolkit/smallbus/xcontent.html. □

■ Organisation for Economic Co-operation and Development

Unemployment is predicted to decline very slowly in OECD countries through 1999 to about 7%, or more than 35 million job-seekers.

The June 1998 issue of *Employment Outlook* looks at short-term prospects for these countries and outlines measures that should help increase jobs and reduce unemployment in the long run. This publication covers the following topics:

- **Recent developments** highlight the problems faced by the jobless in working-age households (almost 20% of which have no employed adults). This proportion has increased in almost all OECD countries over the last decade.
- **Minimum wages** help reduce inequalities in wages and incomes but, if set too high, can also cause employment losses among teenagers. They are neither the sole solution to overall family poverty nor the general scourge on jobs that some believe.
- **Youth labour market** problems are in the forefront of employment policies, as people's initial foray into the world of work is, for many, a harbinger of their future. While many factors influence the transition from school to work, countries with strong apprenticeship systems tend to be most successful in integrating youths into employment.
- **Ageing workforces** raise major economic challenges that can be turned into opportunities. "Active ageing" will become a reality only if labour markets, enterprises and workers are able to adapt and make the most of older workers' skills while guaranteeing them adequate standards of living.
- Trends in **work time** reflect developments such as the recent reversal of the downward trend in hours of full-time workers in some countries, a widespread increase in part-time work, but slower growth in other forms of flexible schedule. Analysis concludes that legislated reduction in work hours alone cannot be counted on to reduce unemployment.

For further information on *Employment Outlook* (Catalogue no. 81 98 06 1 P; ISBN: 92-64-16077-9 – No. 50073 1998), contact OECD Publications, 2, rue André-Pascal, 75775 Paris Cedex 16, France. □

WHAT'S NEW WITH SLID?

About 21% of Canadians who had a low-paying job in 1993 had managed to improve their situation by 1995, according to a study based on new data from the Survey of Labour and Income Dynamics. They were able to do so by changing jobs, working longer hours or receiving a pay increase.

Men were more likely than women to escape a low-paying job. Moreover, female lone parents had an especially hard time moving up to jobs that paid more.

This study covered about 2,200 paid workers who were employed in both December 1993 and December 1995, and who had low earnings in December 1993. They ranged in age from 16 to 60, and were not enrolled in school full time in either 1993 or 1995.

Workers were considered to have low-paying jobs if their weekly earnings in 1993 were less than $404.16. This amount was roughly equivalent to Statistics Canada's low income cutoff for a family of two living in an urban area of at least half a million people. A low earner in 1993 was said to have "moved up" in 1995 if weekly earnings were at least $455.25, that is, at least 10% greater than $413.86, the low income cutoff for 1995 weekly earnings.

The Upward Mobility of Low-paid Canadians, 1993 to 1995 (Product no. 75F0002MPE, 98-07, $10 for a paper copy, or free on the Internet) is now available.

The third wave of data from the Survey of Labour and Income Dynamics (for the reference year 1995) has also been released. Data can be accessed through custom retrievals or remote access. But in order to allow for an earlier release of the next wave of data, no public-use microdata file will be produced for the current wave until the end of 1998.

For further information on data products, or to order the study, contact Client Services, Income Statistics Division at (613) 951-7355 or 1 888 297-7355; fax (613) 951-3012; e-mail: dynamics@statcan.ca. □

UPCOMING CONFERENCE

1998 CSLS Conference on the State of Living Standards and Quality of Life in Canada

October 30-31, 1998, Ottawa

The Centre for the Study of Living Standards (CSLS) has organized a major conference on the state of living standards and quality of life in Canada. The conference, to be held at the Chateau Laurier hotel, will look at trends in consumption flows, stocks of wealth, inequality, and economic security. Thirty papers will be presented.

For further information, contact Andrew Sharpe at (613) 233-8891; fax (613) 233-8250; e-mail: csls@csls.ca. The program is posted on the CSLS website at www.csls.ca. □

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Key labour and income facts

The following is a guide to data sources for labour market, business, income and earnings, pension, education and other household topics. Each quarter, this section presents charts and analysis featuring one or more of these sources. For general inquiries, please contact Joanne Bourdeau at (613) 951-4722; e-mail: bourjoa@statcan.ca or Marie-Paule Robert at (613) 951-4628; e-mail: robemar@statcan.ca.

Administrative data

Small area and administrative data
Frequency: Annual
Contact: Customer Services
(613)951-9720

Business surveys

Annual Survey of Manufactures
Frequency: Annual
Contact: Richard Vincent
(613)951-4070

Business Conditions Survey of Manufacturing Industries
Frequency: Quarterly
Contact: Claude Robillard
(613)951-3507

Census

Census labour force characteristics
Frequency: Quinquennial
Contact: Michel Côté
(613)951-6896

Census income statistics
Frequency: Quinquennial
Contact: Abdul Rashid
(613)951-6897

Employment and income surveys

Labour Force Survey
Frequency: Monthly
Contact: Nathalie Caron
(613)951-4168

Survey of Employment, Payrolls and Hours
Frequency: Monthly
Contact: Sylvie Picard
(613)951-4090

Help-wanted Index
Frequency: Monthly
Contact: Sylvie Picard
(613)951-4090

Employment Insurance Statistics Program
Frequency: Monthly
Contact: Sylvie Picard
(613)951-4090

Major wage settlements
Bureau of Labour Information
(Human Resources Development Canada)
Frequency: Quarterly
Contact: (819) 997-3117

Labour income
Frequency: Quarterly
Contact: Anna MacDonald
(613)951-3784

Survey of Labour and Income Dynamics
Frequency: Annual
Contact: Client Services
(613)951-7355 or
1 888 297-7355

Survey of Consumer Finances
Frequency: Annual
Contact: Client Services
(613)951-7355 or
1 888 297-7355

Household Facilities and Equipment Survey
Frequency: Annual
Contact: Client Services
(613)951-7355 or
1 888 297-7355

Family Expenditure Survey
Frequency: Annual
Contact: Client Services
(613)951-7355 or
1 888 297-7355

General Social Survey

Education, work and retirement
Frequency: Occasional
Contact: Jennifer Hubbard
(613)951-5979

Social and community support
Frequency: Occasional
Contact: Jennifer Hubbard
(613)951-5979

Time use
Frequency: Occasional
Contact: Jennifer Hubbard
(613)951-5979

Pension surveys

Pension Plans in Canada Survey
Frequency: Annual
Contact: Thomas Dufour
(613)951-2088

Quarterly Survey of Trusteed Pension Funds
Frequency: Quarterly
Contact: Thomas Dufour
(613)951-2088

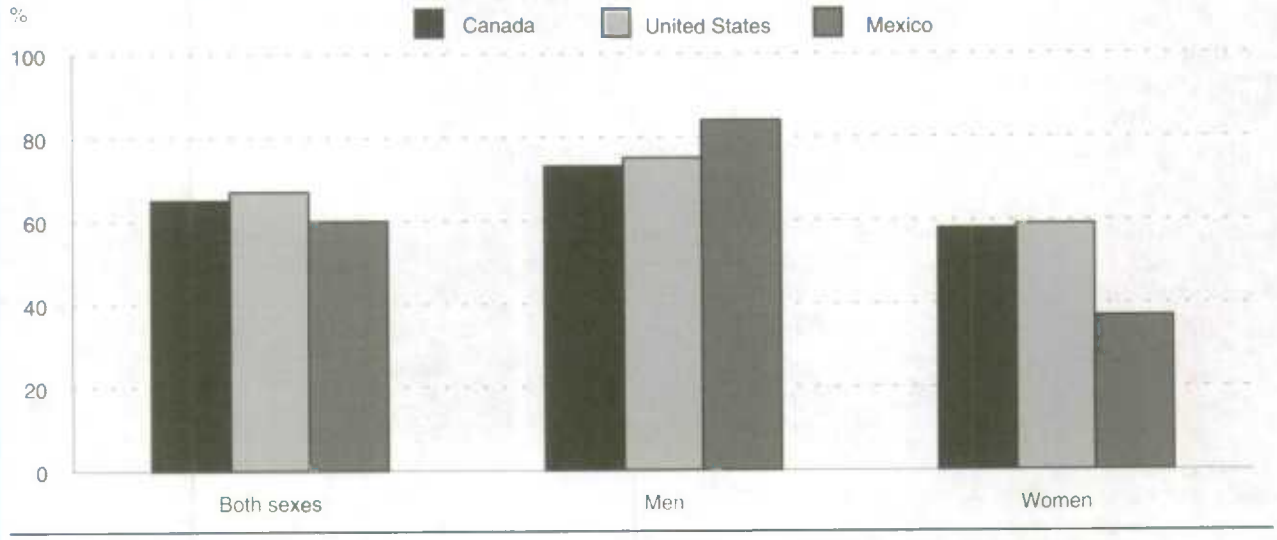
Special surveys

Survey of Work Arrangements
Frequency: Occasional
Contact: Ernest B. Akyeampong
(613)951-4624

Adult Education and Training Survey
Frequency: Occasional
Contact: Steve Arrowsmith
(613)951-0566

Graduate Surveys
(Postsecondary)
Frequency: Occasional
Contact: Bill Magnus
(613)951-4577

Labour force participation rates by sex, 1995



Sources: Canada, Labour Force Survey; United States, Current Population Survey; Mexico, National Employment Survey
Note: For Canada and Mexico, figures are for workers 15 years and over. For the United States, figures are for workers 16 years and over.

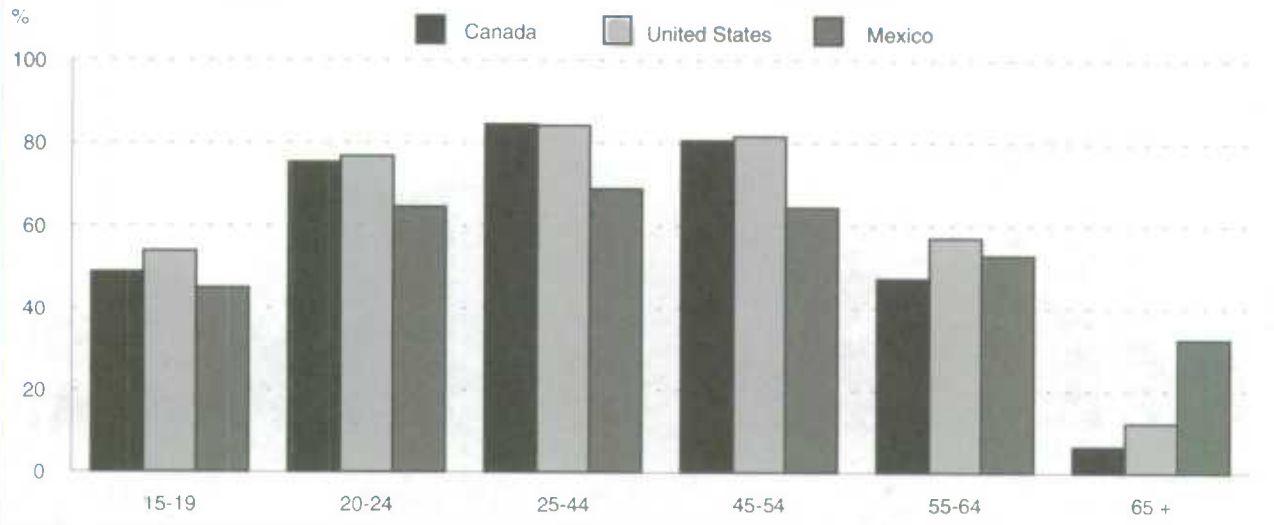
Women's labour force participation is lower in Mexico

In 1995, labour force participation of the working-age population (15 or 16 years and over) was similar in Canada and the United States (65% and 67%, respectively). In Mexico, where a smaller proportion of women participated, the rate was lower (60%).

Women's participation has increased greatly in all three countries in recent years, with Mexico showing the fastest rate of increase. Nevertheless, that country's female participation rate in 1995 (37%) remained substantially lower than that of Canada (58%) and the United States (59%). Accordingly, women made up 45% of the labour force in Canada, and 46% in the United States, but just 32% in Mexico.

Charts and text for this section of "Key labour and income facts" were adapted from *North American Labor Markets: A Comparative Profile*, 1997 (Secretariat for the Commission for Labor Cooperation). For more information, contact the Secretariat at (214) 754-1100; fax (214) 754-1199; website: http//www.naalc.org.

Labour force participation rates by age, 1995



Sources: Canada, Labour Force Survey; United States, Current Population Survey; Mexico, National Employment Survey
Note: For the United States, figures are for workers 16 years and over.

Fewer older workers in Canada

From 1984 to 1995, the most rapid growth in labour force participation in Canada and the United States occurred in the 45-to-54 age group, reflecting the baby boom generation and the increased participation of women in this age group. In contrast, Mexico's most rapid growth was among those aged 55 to 64.

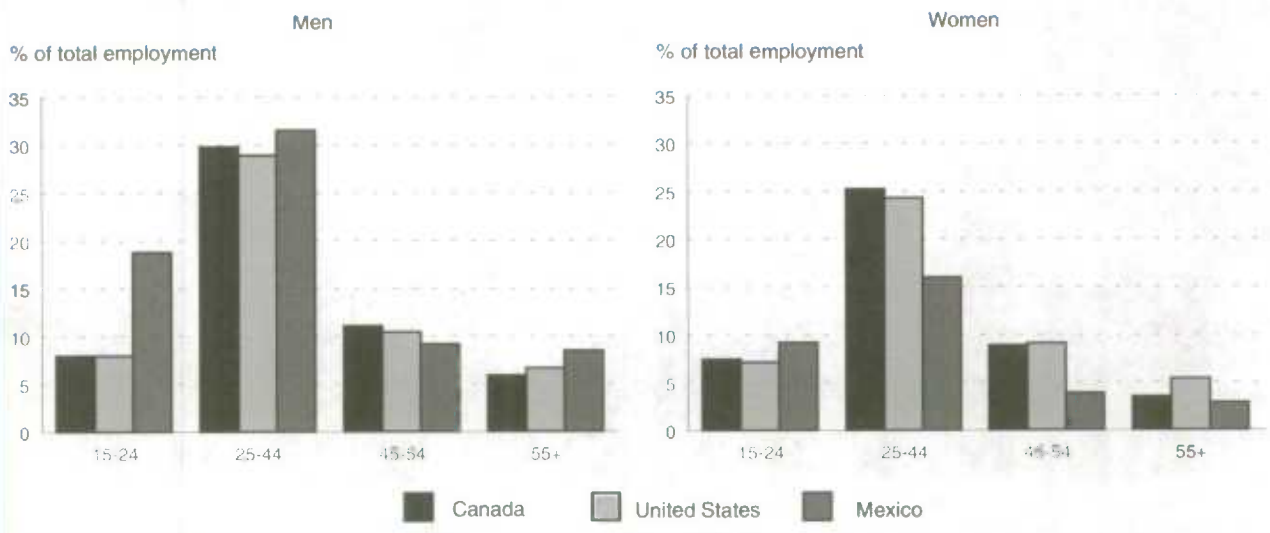
Nevertheless, labour force participation in all three countries in 1995 was highest for those aged 25 to 44. Rates in Canada and the United States were similar for adults between 20 and 54, while those in Mexico were lower for all age groups except workers 55 and over.

The United States had the highest participation rate for young workers (aged 16 to 24) in 1995, with rates having risen slightly since 1984. In contrast, rates for young Canadian workers (aged 15 to 24) dropped during the period, particularly during the 1990-91 recession, because of difficult economic conditions and rising school enrolment. Participation rates for young Mexican workers increased substantially during the 1984-to-1995 period.

In 1995, labour force participation among 55 to 64 year-olds was highest in the United States: 57%. Mexico reported 53% and Canada, 47%. Participation rates for this age group have risen in the United States as more workers postpone retirement. In Canada, however, rates have dropped as a result of fewer job prospects and early retirement.

Mexico reported by far the highest labour force participation rate for workers aged 65 and over (33%), suggesting that many in this group did not have sufficient income to retire. In contrast, the participation rate for this age group was 12% in the United States and just 6% in Canada.

Employment by age and sex, 1995



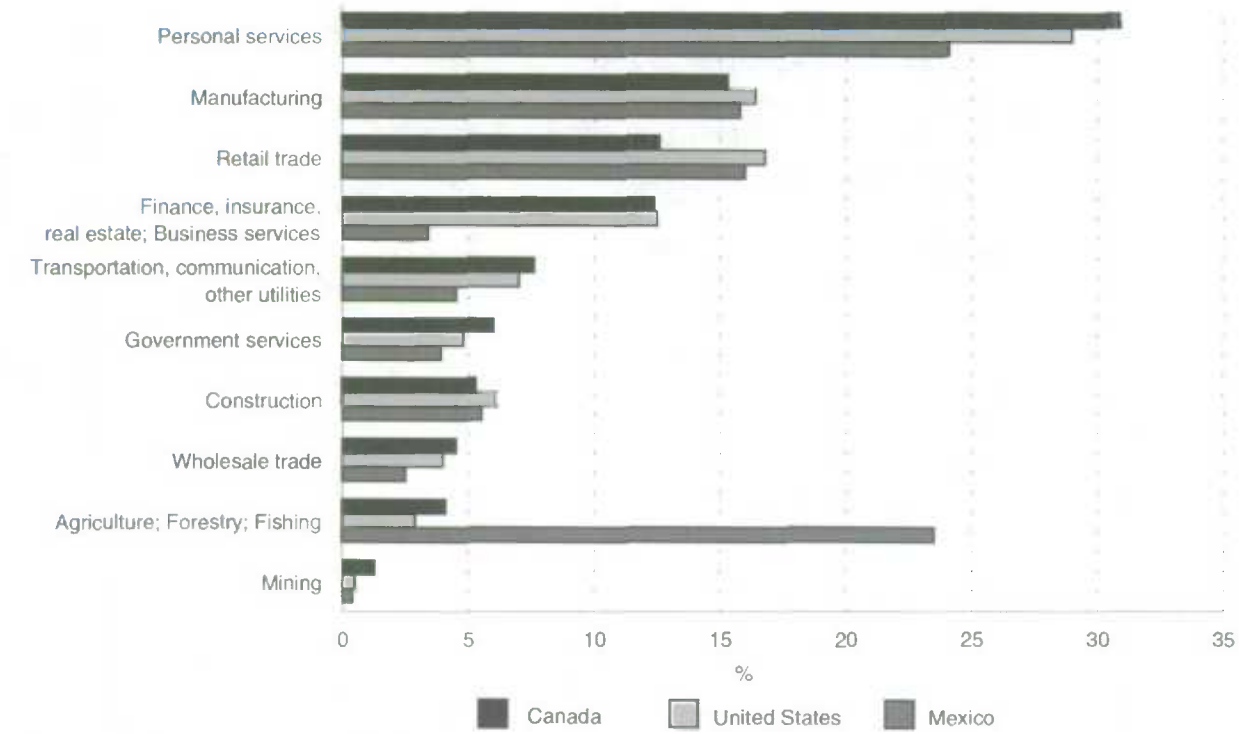
Sources: Canada, Labour Force Survey; United States, Current Employment Survey; Mexico, National Employment Survey
Note: For the United States, figures are for workers 16 years and over.

Young men make up 19% of the labour force in Mexico

Young men (15 to 24) accounted for a disproportionate share of employment in Mexico (19%, compared with 8% in Canada and the United States). On the other hand, Mexican women aged 25 to 44 were under-represented: they accounted for just 16% of employment, compared with 25% in Canada and 24% in the United States.

Employment growth during the 1984-to-1995 period was strongly influenced by the increasing participation of women in the labour force in all three countries. In Canada, women's employment grew 28%, compared with 12% for men. In the United States, employment rose by almost 25% for women but only 14% for men. In Mexico, women's employment grew 72%, while men's increased by 39%.

Employment by industry, 1995



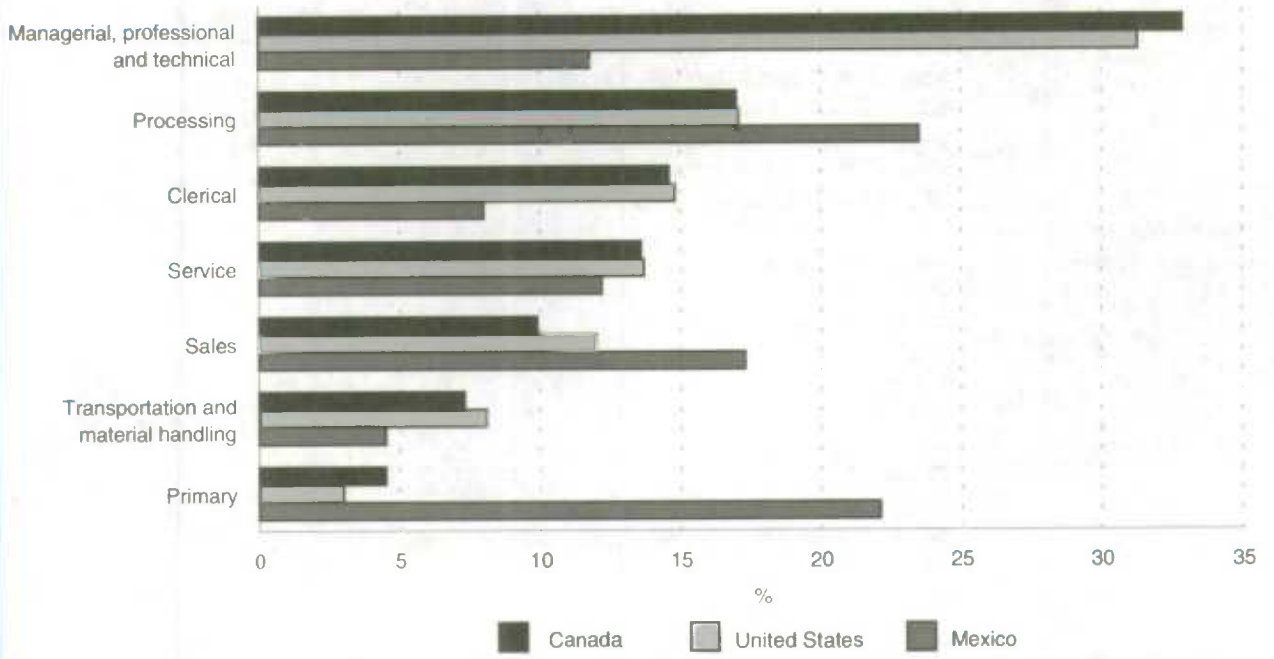
Sources: Canada, Labour Force Survey; United States, Current Population Survey; Mexico, National Employment Survey
Note: For Canada and Mexico, figures are for workers 15 years and over. For the United States, figures are for workers 16 years and over.

Mexico's primary sector a major employer

The three countries differ considerably in their distribution of employment by industry. For example, in Mexico, employment is heavily reliant on primary industries (agriculture, forestry, and fishing). In spite of a substantial decline in recent years, these industries still accounted for almost one-quarter of total employment in 1995, compared with less than 5% in Canada and the United States.

On the other hand, employment in service industries (particularly finance, insurance and real estate; business services; and personal services) was much higher in Canada and the United States (nearly three-quarters of total employment for both countries in 1995) than in Mexico (54%).

Employment by occupation, 1995



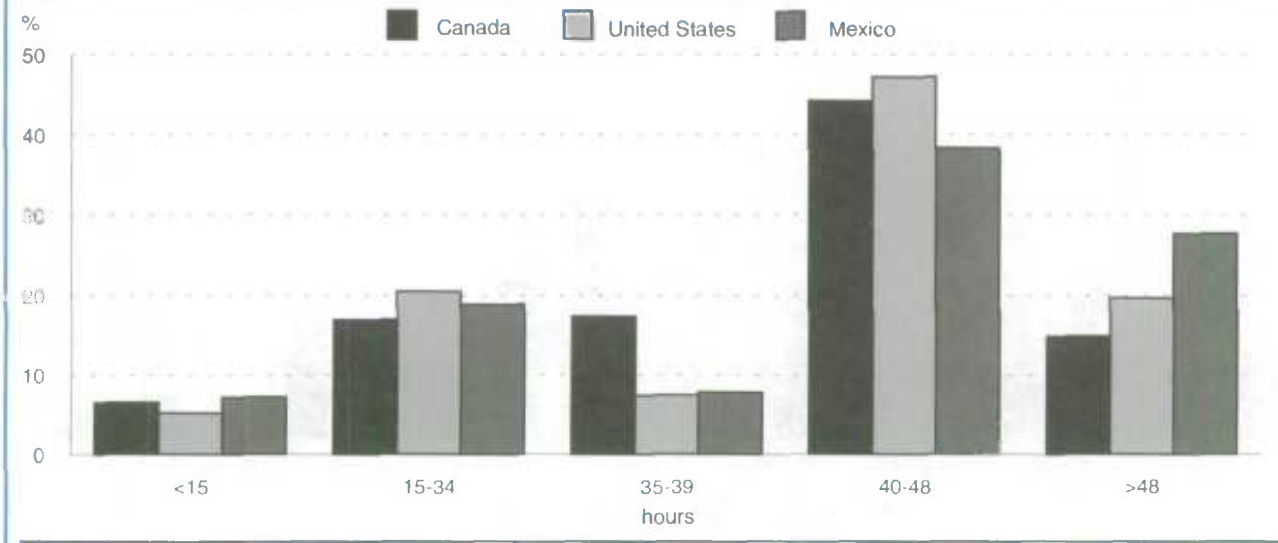
Sources: Canada, Labour Force Survey; United States, Current Population Survey; Mexico, National Employment Survey
Note: For Canada and Mexico, figures are for workers 15 years and over. For the United States, figures are for workers 16 years and over.

Professional occupations are much more common in Canada and the United States

In 1995, employment in managerial, professional and technical occupations was much higher in Canada and the United States than in Mexico. Reflecting the industry pattern, employment in primary occupations was substantially greater in Mexico.

In all three countries, clerical and service occupations were filled mainly by women, while primary; processing; and transportation and material handling jobs went to men. In Canada and in the United States, managerial, professional and technical positions were held by men and women in similar proportions; in Mexico, these occupations were dominated by men.

Employment by hours of work, 1995



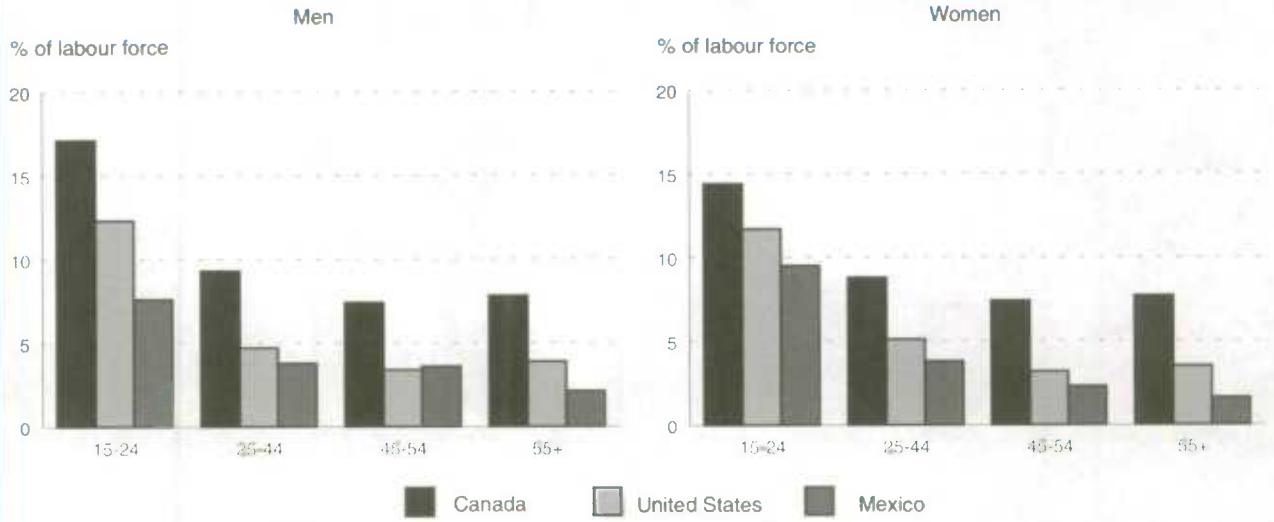
Sources: Canada, Labour Force Survey; United States, Current Population Survey; Mexico, National Employment Survey
Note: For Canada and Mexico, figures are for workers 15 years and over. For the United States, figures are for workers 16 years and over.

Most North Americans work 40 or more hours per week

Less than half of North American workers had a standard 40-to-48 hour work week in 1995. Some 28% of those in Mexico put in more than 48 hours; this compares with 20% in the United States and 15% in Canada. The United States reported the highest proportion of workers with standard hours; Canada, the highest with a 35-to-39 hour week. (In much of the Canadian public sector, a 37.5-hour work week is standard.)

In all three countries, men worked much longer hours than women. The percentage who worked 40 or more hours per week ranged from 73% in Mexico to 76% in the United States. In contrast, 57% of women in the United States worked 40 or more hours per week, compared with 51% and 37% of those in Mexico and Canada.

Unemployment rates by age and sex, 1995



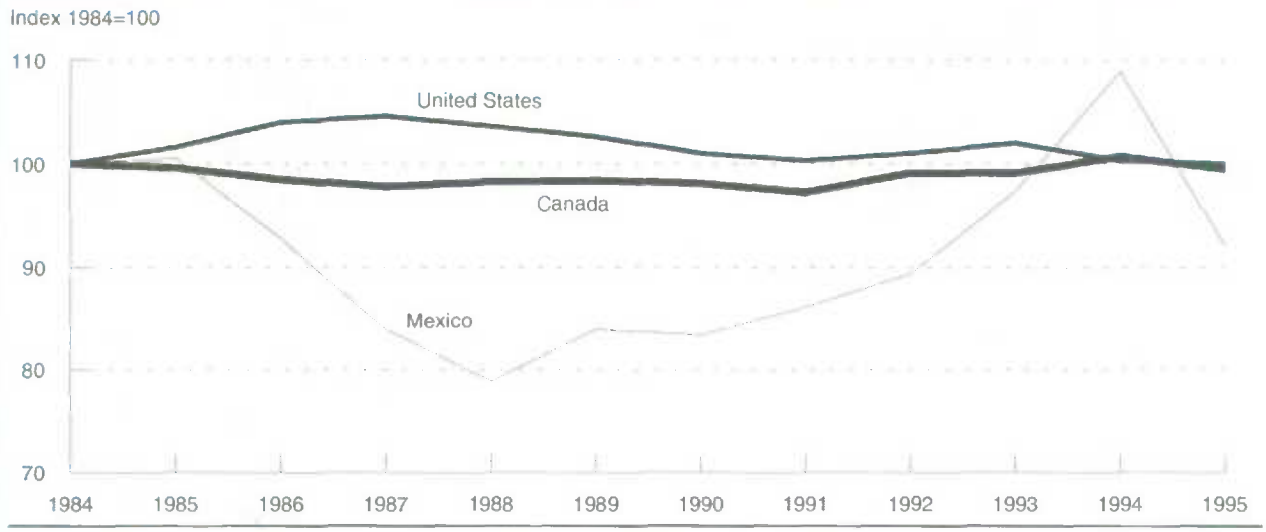
Sources: Canada, Labour Force Survey; United States, Current Population Survey; Mexico, National Employment Survey
Notes: Figures span to second quarter 1995 for Canada and to third quarter 1995 for the United States.
For the United States, figures are for workers 16 years and over.

Unemployment is highest among young people

In 1995, unemployment rates in Canada, the United States and Mexico were highest for young men and women under 25 years of age. In fact, unemployment for this age group was more than double that of any other age group in North America.

In all three countries, workers 45 years and over had the lowest rates of unemployment in 1995. With the exception of men aged 45 to 54, the rates for all ages and both sexes followed a pattern: they were highest in Canada, followed by the United States and Mexico.

Real average weekly earnings *



Sources: Canada, Survey of Employment, Payroll and Hours; United States, Current Employment Statistics Program; Mexico, Mexican Institute of Social Security

* *National currency basis. For Canada, data are for all employees in the private sector, excluding those in agriculture, fishing and trapping. For Mexico, data are for employees in the private formal sector. For the United States, data are* median *earnings for full-time employees.*

Mexico's weekly earnings have varied more

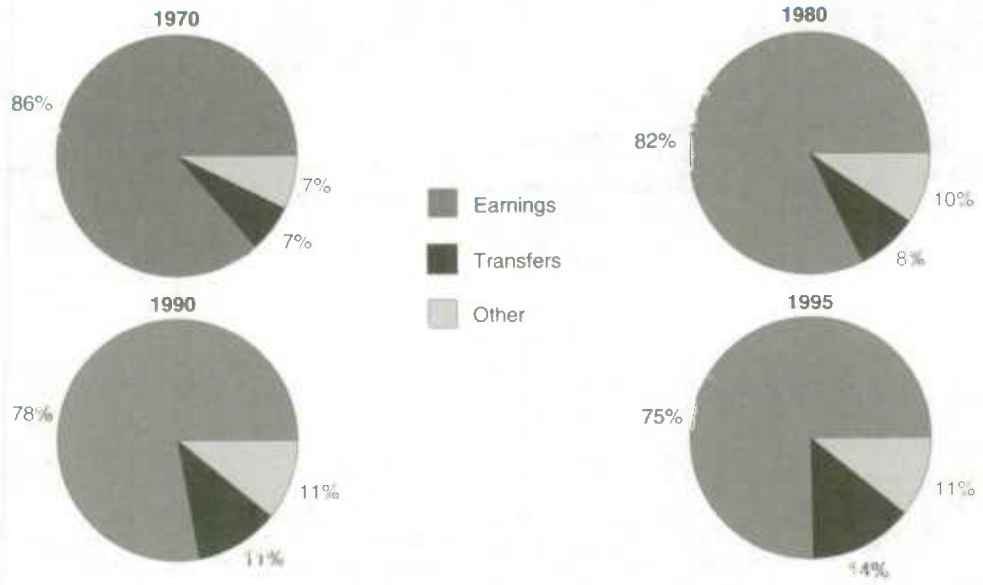
Weekly earnings from 1984 to 1995 fluctuated more in Mexico than in either Canada or the United States.

After a period of moderate decline, Canadian earnings for all employees in the private sector began to recover in 1992, thanks to a large drop in inflation and improved labour productivity (output per hour). By 1995, real average weekly earnings remained slightly (0.4%) below 1984 levels, while labour productivity in the business sector had grown by almost 10%.

In the United States, real median weekly earnings of full-time employees in the private sector increased by 4% from 1984 to 1988. After 1988, real earnings declined. By 1995, levels of real earnings matched those of 1984. In contrast, labour productivity (output per hour) in all private industries (business sector) increased by almost 12% between 1984 and 1995.

In Mexico, real average weekly earnings for employees in the private formal sector decreased substantially (21%) from 1984 to 1988. After 1989, with lower inflation and higher labour productivity (output per employee), earnings began to recover, exceeding 1984 levels by 1994. In 1995, a strict monetary policy was implemented to stabilize the economy. Real earnings fell once again and moderate wage growth was more than offset by a high inflation rate.

Components of income



Source: Census of Canada

Transfer payments' share has doubled since 1970

Earnings in Canada continued to decline as a proportion of total income between 1990 and 1995. In 1995, employment income accounted for 75 cents of every dollar of income, down from 78 cents in 1990 and 86 cents in 1970.

The share of government transfer payments, such as old age pensions, employment (unemployment) insurance benefits, child tax credits/benefits and Goods and Services Tax credits, doubled over the past quarter century. In 1995, these transfers accounted for 14 cents of every dollar of income, compared with 11 cents in 1990 and less than 7 cents in 1970.

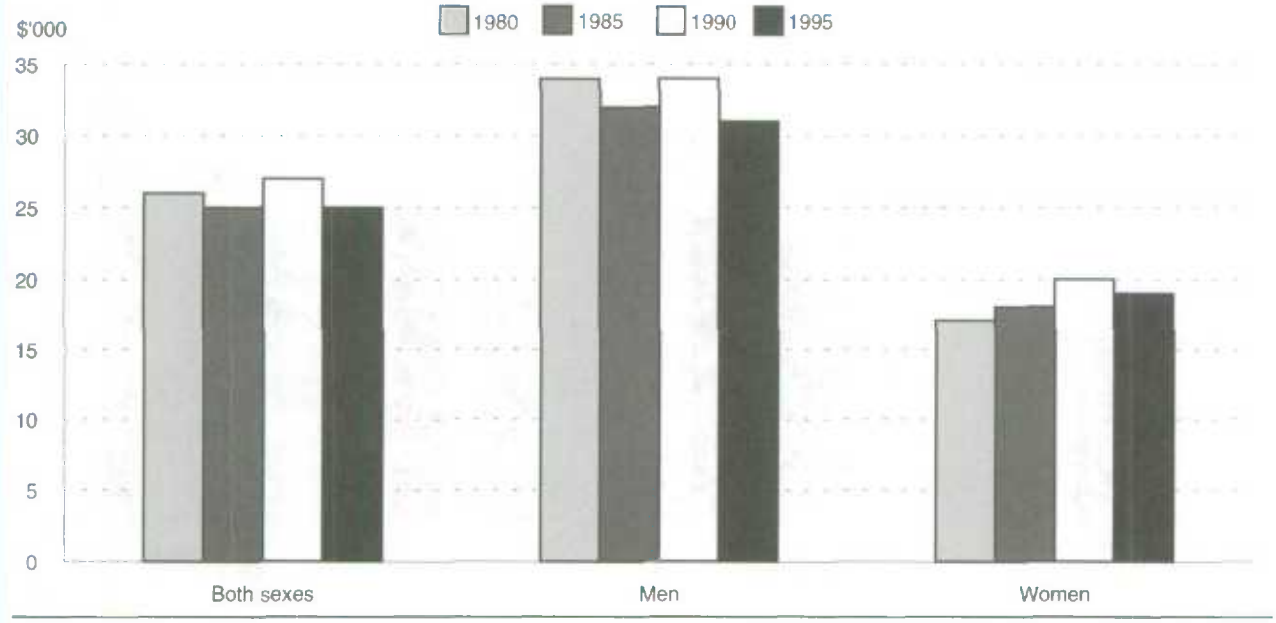
This increase resulted from changes in social security programs and in the demographic composition of the population. Between 1971 and 1996, the total population increased 34%, while the population aged 65 and over, which received many of these transfer payments, more than doubled.

In 1990, almost identical numbers of people (2.8 million) received Old Age Security pensions and Canada/Quebec Pensions. By 1995, the number of OAS recipients had increased by 320,000 (11%), while the number of recipients of C/QPP benefits had grown by over one million (39%). The number of recipients of employment (unemployment) insurance benefits had declined 6%, and the number of recipients of child tax credits/benefits, 8%.

The remaining 11 cents of every dollar of income in 1995 came from sources such as investment income and retirement pensions. This amount increased from about 7 cents in 1970.

Charts and text for this section of "Key labour and income facts" were adapted from Statistics Canada's *The Daily*, Census Release, May 12, 1998. For more information, contact Bruce Rogers of the Labour and Household Surveys Analysis Division at (613) 951-2883; e-mail: rogebru@statcan.ca.

Average total income (1995 $) of individuals



Source: Census of Canada

Average total income has changed very little in 15 years

In 1995, nearly 21 million individuals had an average total income of $25,200, down 6% from 1990 after adjustment for inflation. This decrease wiped out gains made during the second half of the 1980s. As a result, average total income was almost identical to that of 1985, and slightly below the level of 1980.

The average income of men ($31,100) was about 8% below that of 1990. In 1995, women accounted for almost half of all income recipients. Their average income was $19,200, down 2% from 1990.

Despite the recession of the early 1980s, women increased their purchasing power by almost 5% between 1980 and 1985, and gained another 12% between 1985 and 1990. Thus, unlike men, whose average income declined between 1980 and 1995, women enjoyed a 15% increase.

Note: effect of inflation

All income data in this report are presented in 1995 dollars. Incomes from previous censuses have been adjusted for changes in the prices of goods and services.

For example, the actual average income of a census family in 1995 was $54,600, compared with $51,300 in 1990. This is an increase of 6% before adjustment. When changes in prices are taken into account, real (constant-dollar) family income declined by 5%.

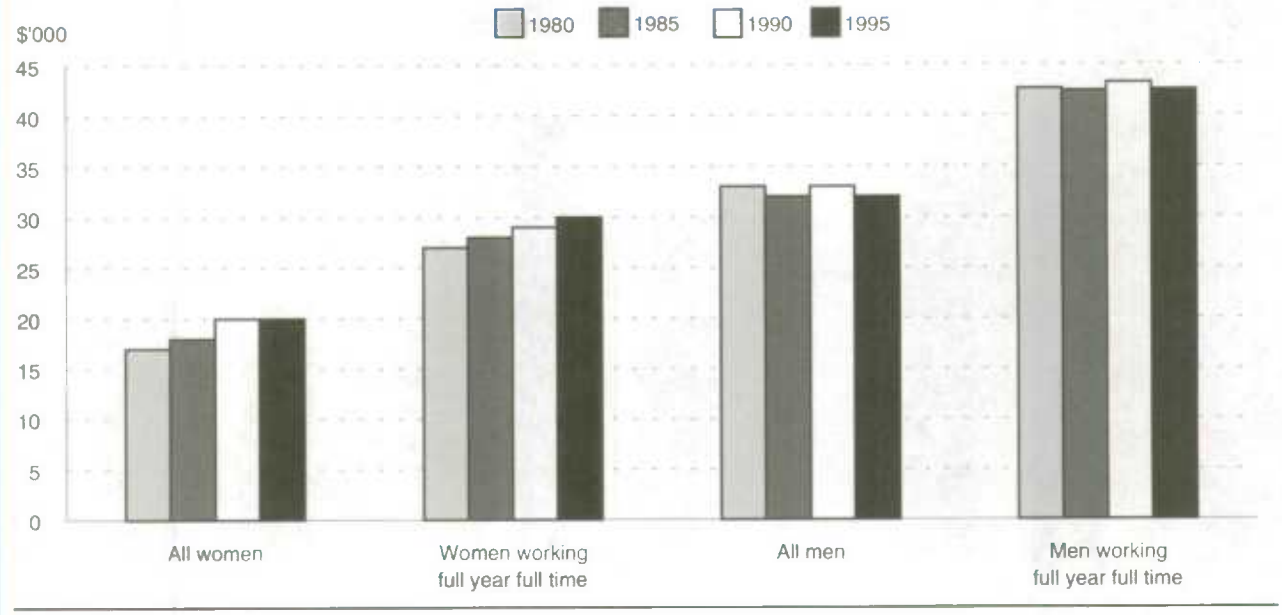
Definitions

A census family is a now-married couple (with or without never-married sons or daughters), a couple living common law (with or without never-married sons or daughters), or a lone parent with at least one never-married son or daughter living in the same dwelling. Families of now-married and common-law couples together constitute husband-wife families.

Total income comprises wages and salaries, net earnings from farm and non-farm self-employment, government transfer payments, investment income, retirement pensions and other money income.

The total income of a census family is all income received by all family members aged 15 and over during the calendar year preceding the census.

Average earnings (1995 $) of men and women



Source: Census of Canada

Average earnings of men declined while women's increased

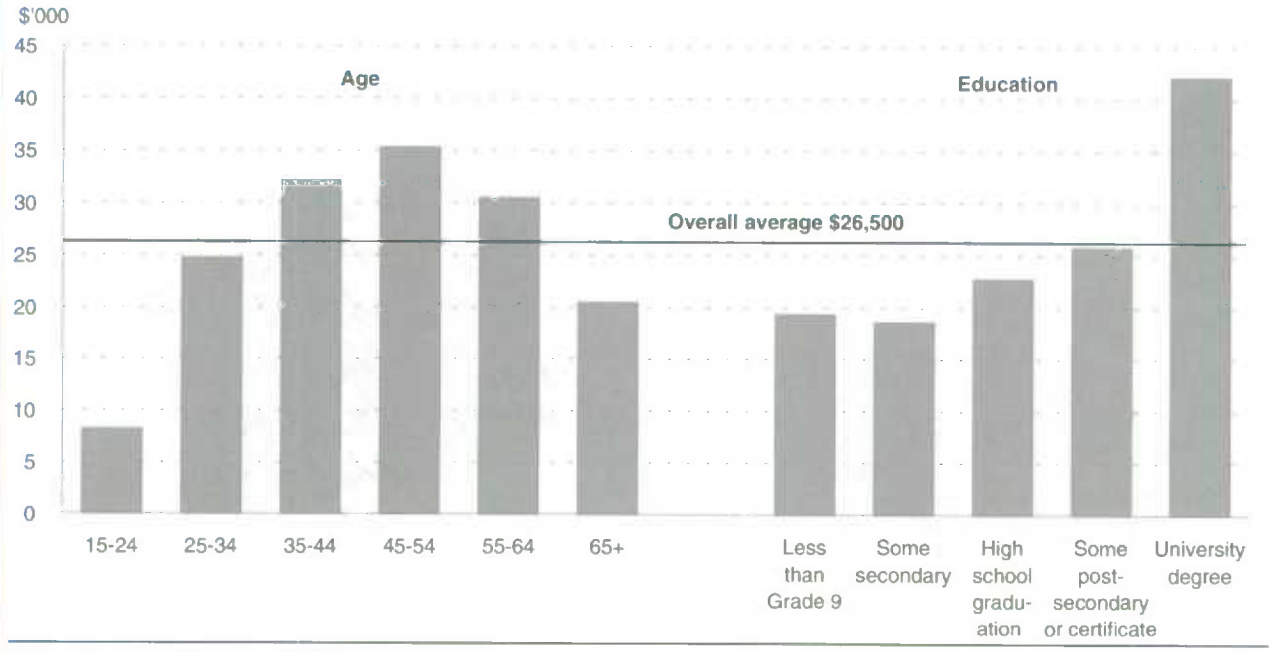
In 1995, men reported average earnings of $31,900, down 5% from a high of $33,500 in 1980. Average earnings of men fluctuated with the economic cycles over the 15-year period. In contrast, earnings of women steadily increased. Women reported earnings of $20,200 in 1995, up 16% from $17,400 in 1980.

Time spent on work is closely related to earnings. In 1995, men who worked full year full time reported earnings of $42,500, down 2% from 1990. Those who worked part year or part time earned $18,400, down 7% during this 5-year period. In contrast, the average earnings of women who worked full year full time increased 4% to $30,100. Earnings of women who worked part year or part time increased 1% to $12,600. (A full year is defined as 49 weeks or more; full time as 30 or more hours per week.)

About one-half of all earners worked full year full time in 1995. Among men, the proportion declined from 58% in 1990 to 56% in 1995. Among women, it declined from 44% to 43%. Without these changes in the amount of time worked, average earnings of men would have declined 3% instead of 4%, and those of women would have increased 3% instead of 2%.

The female/male earnings ratio has risen steadily during the past 15 years. Overall comparisons show that in 1995, women who worked full year full time earned on average 71 cents for each dollar earned by their male counterparts, compared with 67 cents in 1990, 66 cents in 1985 and 64 cents in 1980.

Average earnings by age and education, 1995



Source: Census of Canada, 1996

Shifts in age profile of earners moderated overall decline in earnings

In general, individual earnings increase with age and work experience. In 1995, average earnings were lowest at $8,200 for those aged 15 to 24. They increased to $35,300 for those 45 to 54, then declined to $20,400 for those 65 and over. This pattern was consistent for both men and women.

Although the overall number of earners was virtually unchanged between 1990 and 1995, their age distribution changed substantially. Shifts in the age profile of earners mitigated the general drop in earnings. For example, the number of people in the highest earnings group (aged 45 to 54) increased 23% between 1990 and 1995, while the number in the next group (35 to 44) increased almost 8%. All other things being equal, without these demographic shifts, overall average earnings would have declined almost 6%, instead of 3%.

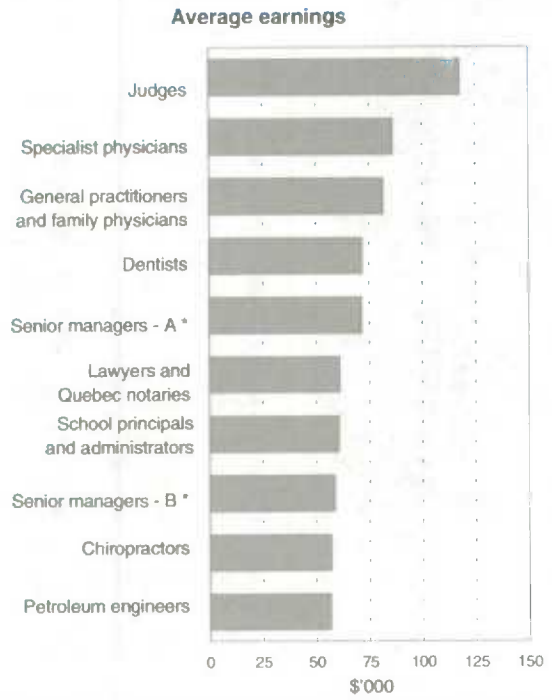
More mature, better-educated workforce offset decline in earnings

The negative effect of the recession of the early 1990s was considerably offset by a more mature and better-educated workforce.

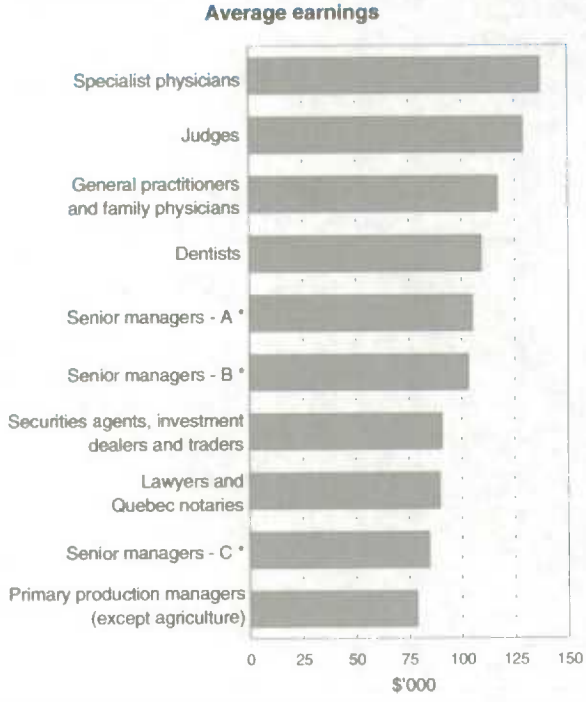
In 1995, persons with a university degree reported average earnings of $42,100, compared with about $19,000 for those who had not completed high school. High school graduates reported average earnings of $22,800.

However, average earnings declined in all education categories between 1990 and 1995. People with less than a Grade 9 education incurred the largest decline in average earnings: 8%. Average earnings for high school graduates declined 3%, while those for university graduates declined almost 6%.

Ten highest-paying occupations for women, 1995



Ten highest-paying occupations for men, 1995



Source: Census of Canada, 1996

**A Finance, communications carriers and other business services.*
B Goods production, utilities, transportation and construction.
C Trade, broadcasting and other services.

Women have made inroads in high-paying occupations...

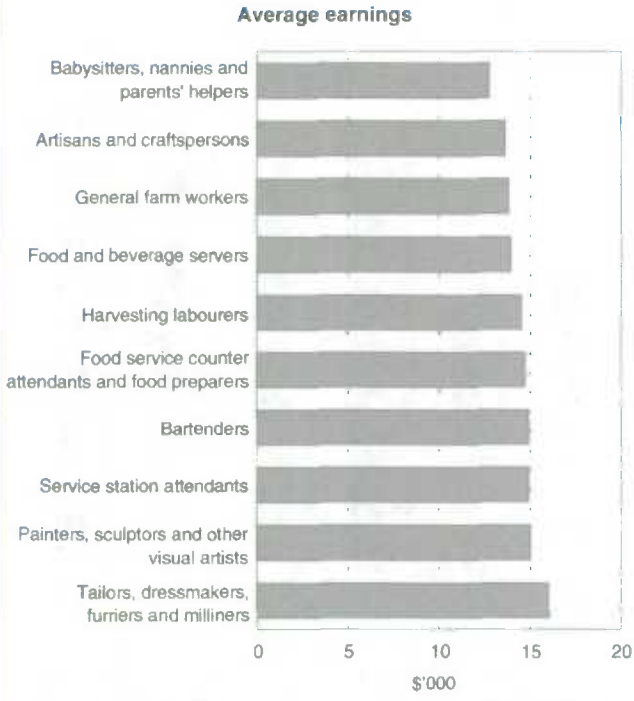
In 1995, more than 7.5 million Canadians worked full year full time in 514 occupations for which employment income data are available. Almost 200,000 worked in the 10 highest-paying occupations.

Earnings in these occupations varied considerably. Judges recorded the highest average earnings ($126,200), followed by specialist physicians and surgeons ($124,000), general practitioners and family physicians ($107,600) and dentists ($102,400).

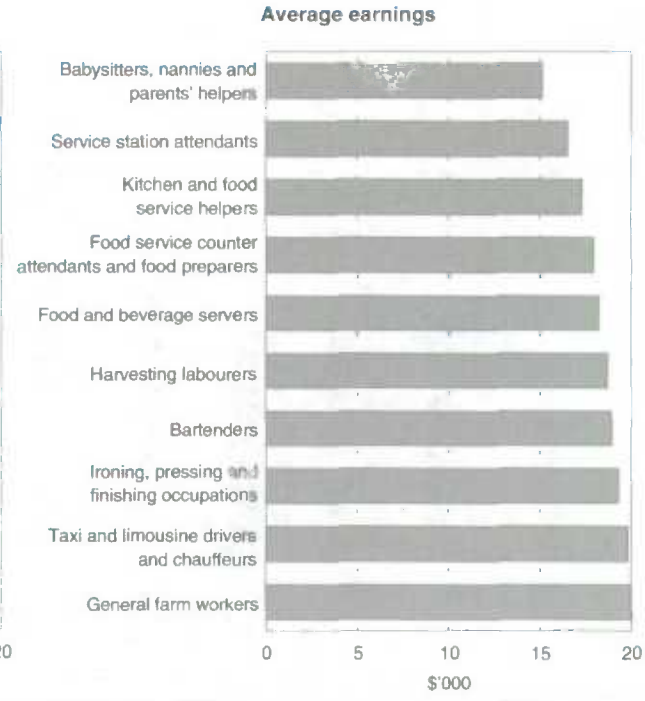
Securities agents, investment dealers and traders experienced the largest increases, both in number (33%) and average earnings (23%), between 1990 and 1995. The number of dentists increased 21%, but their average earnings declined 2%.

Women increased their representation among the 10 highest-paying occupations from 1990 to 1995. The largest growth occurred in two groups: lawyers and Quebec notaries, and elementary and secondary school principals and administrators. In each, the number of women who worked full year full time increased by 3,000. The number of female dentists nearly doubled from 800 to 1,500.

Ten lowest-paying occupations for women, 1995



Ten lowest-paying occupations for men, 1995



Source: Census of Canada, 1996

but remain the majority in the lowest-paying occupations

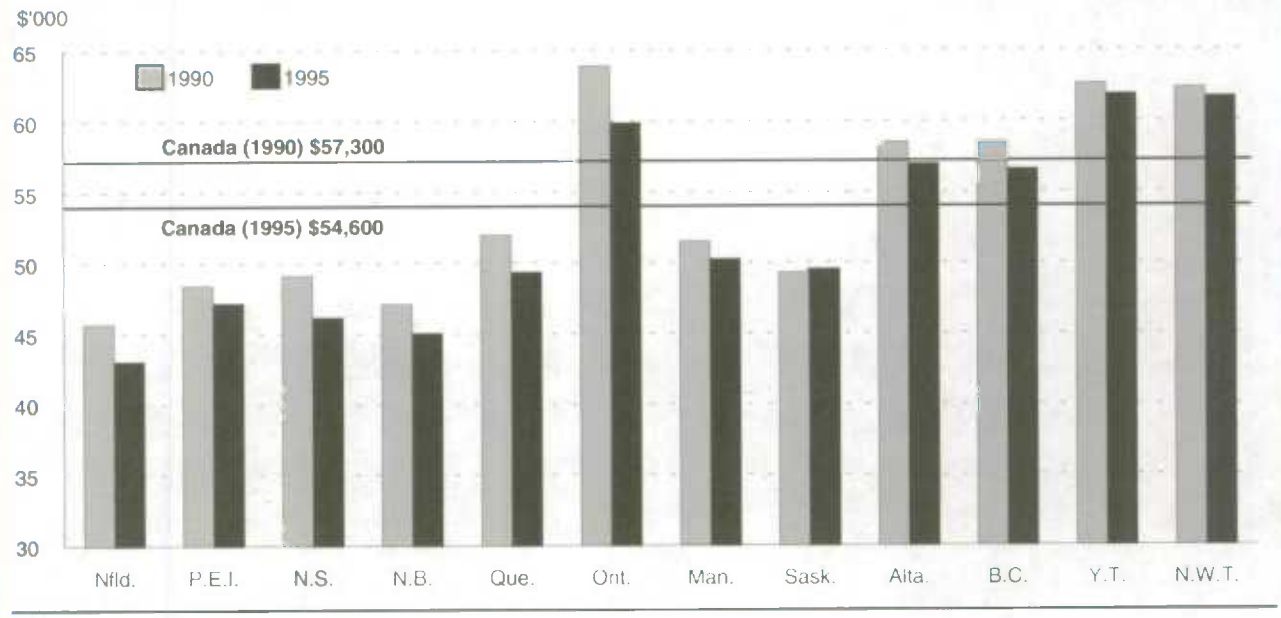
About 200,000 individuals worked full year full time in the 10 lowest-paying occupations. As in 1990, the majority, more than three out of every five, were women.

The lowest-paying category in 1995 for both women and men was babysitters, nannies and parents' helpers. Other low-paying jobs for women included artisans and craftspersons; painters and sculptors; and tailors, dressmakers and furriers.

Low-paying occupations for men included kitchen helpers; ironing, pressing and finishing occupations; and taxi and limousine drivers and chauffeurs.

Average employment income in the 10 lowest-paying occupations in 1995 ranged from $12,700 to $16,000 for women and from $15,100 to $20,000 for men.

Average family income by province or territory



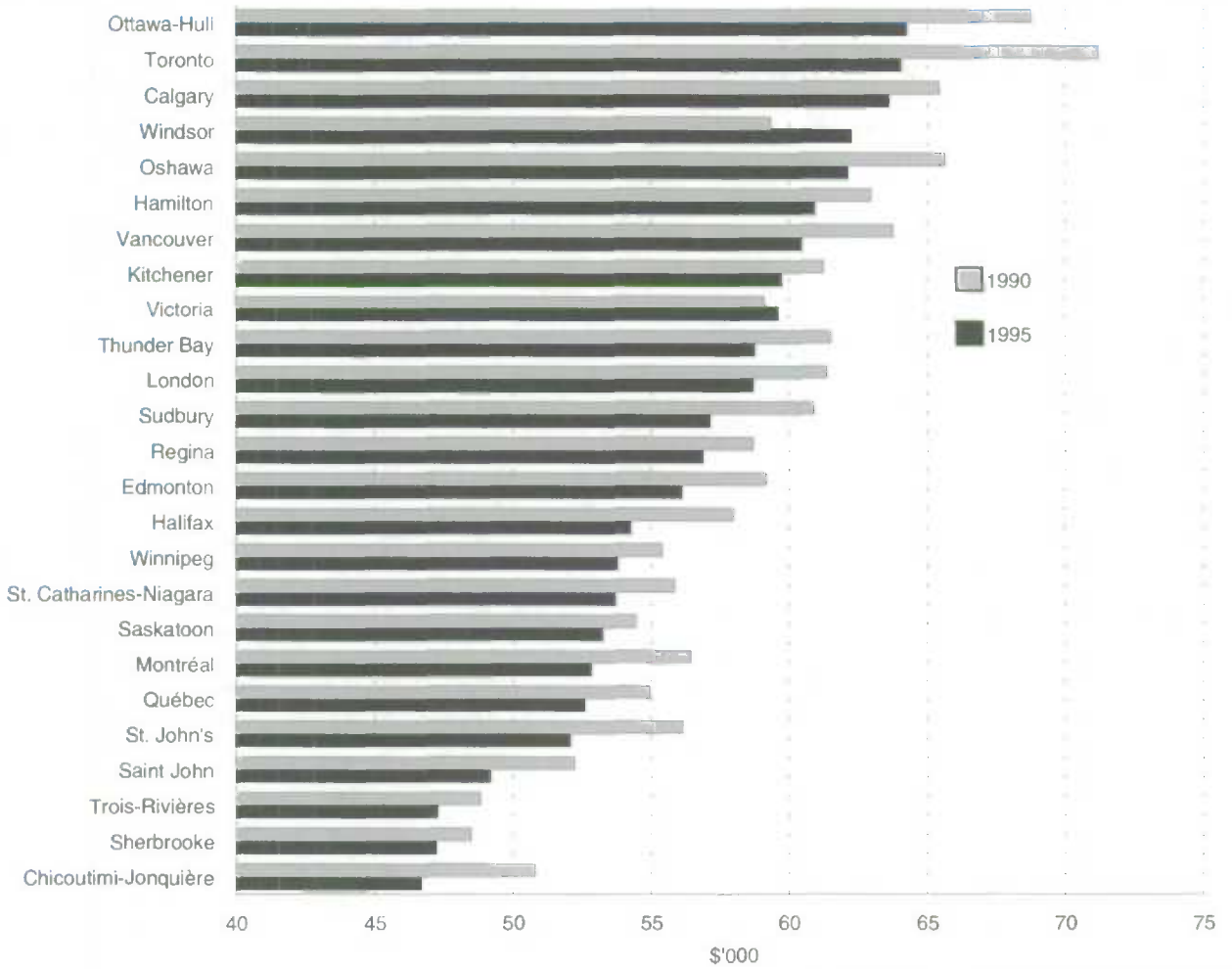
Source: Census of Canada

Family income declined across Canada

Average family income (in 1995 dollars) declined between 1990 and 1995 in all provinces and territories except Saskatchewan, where it increased slightly. The greatest decrease occurred in Ontario, where the average family income dropped by about $4,000.

The national average was $57,300 in 1990. By 1995, this had declined to $54,600, a drop of 5%. Average family income in Ontario remained above the national average, as it did in Alberta, British Columbia and the two territories. In contrast, Manitoba, Saskatchewan, Quebec and the Atlantic provinces recorded figures below the national average. These patterns were consistent with those of 1990.

Average family income by census metropolitan area



Source: Census of Canada

Family income declined in most census metropolitan areas

Average family income declined between 1990 and 1995 in all census metropolitan areas except two. In Windsor, it increased 5%, and in Victoria, it increased slightly.

The declines ranged from 2% in Saskatoon to 10% in Toronto. Eleven census metropolitan areas registered decreases greater than the national average of 4.8%. In the remaining 12, the declines were below the national average.

The census metropolitan area with the highest average family income in 1995 was Ottawa-Hull. Toronto moved from first to second place. Calgary replaced Oshawa in third place. In both 1990 and 1995, the lowest income figures were reported in Chicoutimi-Jonquière, Sherbrooke and Trois-Rivières.

In the works

Here are some of the topics to be featured in upcoming issues

High school may not be enough

How does education influence employment? The 1995 School Leavers Follow-up Survey helps answer this question, by supplying data on unemployment rates, earnings, and job-related training.

Factors underlying job stability

Has job stability changed over the last 20 years? This article examines trends in job duration by sex, age, education, and full- or part-time employment status.

Raising the stakes

This article updates "A sure bet industry" (published in the Autumn 1996 issue), which looked at employment growth and characteristics of workers and jobs, amounts spent per household, and revenue generated by lotteries, casinos and video lottery terminals.

The rise of unionization among women

This profile of unionized women covers demographic and labour characteristics, wages, benefits and work arrangements.

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