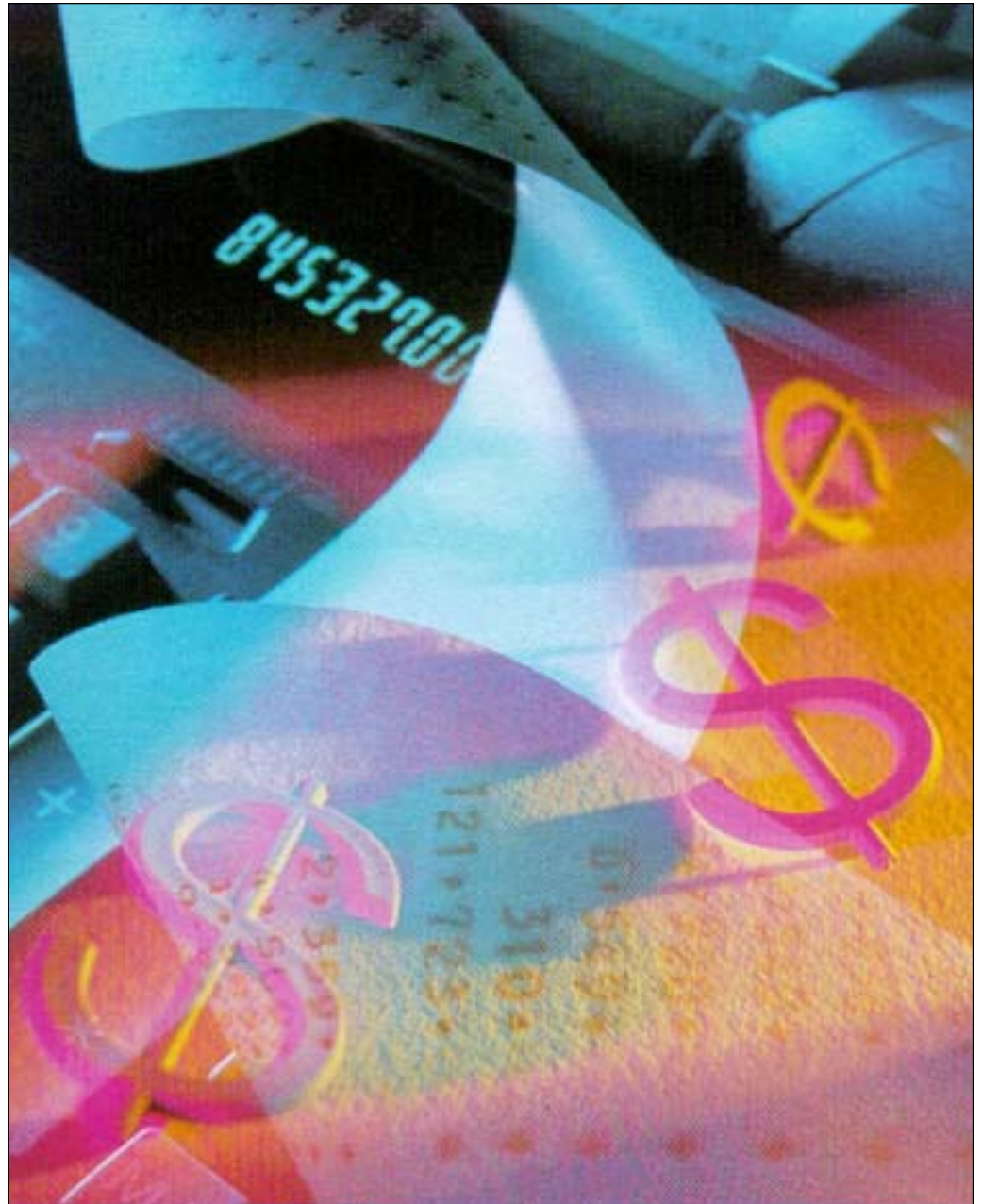# PERSPECTIVES

ON LABOUR AND INCOME

OCTOBER 2001
Vol. 2, No. 10

■ AFTER THE LAYOFF

■ THE LABOUR MARKET IN THE WEEK OF SEPTEMBER 11

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Highlights

In this issue

■ After the layoff

- From 1993 to 1997, the time taken to find a new job after a layoff declined. In 1993, only 27% of individuals who had been permanently laid off that year managed to find another job within three months, compared with 47% in 1997. This reflects the more favourable economic conditions at the end of the period, and a more rapid adjustment by workers.

- A strong link was found between the duration of joblessness and age. Men under 35 and women under 25 had the best chances of finding a new job after a layoff; however, the chances decreased with age. Women's chances were always worse than men's in the corresponding age group. Men aged 55 and over had a 66% lower chance of finding a job than men aged 16 to 24, whereas women aged 55 and over had a 77% lower chance.

- Individuals living alone and those without children—two factors likely to increase mobility—increased the chances of finding a new job by 30% and 24% respectively.

- Professionals and managers had the best chances of finding a new job after a layoff, whereas clerks, salespersons and people working in the service industry had the lowest. The chances were also less for those laid off from a long-held job (at least five years).

- Receipt of EI benefits tended to increase the duration of joblessness. Because the duration of benefits is limited under the program, the effect disappeared after a year.

- One year after a layoff, one in five individuals were unemployed, either because they had not found or had lost a new job. The proportion ranged from a high of 25% for individuals laid off in 1993 to a low of 15% for those laid off in 1996.

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After the layoff

Diane Galarneau and Lori M. Stratychuk

L ABOUR TURNOVER is a major aspect of the Canadian labour market. Year after year, one-third of workers quit their job or are laid off, either permanently or temporarily. The 1990s were characterized by a general feeling of job insecurity. However, this feeling is not supported by the data. While some groups were more susceptible to layoffs and short-term employment, the average trends were fairly similar to those observed in the 1980s (Picot and Lin, 1997).

One little-studied aspect concerns the consequences of layoffs: How long does it take a permanently laid-off person to find a new job? What factors determine how long a jobless period lasts? What is the wage gap between a new job and the old one? What factors influence this gap? To answer these questions, this article uses the Survey of Labour and Income Dynamics (SLID) to examine permanent layoffs from full-time jobs between 1993 and 1998 (see *Data source and definitions*).

Who gets laid off?

From 1993 to 1998, the annual number of layoffs ranged between 411,000 and 610,000 (Table 1).[1] Since there is usually a time lag between an economic recovery and a turnaround in employment, it was not until 1995, three years after the 1992 recession, that a sizeable decrease occurred in the number of permanent layoffs (17% between 1994 and 1995). However, while permanent layoffs are sensitive to economic cycles, they are less so than temporary layoffs, quits and hirings (Picot, Lin and Pyper, 1997). In an economic downturn, employers tend to resort more frequently to temporary layoffs, attrition and reduced hiring in an effort to reduce labour costs. By the same token, in a period of growth, employers tend to call back workers laid off temporarily and hire new

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employees. Also, greater numbers of dissatisfied workers are tempted to try their luck elsewhere, resulting in increased hirings and quits.

Table 1: Layoffs

	1993	1994	1995	1996	1997	1998
	'000					
Layoffs	489.1	609.9	505.4	490.5	410.8	418.1
Persons laid off	470.7	555.3	430.5	465.6	365.9	363.2
Layoffs per person			%			
1	95.7	90.7	85.2	94.9	88.3	87.3
2	3.3	7.7	11.9	4.0	10.0	9.5
3 or more	0.5	1.1	1.4	0.5	0.9	2.1

Source: Survey of Labour and Income Dynamics

The downward trend in the layoff rate, which fell from 4.9% in 1993 to 3.6% in 1998, reflects the gradual improvement in labour market conditions. From 1993 to 1998, gross domestic product expanded and the unemployment rate followed a downward trend (Chart A).

Chart A: Rates of unemployment and layoff fell as GDP grew.
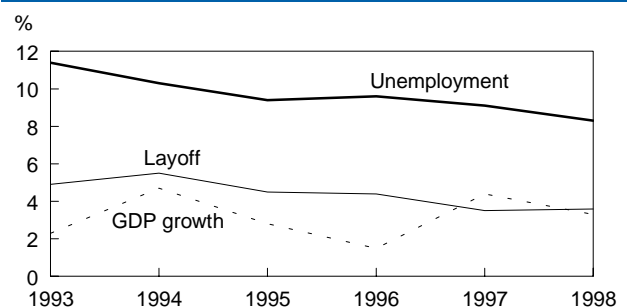
Sources: Survey of Labour and Income Dynamics; Labour Force Survey; Income and Expenditure Accounts

The layoff rate was higher for men, youths (aged 16 to 24), workers with less education, workers in the Atlantic provinces and Quebec, rural workers, people living alone, and those with no children at home (Table 2).[2] The rate was also higher when the spouse was earning a low income.[3] Workers not subject to a collective agreement as well as those working in small firms also had relatively high rates. In general, the layoff rate was higher in construction occupations[4] and lower for managers and professionals (Table 3). It was also higher for persons whose lost job had been short-lived and for low-wage workers. The rate of layoff declined as the hourly wage increased.

The higher layoff rates in small firms are explained by the different characteristics of their employees—the employees of large firms are generally more educated, older, more experienced, and more often unionized. Also, small firms tend to be less stable and more likely to go out of business, accounting for a sizeable proportion of permanent layoffs (Picot, Lin and Pyper, 1997).

What happens after the layoff?

The consequences of layoffs were examined using the longitudinal sample of SLID (see *Data source and definitions*). The analysis was confined to layoffs of persons with at least one year of tenure in the lost job in order to focus on the population of interest: workers with strong ties to the labour market.[5]

For certain people laid off between 1993 and 1997, the jobless period was relatively short; 13% to 21% of layoffs ended in a new job in one month or less (Table 4). For all years combined,

Table 2: Layoff rate by selected personal characteristics*

	1993	1994	1995	1996	1997	1998
			'000			
Layoffs	**489.1**	**609.9**	**505.4**	**490.5**	**410.8**	**418.1**
			%			
Layoff rate	**4.9**	**5.5**	**4.5**	**4.4**	**3.5**	**3.6**
Sex						
Men	5.5	6.3	4.7	4.9	4.1	3.9
Women	3.9	4.2	4.1	3.6	2.8	3.0
Age						
16 to 24	9.3	9.8	8.5	7.0	4.5	6.4
25 to 34	4.9	5.5	4.4	4.5	3.7	3.5
35 to 44	4.3	4.0	3.6	3.8	3.4	3.3
45 to 54	4.2	6.5	3.8	4.3	3.4	3.0
55 and over	3.4	2.8	4.5	3.9	2.7	3.0
Education						
Less than high school diploma	7.4	8.4	6.5	7.0	5.9	5.7
High school diploma	4.7	4.7	5.0	5.1	4.1	3.5
Non-university certificate or diploma	5.0	5.6	4.9	4.0	3.2	3.7
University degree	2.2	4.0	1.5	1.9	1.4	1.4
Province						
Atlantic	5.3	7.3	6.3	6.6	5.0	4.9
Quebec	8.0	7.9	6.4	5.6	4.0	4.7
Ontario	3.5	4.6	2.9	3.7	3.1	2.7
Manitoba/Saskatchewan	3.4	3.1	2.7	2.6	3.2	2.7
Alberta	4.4	5.8	5.6	3.8	2.7	4.3
British Columbia	3.3	3.3	4.3	4.5	3.8	3.1
Milieu						
Urban	4.7	5.3	4.3	4.1	3.2	3.3
Rural	5.7	6.3	5.2	5.8	4.9	4.9
Family status						
Couples	4.3	4.6	4.1	3.9	3.2	2.8
Persons living alone	6.2	7.4	5.3	5.5	4.3	5.0
Children at home						
No	5.1	6.6	4.8	5.0	3.8	4.1
Yes	4.7	4.3	4.2	3.9	3.3	3.0
Preschool-aged children						
No	4.8	5.8	4.5	4.5	3.6	3.6
Yes	5.1	4.2	4.5	4.2	3.2	3.3
Visible minority						
No	5.0	5.4	4.3	4.3	3.5	3.5
Yes	--	6.2	6.2	5.6	4.3	3.5
Spouse's total annual income (for people living in couples only)						
Spouse without income	--	--	--	--	--	--
$1 to 10,000	5.4	5.8	5.6	5.4	4.1	4.2
$10,001 to 20,000	6.7	4.4	5.1	5.3	3.9	3.5
$20,001 to 30,000	3.4	3.5	3.5	3.8	3.2	2.6
$30,001 to 40,000	3.4	5.9	4.2	3.0	2.9	--
More than $40,000	2.7	2.9	2.2	2.4	2.0	2.4

Source: Survey of Labour and Income Dynamics
* The characteristics are those of the individual at the time of the layoff. Some individuals had more than one layoff per year and their characteristics are taken into account for each layoff. Totals are based on the cross-sectional sample.

in 8% of layoffs the jobless period lasted no more than one week, with some persons finding a job even before they were laid off. The proportion of layoffs that ended in twelve months or less increased over the years, from 60% in 1993 to 83% in 1997 (Chart B).[6] This reflects the more favourable conditions at the end of the study period and a more rapid adjustment on the part of workers. This trend of individuals finding a new job more quickly after layoff is reflected in the average jobless duration, which peaked at 18.3 weeks in 1994, and then decreased in the following years. Among those who found a job within a year, about 84% secured one that was full-time. This rate was comparable to the proportion of full-time workers in the labour force (81% according to the Labour Force Survey).[7]

One year later

One year after a layoff, almost one-fifth of the individuals were unemployed—either they had not yet found a new job or they had lost their new job. The unemployment rate for laid-off workers was 23.3%—disproportionately high compared with the total labour force, which averaged 10.0% from 1993 to 1997 (Table 5). The rate for laid-off workers varied from year to year, peaking in 1993 at 32.8% and reaching a low of 18.6% in 1996.[8]

An examination of labour force status one year after layoff shows that 83% of those who found a job within a year were still employed, whereas 9% were unemployed, and 8% were not in the labour force. This reduced the success rate after one year from 74% to 62%. The unemployment rate for those who found a job within a year (9.8%)

was therefore comparable to that of the labour force as a whole (10.0%). Among those who did not find a job, a sizeable proportion (53%) were not in the labour force and 47% were unemployed.

The unemployment rate of laid-off workers varied considerably by age, with the highest rate among those aged 55 and over (45.8%). For the labour force as a whole, the rate also showed considerable variation, but generally declined with age. The rate for the 55-and-over age group was only 7.9%.

The unemployment rate was also higher for laid-off workers with a low education level—29.1% for persons with less than a high-school diploma, compared with 20.9% for those with a post-secondary degree or higher. For the labour force as a whole, the corresponding figures were 15.8% and 7.8%. One year after their layoff, managers and professionals had the lowest unemployment rate (15.3%).

A small proportion of persons (just over 13%) returned to school after their layoff. They tended to

Table 3: Layoff rate by selected job characteristics*

	1993	1994	1995	1996	1997	1998
			%			
Occupation						
Managers and professionals	2.3	3.5	2.0	1.9	1.5	1.5
Clerical	4.3	5.2	4.0	4.0	3.4	3.0
Sales	8.1	6.0	3.6	5.4	3.0	3.8
Service	5.2	6.2	6.0	4.2	3.9	3.3
Primary, processing, and machining	5.4	6.4	6.3	6.5	5.2	6.2
Product fabricating, assembling, and repairing	7.4	6.8	8.7	5.8	4.3	6.1
Construction	10.4	12.5	8.4	10.3	8.8	6.7
Transport equipment, material handling, and other crafts	5.0	4.6	5.0	6.3	5.8	4.8
Subject to a collective agreement						
No	5.9	6.9	6.0	5.5	4.4	4.5
Yes	3.5	3.3	2.4	2.8	2.1	2.0
Duration of lost job						
1 to 4 months	22.5	26.3	20.4	15.3	12.9	9.9
5 to 12 months	12.7	17.9	15.2	17.3	12.3	6.2
1 to 5 years	7.2	5.9	4.9	4.8	2.9	3.5
Over 5 years	1.4	1.4	1.4	1.4	1.3	1.4
Hourly wage of lost job						
Less than $7.00	9.9	10.0	11.2	9.0	9.0	6.8
$7.00 to 9.99	7.2	8.7	9.3	8.2	6.0	6.7
$10.00 to 14.99	5.4	7.0	4.9	5.3	4.3	5.1
$15.00 to 19.99	4.1	4.1	2.6	3.6	2.5	2.5
$20.00 or more	3.1	3.6	2.4	2.2	1.9	1.5
Workplace size						
Less than 20 employees	7.7	8.5	7.3	6.0	5.6	5.0
20 to 99 employees	5.8	6.3	4.4	5.4	4.2	4.8
100 to 499 employees	4.2	4.2	4.0	3.7	3.1	3.4
500 or more employees	2.6	3.5	2.5	2.6	1.8	1.9

Source: Survey of Labour and Income Dynamics
* The characteristics are those of the individual at the time of the layoff. Some individuals had more than one layoff per year and their characteristics are taken into account for each layoff. Totals are based on the cross-sectional sample.

be younger (49% were under 35 compared with 37% for those who did not return to school), more educated (87% compared with 73% had at least completed high school—probably because they were younger), and more frequently in occupations requiring fewer skills such as clerical; service; or product fabricating, assembling and repairing. On the other hand, persons who did not return to school were more often managers and professionals. A small proportion of all laid-off persons (3%) returned to school full time.
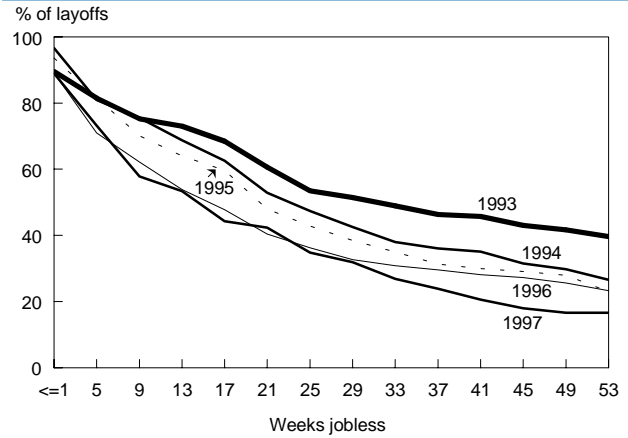
What influences the duration of joblessness?

The duration of joblessness following layoff varied. A proportional hazards model was used to isolate the effect of various factors. To analyze these factors, a duration model was estimated. The duration of joblessness varied by sex, age, presence of children, presence of a spouse, occupation, receipt of unemployment insurance benefits, tenure in the lost job, visible minority status, and the year of the layoff.[9]

Personal characteristics

Being a man over 54 reduced the chance[10] of finding a new job by 66% in relation to men aged 16 to 24—older workers may be perceived as being too close to retirement, or their skills may be considered outdated.

Being a woman over 54 reduced the chance of finding a new job even more—by 77% in relation to men aged 16 to 24. The general pattern observed was that the chance of finding another job decreased as age increased (once again, in relation to men aged 16 to 24). However, in all age groups, the chance was always smaller for women than for men. This may be attributable to men's closer ties to the labour market.

Living alone or having no children—two factors likely to increase mobility—tended to increase the chances of finding a new job by 30% and 24% respectively. The spouse's income level had no effect.

Chart B: Weeks of joblessness declined as the economy improved.

Source: Survey of Labour and Income Dynamics

Occupation and length of service

In comparison with the reference category—managers and professionals—most occupations associated with a lost job had little influence on the duration of joblessness. The exceptions were clerical, sales and service, where the chance of finding a new job at any time after layoff was 32% lower than for

Table 4: Success rate by length of jobless period

	1993	1994	1995	1996	1997	1993-97
			'000			
Total layoffs*	**203.0**	**217.8**	**220.4**	**203.1**	**177.0**	**1,021.3**
Found a job within			%			
1 month or less	16	13	14	21	21	17
3 months or less	27	31	36	46	47	37
6 months or less	46	55	58	64	66	58
9 months or less	54	64	69	70	77	67
12 months or less	60	73	77	77	83	74
Proportion with full-time work among those finding a job within a year	85	84	87	81	82	84
			weeks			
Average length of jobless period	16.7	18.3	17.6	13.4	14.5	16.1

Source: Survey of Labour and Income Dynamics
Note: Since persons laid off in 1998 could not be observed for a full year (this would have biased their job search success rate), they were excluded.
*   From jobs with at least one year of tenure.

Table 5: Status, after one year, of workers laid off permanently from a full-time job, 1993 to 1997

	Total	Employed	Unemployed	Unemployment rate* Laid-off workers	Total labour force**	Not in the labour force†
	'000			%		
Total	**1,021.3**	**61.8**	**18.8**	**23.3**	**10.0**	**19.4**
Year of layoff						
1993	203.0	50.7	24.8	32.8	11.4	24.5
1994	217.8	64.4	18.0	21.8	10.4	17.6
1995	220.4	63.4	18.5	22.6	9.4	18.1
1996	203.1	64.9	14.8	18.6	9.6	20.3
1997	177.0	66.1	17.9	21.3	9.1	16.0
Success in finding a job						
Found a job within a year	755.6	83.4	9.1	9.8	…	7.5
Did not find a job within a year	264.2	…	46.7	…	…	53.3
Sex						
Men	654.2	64.6	18.8	22.5	10.4	16.6
Women	367.2	57.0	18.8	24.8	9.5	24.2
Age						
16 to 24	103.8	73.0	--	--	15.8	--
25 to 34	292.0	62.9	19.9	24.1	10.4	17.2
35 to 44	272.8	62.9	18.8	23.0	8.5	18.3
45 to 54	256.6	66.5	16.2	19.6	7.4	17.4
55 and over	96.1	31.4	26.5	45.8	7.9	42.1
Education						
Less than high school diploma	234.3	55.9	23.0	29.1	15.8	21.1
High school diploma	312.7	60.3	17.8	22.7	9.9	21.9
Postsecondary or higher	455.4	67.1	17.7	20.9	7.8	15.2
Occupation						
Managerial and professional	251.7	74.3	13.4	15.3	3.8	12.3
Clerical, sales and service	367.5	51.6	21.9	29.8	6.8	26.5
Primary, processing, machining, product fabricating, assembling and repairing	252.2	63.6	18.3	22.3	8.4	18.2
Construction	59.3	62.7	21.4	25.4	15.5	15.9
Transport equipment, material handling and other crafts	87.4	62.4	21.7	25.8	8.6	15.9
Other studies						
Picot and Pyper (1988)††	831.8	64.4	13.8	17.6	8.2	21.8
Picot and Wannell (1982-1985)	999.0	62.9	20.9	24.9	11.2	16.2

Sources: Survey of Labour and Income Dynamics; Labour Force Survey
*   Rate refers to jobs for laid-off workers, but to individuals for total labour force. See note 7 for more explanation.*
** Age 15 and over.
†   Includes persons who did not specify their status.
††   All displaced workers, without restriction as to job tenure.

managers and professionals. Various explanations are possible. Clerks, salespersons and service workers may have a lower degree of skill transferability compared with managers and professionals. This could make their skills seem less valuable to potential employers and reduce their chances of getting a job. This lower transferability could also reflect a lower versatility. Less

versatile workers have a smaller range of skills, which can reduce job opportunity. Also, clerks, salespersons and service workers appeared to have weaker ties to the labour force—20% were out of the labour force one year after layoff compared to 6% of managers and professionals. This weaker tie may reflect a lower job-search intensity.

Data source and definitions

The **Survey of Labour and Income Dynamics (SLID)** is a longitudinal survey that was launched in 1993; it also provides cross-sectional estimates. The first part of the article is based on the cross-sectional sample of SLID, and examines the number and rate of layoffs for each year. The second part of the article uses the longitudinal sample, and focuses on what happens after a permanent layoff. Estimates from the cross-sectional sample are weighted in order to be representative of the Canadian population (excluding individuals under 16 and those living in the Territories, Indian reserves, military bases, or in institutions) for each year. On the other hand, the longitudinal sample is representative of the population at December 1992. From 1993 to 1995, the longitudinal sample of SLID was based on a single panel, consisting of 15,000 households representing approximately 30,000 persons. With the 1996 introduction of a second panel, SLID now covers 30,000 households (60,000 persons).

Longitudinal sample

All estimates concerning the length of the jobless period are based on the longitudinal sample from SLID. Only persons who were laid off at least once between January 1993 and December 1998 and who answered the SLID questionnaire in all six years were selected. The sample population represents the population as of December 31, 1992. The unit of analysis is the layoff (and not the person); all layoffs experienced by a given person are counted separately.

The probability of finding a job at any time after layoff was estimated using the Cox proportional hazards model, which takes account of censored values. For example, if a person laid off in 1998 had not found a job by the end of the year, the associated information could be incorporated into the model, as could information relating to persons who had not found a job more than one year after layoff.

The model for the wage gap was estimated only for those individuals who found a job within a year. This model was estimated by ordinary least squares.

Layoffs

The layoffs covered by this study are those that occurred for structural or cyclical reasons—the company moved, the company went out of business, a business slowdown occurred, or the employee was dismissed.

Since a person who is laid off must first have been an employee, the self-employed were excluded, as were full-time students who simultaneously held a full-time job or attended an educational institution for at least eight months during the year. Layoffs from a temporary or seasonal job were also excluded, since workers in such jobs expect them to end after a specified period. Likewise, layoffs of persons with more than one job for more than one week were excluded, the reasoning being that if such people were laid off from one of their jobs, they would not feel the same urgency to replace it. However, a transition period was permitted to allow for people who found a new job the week before or after being laid off.

Only **permanent layoffs** from a full-time job were counted in order to observe the behaviour of workers with strong ties to the labour market. Whether a layoff is permanent or temporary depends upon the perception of the respondent.

People were counted more than once if they had more than one layoff. This provides a more complete picture of the characteristics of the jobs in which layoffs occurred—by industry, occupation, union status, wage level, or length of employment. This is not a double count since the layoffs took place at different times. People's characteristics may also have changed in the interim: they will have aged, their education level may have increased, or their experience may have become more diversified. However, most persons were laid off only once in the six years covered by this study.

The **layoff rate** is the ratio of permanent layoffs from full-time jobs to total full-time jobs held for one year, excluding self-employed persons and full-time students. This rate was compiled for each year.

Greater tenure in the lost job reduced the probability of finding a new job by 15%. It could be that workers who stay in a job longer tend to have skills specific to their employer, and these may sometimes be hard to transfer. In addition, such individuals may be unfamiliar with job-searching and could take longer to find a new job.

Employment Insurance benefits

The receipt of Employment Insurance (EI) benefits reduced the chances of finding a job by 38%. EI benefits may be associated either with a job search that is initially less intense or with an extended search in hopes of finding more suitable work. EI benefits had a major effect on the length of the jobless period.

Among persons not receiving benefits, nearly two-thirds found a job in three months or less, compared with 30% of those with benefits. Since EI benefits are of limited duration, their effect declines over time, with the result that a comparable proportion of claimants and non-claimants found a job in twelve months or less (Chart C).

Visible minorities

Being a member of a visible minority reduced the chances of finding a new job.[11] A number of these persons were immigrants who had come to Canada fairly recently (nearly a third after 1985). Many of them may have been in the process of integrating into the Canadian labour market or in training (in language

Chart C: EI beneficiaries took longer to find a new job.
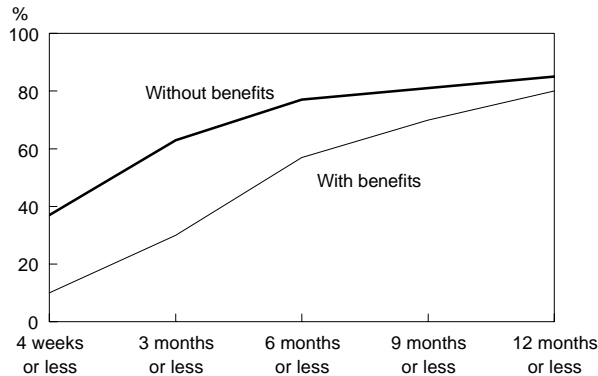
Source: Survey of Labour and Income Dynamics

courses or courses taken to gain recognition of their degrees). At first, some may have accepted jobs not compatible with their qualifications, and then later searched for a more suitable job.

Year of layoff

Some years were more conducive to a successful job search than others—for example, 1995 to 1997 compared with 1993. The years 1995 to 1997 had lower unemployment rates and were characterized by robust economic growth (Chart A). Some of the years in the study period also coincided with the reform of the Employment Insurance program. The improvement observed toward the end of the study period could be partly attributable to this reform. Starting in 1996, the eligibility rules were tightened, the entitlement period was reduced,[12] and the way of calculating benefits was changed. These changes may have induced some laid-off persons to intensify their job search.

Other characteristics such as education level, earnings in the lost job, and the month of the layoff did not have any significant effect on the probability of finding a new job.

Wages before and after layoff

In the job following layoff, 21% of workers received a wage that was equal (plus or minus 5%) to the wage in the lost job, while 47% received a lower wage and 32% received a higher wage (Table 6). Regardless of the year of the layoff, more people experienced a wage loss in the new job. For those experiencing a loss, the

average loss was nearly 30%; for those experiencing a gain the average increase was just under 26%. In all, 21% of layoffs were followed by wage losses of more than 30%, while only 14% were followed by gains of more than 30%.

Estimates show that the wage gap was sensitive to the wage in the lost job.[13] Persons with a higher wage were more likely to suffer a loss; those in low-paying jobs had a better chance of a wage gain in their new job (Chart D). This effect was observed earlier (Picot and Wannell, 1987; Picot and Pyper, 1993). According to Picot and Pyper, "Wage change may also be negatively correlated with the wage level in the lost job simply because the higher the wage, the less likely is a very large wage gain. There is a limit to the wages most firms are willing to pay (for a given level of human capital). Similarly, for very low wage jobs large wage losses are unlikely because there is a minimum wage restriction. These considerations may lead to a regression to the mean phenomenon."

The characteristics of the new job also affected the wage gap; for example, if the job was full-time,[14] unionized, or if the occupation was the same as in the lost job, the wage in the new job tended to be higher. The skill level associated with the occupation also affected the wage gap. Managers and professionals as well as construction workers were more likely to report a wage gain in the new job (in comparison with the reference category *other occupations*: transport equipment operators, material handlers, and other crafts). However, the wage gap showed no relationship to the length of the jobless period or the worker's education level.[15] Furthermore, family characteristics such as having children or having a spouse with no income had no more effect on the wage gap than did the year of the layoff.

Summary

This study examined what happens after a person is laid off from a full-time job. The layoff rate was higher for men, youths (aged 16 to 24), workers with less education, construction workers, workers not covered by a collective agreement, and workers in small firms. The rate was also higher for individuals whose lost job was short-term and for low-wage workers. Persons living alone and those with no children at home also had a relatively high layoff rate. Conversely, the layoff rate was low for managers and professionals.

Table 6: Earnings change for persons finding a new job within a year, 1993 to 1997

	%
Loss	**47**
More than 30% less	21
21 to 30% less	7
11 to 20% less	11
5 to 10% less	7
Average loss	**-29.8**
Same (+/-5%)	**21**
Gain	**32**
More than 30% more	14
21 to 30% more	4
11 to 20% more	8
5 to 10% more	6
Average gain	**25.6**
Overall change	**0.52**

Source: Survey of Labour and Income Dynamics

For some people, the jobless period was relatively short—for 8%, one week or less. The proportion of layoffs that ended in a job (within a year) averaged 74%. The proportion increased over the years, from 60% in 1993 to 83% in 1997. This reflects the more favourable economic conditions at the end of the study period and a more rapid adjustment on the part of workers. Nonetheless, one year after a layoff some of those who had found a new job also lost it. Accordingly, the job search success rate declined to 62%.

One year after a layoff, almost one in five laid-off workers were unemployed—they had not yet found a job, or they had lost their new job. Laid-off persons therefore had disproportionately high unemployment rates—over 23% one year later—compared with the labour force as a whole, for which the rate averaged 10% between 1993 and 1997. The unemployment rate of laid-off workers varied according to the year, peaking at 32.8% in 1993 and reaching a low of 18.6% in 1996.

The chance of finding a job—regardless of the number of weeks after layoff—was lower for persons aged 55 and over; women; persons working as clerks, salespersons or in service occupations; Employment Insurance claimants; members of visible minorities; and persons who had worked for a long time for one employer. Having children at home, living alone, working as a manager or professional, or being laid off between 1995 and 1997 tended to increase the chance of finding a new job. Neither education level nor wage level of the lost job had any significant effect.

Regardless of the year of layoff, more people suffered a wage loss in their new job. Average wage gains and losses were relatively high—26% and 30% respectively. A major factor determining the size of the wage gap was the wage in the lost job. The higher the wage in the lost job, the more frequent the loss in the new job; conversely, the lower the wage in the lost job, the more frequent the gain in the new job. The wage gap also depended on the characteristics of the new job. For example, if the new job was full-time or unionized, or if the occupation was the same as for the lost job, the wage tended to be higher than for the lost job. The skill level associated with an occupation also affected the wage gap—managers and professionals as well as construction workers had a better chance of a gain in their new job.

Perspectives

Chart D: The higher the previous earnings, the greater the chance of lower earnings in the new job.

Losing, gaining, or maintaining the same earnings (%)
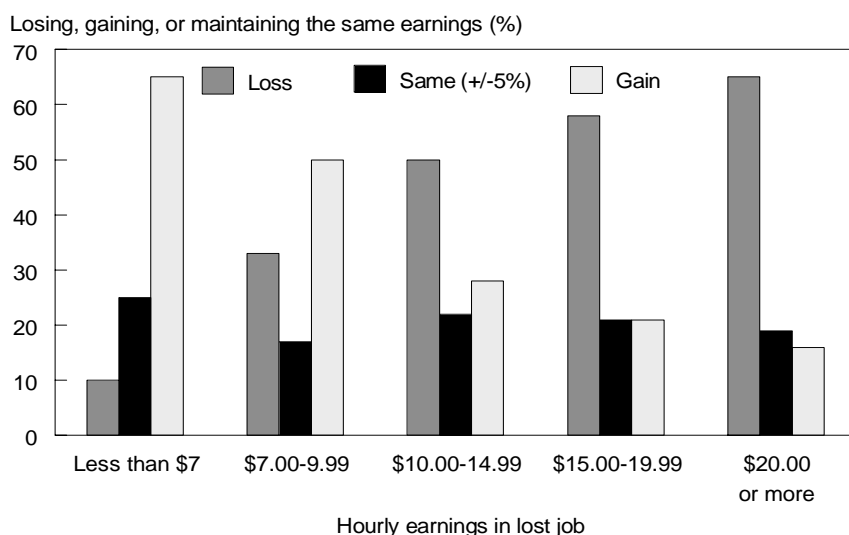
Source: Survey of Labour and Income Dynamics

■ *Notes*

1   This part of the study is based on the cross-sectional sample.

2   The characteristics of laid-off persons are as of December 31 of the year of the layoff.

3   Earlier studies noted similar trends (Picot and Wannell, 1987; Picot and Pyper, 1993; Picot and Lin, 1997). It would appear that the last in are also the first out. Various theories on labour turnover explain this phenomenon, such as those based on human capital concepts (Parsons, 1972) or job matching (Jovanovic, 1979). According to Parsons' theory, the employee acquires experience and the employer invests in the employee so that, over time, the probabilities of a quit or dismissal diminish. In job matching described by Jovanovic, at the outset the employee and the employer have limited knowledge of each other. Over time, the employer-employee match is more solid, thereby reducing the probability of a quit or dismissal.

4   This was found despite the exclusion of seasonal and temporary workers. While construction workers are often laid off temporarily, these results suggest that permanent layoffs are also sizeable for this occupation. However, it is possible that a certain number of seasonal workers were inadvertently included in the survey universe.

5   Persons with only a few months of job tenure might have a profile similar to that of sporadic workers. A sizeable proportion of layoffs occurred in short-term jobs; in fact, nearly a third of laid-off persons had been in jobs that lasted less than four months. Confining the analysis to layoffs of jobs lasting more than one year meant that 56% of layoffs were excluded. With this restriction, a larger proportion of laid-off persons (97%) had only one layoff between 1993 and 1998. For all layoffs, the corresponding proportion averaged 91%.

6   The overall success rate—that is, where no time restriction was imposed—was obviously higher. It ranged between 85% and 89%. However, this success rate was influenced by the year of the layoff—people laid off in 1993 had five years to find a job, whereas those laid off in 1997 had only one year. So that the average duration of joblessness would not be influenced by the year of the layoff, the rate was calculated only for persons who found a new job within a year. The year 1998 was therefore excluded from these calculations; however, it was included in the duration model.

7   In the Labour Force Survey, the proportion (81%) refers to the number of *individuals* while in SLID the proportion is based on the number of *jobs*. However, since 97% of all individuals had only one layoff, the results may be compared.

8   According to Picot and Wannell (1987), the post-layoff unemployment rate for the period from 1982 to 1985 was 24.9%. However, that period differs from the study period in that it began with a recession and ended with an expansion, whereas the period from 1993 to 1997 fell within the economic upswing that followed the 1992 recession. It is therefore difficult to compare unemployment rates for the two periods. Also, the rate obtained by Picot and Wannell was the one at the time of the survey in January 1986; this was not necessarily the rate one year after the layoff, since the layoffs occurred between 1981 and 1984. The unemployment rate for workers laid off from a full-time job in 1988 (without restriction as to the number of months or years of tenure in the lost job) was 17.6%, slightly lower than the rate for 1996 (Picot and Pyper, 1993). The years 1988 and 1996 differed as to the unemployment rate (7.8% and 9.6% respectively) and GDP growth rate (4.9% and 1.5%). However, both years fell during phases of expanding GDP and declining unemployment. The study by Picot and Wannell focused on layoffs from full-time jobs, without restriction as to the length of employment. This differs from the definition used in the present study, which deals with layoffs from a full-time job held for at least one year.

9   The model on the duration of the jobless period included the following variables: sex, age, province of residence, education level and family status (presence of children, presence of a spouse and spouse's income where applicable) of the laid-off person; characteristics of the lost job (occupation, hourly wage and length of employment); receipt of Employment Insurance benefits; and some characteristics of the layoff, such as the year or month in which it occurred. Other variables were also tested (such as the union status of the lost job, or living in a rural or urban area). None of these yielded conclusive results. Furthermore, since not all provinces were in the same phase of the economic cycle, a variable combining the effect of the year and the province was also tested without any significant results. The detailed results are shown in the appendix.

10 The technically correct term for a proportional hazards model is *risk*. To avoid the negative connotation of this word, the more common term *chance* is used. See analysis by Allison (1995).

11 Only 8% of jobs from which people were laid off were held by members of a visible minority; therefore, caution should be exercised in drawing any conclusions.

12 Before June 30, 1996, claimants could receive benefits for up to 50 weeks, depending on the unemployment rate in their region and how long they had been employed. The new legislation reduced the entitlement period to 45 weeks. Since in this study persons laid off had to have at least one year of

tenure in the lost job, they qualified for the maximum number of weeks of benefits, based on the unemployment rate in their region.

13 Models of the wage gap commonly use the logarithm of the ratio of the new wage to the old wage. This approach was used here. Detailed results are available from the authors.

14 This relationship was unexpected, since the layoffs studied were restricted at the outset to persons with a full-time job.

15 In the study by Picot and Pyper (1993), the wage gap exhibited the same relationship with the change-of-occupation variable and with the length of the job search. Unlike the results of the present study, the wage gap was affected by education level.

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Appendix: Duration model, proportional hazard results

Difference in risk compared with reference category (risk ratio − 1)

%

Age and sex

Men
16 to 24[†]	0
25 to 34	14
35 to 44	-11
45 to 54	-9
55 and over	-66*

Women
16 to 24	13
25 to 34	-27
35 to 44	-28
45 to 54	-16
55 and over	-77*

Education
Less than high school diploma	-15
High school diploma[†]	0
Postsecondary or more	-2

Visible minority
No	40*
Yes[†]	0

Children at home
No	24*
Yes[†]	0

Spousal income
No spouse	30**
Spouse without income	1
$1 to 10,000	9
$10,001 to 20,000	-12
$20,001 to 40,000	-11
More than $40,000[†]	0

Occupation in lost job
Primary, processing and machining	-24
Construction	-23
Clerical, sales and service	-32*
Professional and managerial[†]	0
Product fabricating, assembling, repairing	-17
Transport equipment, material handling and other crafts	-10

Hourly earnings in lost job
Less than $7.00	14
$7.00 to 9.99[†]	0
$10.00 to 14.99	0
$15.00 or more	1

Tenure of lost job
60 months or less[†]	0
61 months or more	-15**

EI benefits
No[†]	0
Yes	-38*

Province
Atlantic	-11
Quebec	-14
Ontario[†]	0
Manitoba/Saskatchewan	25
Alberta	6
British Columbia	17

Month of layoff
January	-11
February	-2
March[†]	0
April	-21
May	23
June	-13
July	-6
August	24
September	2
October	4
November	9
December	22

Year of layoff
1993[†]	0
1994	21
1995	31*
1996	51*
1997	87*
1998	-20

[†] Reference category.
* Significant at 5% level.
** Significant at 10% level.

# The labour market in the week of September 11

Geoff Bowlby

THE SEPTEMBER 11 TERRORIST ATTACKS in New York and Washington occurred during the Labour Force Survey (LFS) reference week of September 9 to 15. The data collected allow an early but incomplete look at how the Canadian labour market and economy were affected in the days immediately following the attacks.

It is not possible to quantify the effect of the attacks on overall levels of employment and unemployment. The LFS considers people who worked at any time during the reference week to be employed, even if they were laid off at some point during the week. Therefore, those who worked early in the week but were told not to come into work following the attacks would be considered employed. As a result, most of the effect on employment and unemployment is not reflected in the September estimates.

The effect of the attacks was more evident in a sharp increase in days lost, particularly in certain industries. Over 136,000 employees missed part of the work week for 'other' reasons—about 83,000 more than the average month over the last year. The industries in which most time was lost tended to be concentrated in downtown locations (for example, banking) or near airports (air transportation).

Employee absences for part of the week for 'other' reasons jumped in September 2001.

Part-week absences for 'other' reasons ('000)
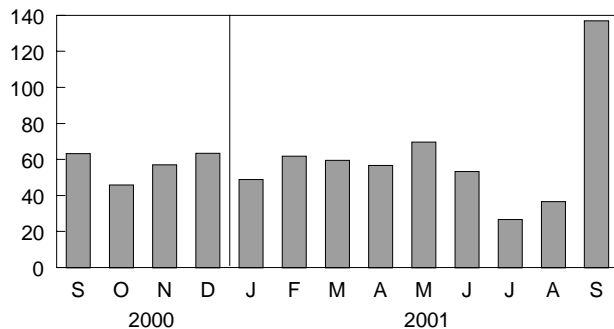
Source: Labour Force Survey

Even though hours were lost in many industries, some workers worked longer-than-normal hours. As well, full-time job gains were made in other parts of the economy. As a result, there was a slight increase in total actual hours worked in Canada that week (+0.4%, seasonally adjusted).

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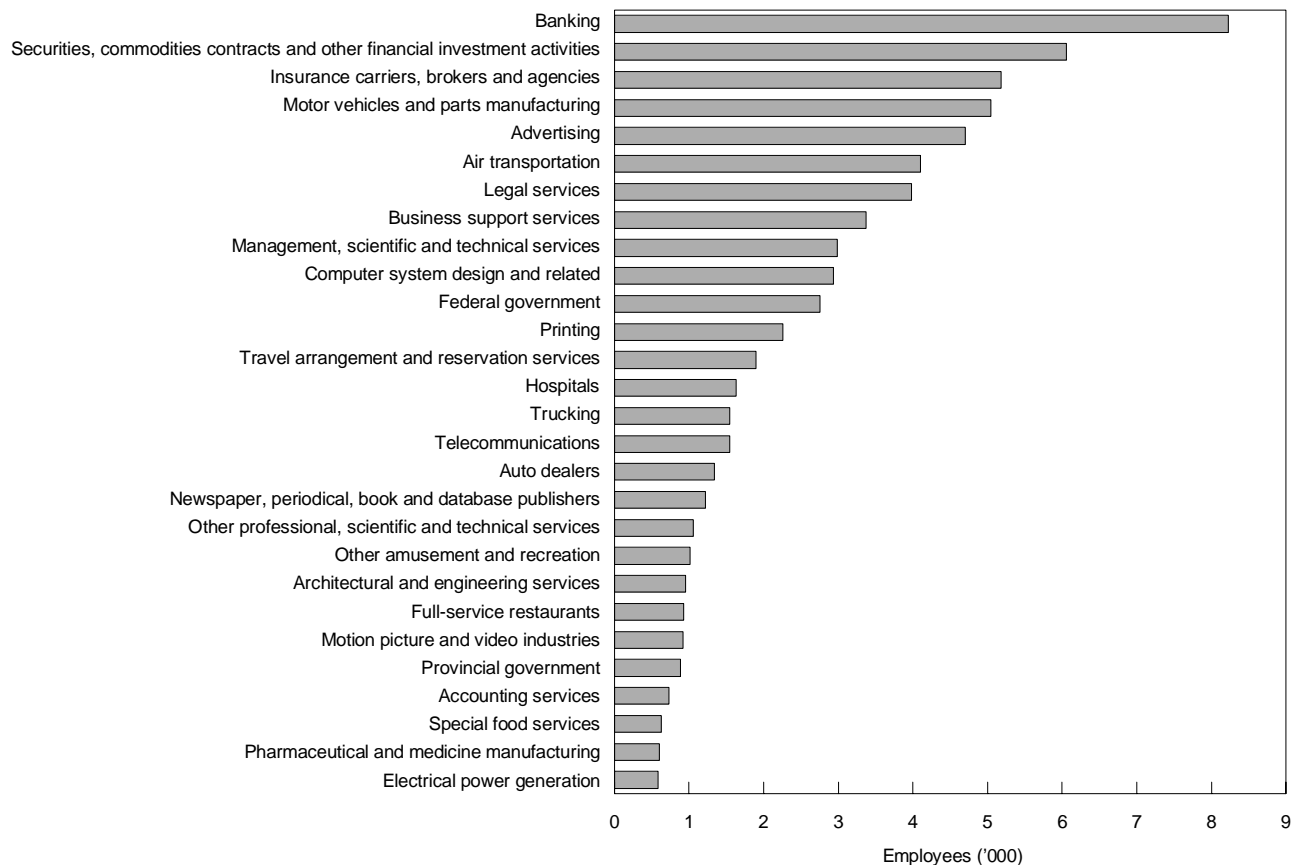
Industries losing work hours

Most employees absent from work during the week of September 9 to 15 were working in banking, investment activities and insurance. As expected, a very large number of people in the air and truck transportation industries also lost hours.

In total, an estimated 1.4 million hours were lost by people who missed part of the week for 'other' reasons—approximately 841,000 hours more than normal. This was the largest loss of hours caused by extraordinary events since the 1998 ice storm in

eastern Canada. At that time, about 150,000 more people than normal could not make it in to work for the entire reference week, and another 390,000 attended for only part of the week; the result was about 10.4 million hours lost. The number of hours lost during the week of September 9 was similar to the number lost following the Mississauga, Ontario, train derailment in 1979.

Almost all of the lost hours occurred in less than 30 industries. By far the largest loss came from investment activities, where more than 100,000 hours were lost as a result of the closing of the Toronto Stock

A wide range of industries had increases* in part-week absences for 'other' reasons.

Industry	Employees ('000)
Banking	8.2
Securities, commodities contracts and other financial investment activities	6.0
Insurance carriers, brokers and agencies	5.2
Motor vehicles and parts manufacturing	5.1
Advertising	4.7
Air transportation	4.1
Legal services	4.0
Business support services	3.4
Management, scientific and technical services	3.0
Computer system design and related	2.9
Federal government	2.7
Printing	2.2
Travel arrangement and reservation services	1.9
Hospitals	1.6
Trucking	1.5
Telecommunications	1.5
Auto dealers	1.3
Newspaper, periodical, book and database publishers	1.2
Other professional, scientific and technical services	1.1
Other amusement and recreation	1.0
Architectural and engineering services	1.0
Full-service restaurants	1.0
Motion picture and video industries	1.0
Provincial government	0.9
Accounting services	0.8
Special food services	0.7
Pharmaceutical and medicine manufacturing	0.7
Electrical power generation	0.6

Source: Labour Force Survey
* Compared with the average for September 2000 to August 2001.

Exchange and other stock markets across the country. The loss amounted to over 20 hours per absent employee.

Air transportation experienced the next largest loss. In this industry, which includes airlines and airport support workers, about 75,000 hours were lost when air traffic was grounded—over 18 hours per absent employee. A very large number of hours were also lost in the banking sector—72,000 hours or 8.8 hours per absent employee.

About 5,000 more employees than normal were absent from work in the motor vehicle and parts manufacturing industry for 'other' reasons, resulting in 61,000 hours lost. During the week of the attacks, some manufacturers reported not having received enough materials to keep plants open. In motor-vehicle manufacturing, an additional 3,400 people lost part of the week because of material shortages at the plants—3,000 more than the average in the previous 12 months. In total, approximately 8,000 people lost hours in the manufacturing sector.

Employment and actual hours worked in disaster-affected industries, September 2001

	Increased hours lost* for 'other' reasons		Abnormal change**	
	Total	Per absent employee	Actual hours	Employment
	'000		'000	
Disaster-affected industries	**718.6**	**10.4**	**-3,894.1**	**-60.5**
Securities, commodities contracts and other financial investment activities	122.6	20.2	-202.6	6.3
Air transportation	74.7	18.2	162.7	4.8
Banking	72.4	8.8	-626.4	-6.5
Business support services	60.7	18.0	-92.2	-4.1
Motor vehicles and parts manufacturing	60.6	12.0	-463.9	2.1
Computer system design and related	39.8	13.6	-430.0	-21.7
Insurance carriers, brokers and agencies	34.7	6.7	-318.0	-2.9
Trucking	26.8	17.3	-520.3	-2.9
Advertising	26.8	5.7	301.7	9.8
Legal services	21.7	5.4	235.7	-0.1
Federal government	17.7	6.4	-453.0	-2.2
Architectural and engineering services	15.4	16.2	453.4	8.0
Full-service restaurants	15.3	16.4	-645.2	-35.9
Provincial government	15.2	17.1	170.0	11.1
Management, scientific and technical services	14.8	4.9	161.4	5.0
Other professional, scientific and technical services	14.2	13.4	-98.5	-1.2
Telecommunications	11.5	7.4	-558.9	-7.9
Travel arrangement and reservation services	10.7	5.7	-90.4	-5.3
Printing	9.7	4.3	-15.5	-0.1
Auto dealers	9.7	7.2	3.0	1.6
Motion picture and video industries	7.8	8.4	393.6	2.6
Hospitals	6.4	3.9	656.8	-3.4
Special food services	6.3	9.9	86.4	4.1
Other amusement and recreation	6.0	5.9	-1,350.0	-23.5
Electrical power generation	5.8	9.9	-539.1	-6.6
Newspaper, periodical, book and database publishers	4.2	3.5	29.3	-1.4
Accounting services	3.5	4.9	-151.2	4.2
Pharmaceutical and medicine manufacturing	3.5	5.8	7.2	5.5

Source: Labour Force Survey
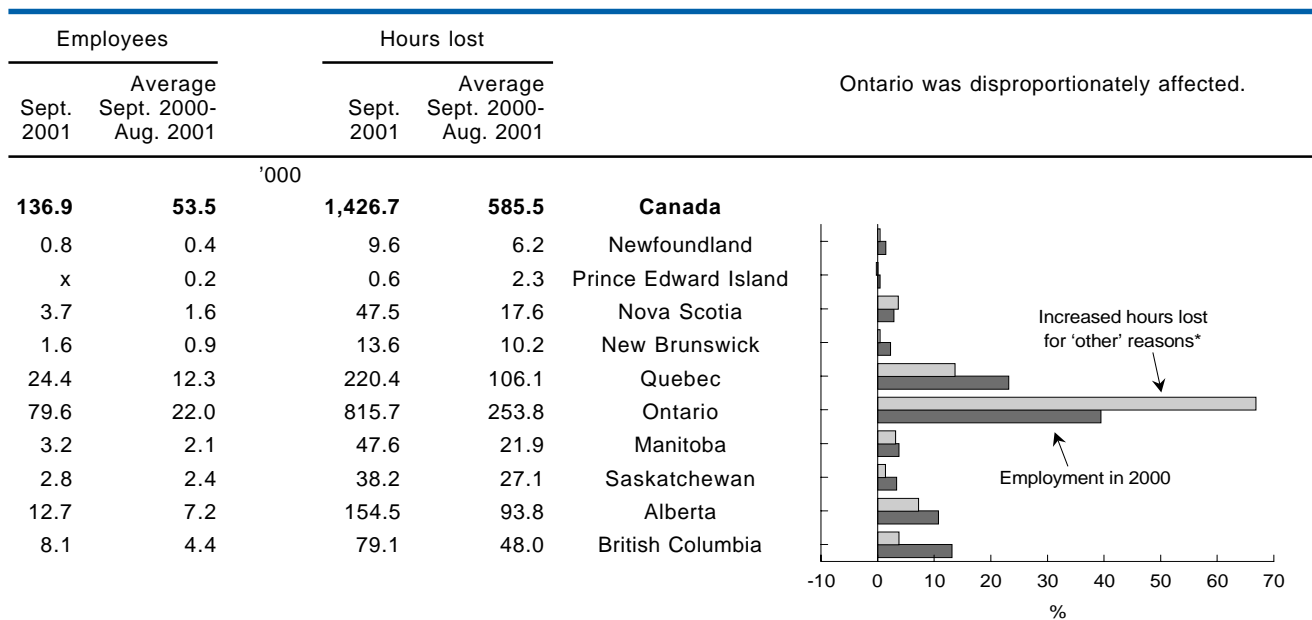* Compared with the average for September 2000 to August 2001.
** Compared with the three-year average August to September change for 1998 to 2000.

Where were the hours lost?

About 4 in 10 employed people in Canada live in Ontario; however, two of every three hours lost were in that province, making it disproportionately affected by the September 11 events. Given that the affected industries are concentrated in Ontario, it comes as no surprise that the province was the most affected of all the provinces.

Part-week absences for 'other' reasons

| Employees			Hours lost			
Sept. 2001	Average Sept. 2000- Aug. 2001		Sept. 2001	Average Sept. 2000- Aug. 2001		Ontario was disproportionately affected.
'000						
136.9	**53.5**		**1,426.7**	**585.5**	**Canada**	
0.8	0.4		9.6	6.2	Newfoundland	
x	0.2		0.6	2.3	Prince Edward Island	
3.7	1.6		47.5	17.6	Nova Scotia	
1.6	0.9		13.6	10.2	New Brunswick	
24.4	12.3		220.4	106.1	Quebec	
79.6	22.0		815.7	253.8	Ontario	
3.2	2.1		47.6	21.9	Manitoba	
2.8	2.4		38.2	27.1	Saskatchewan	
12.7	7.2		154.5	93.8	Alberta	
8.1	4.4		79.1	48.0	British Columbia	

Source: Labour Force Survey

* *Compared with the average for September 2000 to August 2001.*

Incidence of extra hours

In some of the disaster-affected industries, more people worked longer hours, even as others lost some days of the week. The most obvious example was the air transportation industry. While there was a large drop in the number of people putting in a standard 37.5 to 40-hour workweek, more people worked longer hours and more worked shorter hours. Although this was true for air transportation and a few other industries (hospitals and auto dealers), most other industries showed more people working shorter hours and fewer people working longer hours.

In total, the extra hours worked in the disaster-affected industries did not make up for the hours lost because of absences. As well, a few disaster-affected industries (full-service restaurants and 'other' amusement and recreation), had an unusually large drop in employment. As a result, the number of actual hours worked in the disaster-affected industries fell 3.9 million hours from the normal.

Downward shift in hours worked in disaster-affected industries.
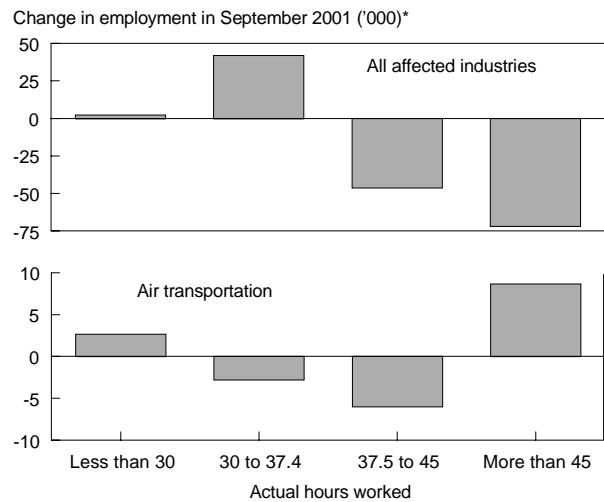
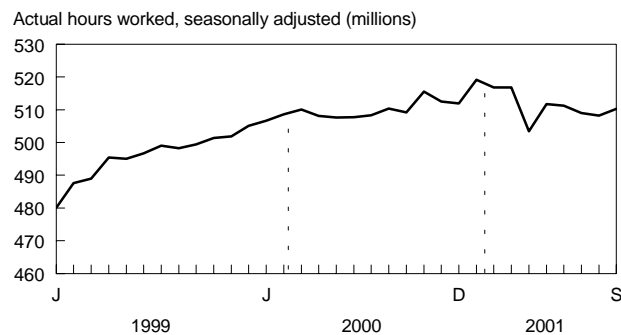Change in employment in September 2001 ('000)*

Actual hours worked

Source: Labour Force Survey
* *Compared with the three-year average August to September change for 1998 to 2000.*

Overall actual hours worked

Even though actual hours fell in the disaster-affected industries, other parts of the economy experienced large gains in full-time work. As a result, total actual hours worked rose 0.4%, or about 2 million.

Despite the drop in disaster-affected industries, overall actual hours worked rose in September 2001.

Actual hours worked, seasonally adjusted (millions)

Source: Labour Force Survey