

Non-permanent paid work

Lee Grenon and Barbara Chun

Some 87% of Canadian paid workers (9.7 million) have permanent employment. However, the pace of change in the workplace over the past decade means that many people no longer expect to remain with the same employer until they retire. Indeed, temporary work arrangements appear to be a growing trend.

Several earlier studies, working with relatively narrow definitions of non-permanent work, examined change in temporary work over time (see *Related studies*). This study, using concepts and data sources that have been developed to track new work arrangements, examines and compares the characteristics of permanent and non-permanent jobs and the workers³ in these jobs. In particular, it makes use of the (expanded) 1995 Survey of Work Arrangements (SWA), which provides comprehensive information on this topic (see *Data sources, concepts and definitions*). The following observations are based on this survey.⁴

Newfoundland has highest rate

In November 1995, paid workers who described their main job as non-permanent accounted for 11% of the Canadian paid workforce. However, the prevalence of non-permanent work varied across the country. Workers with non-permanent jobs were more common in Newfoundland than in any other province, at 26% of all paid workers. British Columbia had the lowest rate (9%). Rates in Ontario and the Prairie provinces generally

Lee Grenon is with the Labour and Household Surveys Analysis Division. He can be reached at (613) 951-5254. Barbara Chun is with the Household Survey Methods Division. She can be reached at (613) 951-4687.

Related studies

Temporary or contract work has increased

In 1989 and 1994, the General Social Survey (GSS) studied temporary or contract workers, defined as paid workers with a specified end-date for their job. The self-employed and independent contractors were excluded. Among employees aged 15 to 64 years, workers with temporary or contract jobs were slightly more common in 1994 (9% or 970,000) than in 1989 (8% or 799,000) (Krahn, 1995).¹ This increase was greater in some industries than others. From 1989 to 1994, temporary or contract workers increased from 17% to 22% in construction, from 10% to 13% in social services, and from 8% to 11% in public administration. On the other hand, in the retail sector they dropped from 7% (88,000) in 1989 to 4% (52,000) in 1994. Over the same period, in "other consumer services,"² they decreased from 13% of all employees (136,000) to 11% (128,000). This change by industry may be more related to the business cycle downturn during the early nineties than to a broader structural change in the use of temporary or contract workers.

Temporary help services industry has grown

In the 1950s, the temporary help services industry emerged primarily to provide clerical, secretarial and manual workers as replacements for permanent employees who were temporarily absent from work (Akyeampong, 1989). The industry has evolved with the changing needs of business and a more diversified clientele. Today, businesses call on temporary help services,

also known as personnel suppliers, to provide a wide range of workers (Hamdani, 1996). Employers need workers to supplement the core labour pool as well as to fill in for absent workers. They want a reliable supply of supplementary labour to meet unanticipated changes or seasonal fluctuations. Temporary help can also be used to fill a gap in staffing while employers decide how to commit long-term resources.

One way of measuring the growth of the personnel supplier industry is to track revenue, which reflects the number and duration of assignments (volume of work) and the type of service (skill level) provided (Hamdani, 1996). The industry experienced strong revenue growth throughout the 1980s and peaked in 1989. The increasing use of labour-saving technologies and the growing demand for workers with skills in short supply contributed to a decline in revenues that continued over the next three years. Despite an increase in 1993, personnel suppliers saw revenue remain close to 16% below the 1989 peak.

Short-term job tenure on the rise

The increase in temporary workers and temporary help services coincides with the growth of jobs with short-term tenure. Although the average complete duration of jobs did not show any significant trend between 1981 and 1994, job tenure became more polarized between long- and short-term jobs. This occurred across the entire workforce. It appears that many firms are using a core of long-term employees along with supplementary, short-term employees as the need arises (Heisz, 1996).

matched the national average, while those in Quebec and the Atlantic provinces exceeded it (Table 1).

Temporary, contract and term jobs most common

The range of non-permanent work arrangements is much broader than

the usual image of "temps." In fact, temporary help agency workers were only a small segment of workers with non-permanent jobs in November 1995 (2%).⁵ Most common arrangements were temporary, contract and term jobs. Casual and on-call

jobs were also frequently cited. The other major type of non-permanent job was seasonal paid work.⁶ Self-employed workers with a seasonal business by definition had a permanent job.

Data sources, concepts and definitions

Data sources

The **General Social Survey (GSS)** provides information on work and related characteristics. Its 1989 and 1994 cycles yielded data on temporary or contract workers with a specific end-date. Because the 1989 survey (Cycle 4) was conducted in January and February, and the 1994 survey (Cycle 9), over all 12 calendar months, possible seasonal effects in 1989 should be borne in mind if comparisons between the two cycles are made.

The **Survey of Employment Agencies and Personnel Suppliers** is an annual business survey. A redesigned questionnaire was introduced in 1993 to increase the information collected from each firm and to improve the existing measures from the survey.

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. The objectives of the 1995 SWA were to update 1991 SWA estimates, to fill in data gaps identified since the 1991 survey, and to extend coverage to the self-employed. Some of the redefined concepts pertained to permanent and non-permanent jobs, and types of non-permanent jobs.

All sample survey estimates will have some level of sampling error. Measurement of the standard error of an estimate is expressed as the coefficient of variation (CV), which is expressed as a percentage of the estimate. For the SWA, an estimate of 40,500 or more at the Canada level will have an acceptable CV of less than 16.5%. Estimates of 18,000 to 40,499 must be **qualified**, or used with greater caution, because their CV is likely to fall between 16.6% and

33.3%, which means the estimate is subject to high levels of error. Estimates between 10,000 and 17,999 are not reliable and are considered confidential, while those under 10,000 are not releasable. Release criteria vary by province and region.

SWA concepts

Data for **permanent and non-permanent jobs** were collected in November 1995 by the Survey of Work Arrangements. Questions about job permanency were not asked of the self-employed. The survey asked employees about their main job (that is, the job in which they worked the most hours in the reference week):

"Is... 's job permanent, or is there some way that it is not permanent?"

The distinction between a permanent and non-permanent job applies to the job, and not to the worker's intentions. For example, a student working at a permanent job is considered permanent, even though he or she may intend to remain only temporarily in this job.

Permanent jobs are sometimes referred to as indeterminate since they have no specified date of termination.

A job that is *not* permanent will end on a predetermined date or as soon as a specified project is completed. Non-permanent jobs include term positions, casual work, seasonal work, and contract work. Unless otherwise stated, the analysis of non-permanent work in this study excludes seasonal workers and workers who did not state the type of non-permanent work that best described their job.

Respondents who reported that their main job was in some way not permanent were asked a follow-up question:

"In what way is... 's job not permanent?"

The response is classified as follows:

Seasonal jobs last only a limited period(s) at the same time each year. They are structured by the annual labour demands of industries such as agriculture, fisheries, forestry, construction and tourism.

Temporary, term or contract (non-seasonal) jobs are defined by the employer prior to hiring, to be terminated at a specified date or at the completion of a specified task or project.

On-call or casual jobs have work hours that vary substantially from one week to the next, no pre-arranged schedules (in other words, employees are called to work as the need arises), no usual pay for time not worked, and limited prospects for regular work over the long-term.

Work done through a temporary help agency is arranged and paid for by the agency.

Definitions

Personnel suppliers or temporary help services are firms in the personnel supplier industry (classified in the 1980 Standard Industrial Classification system as code 7712). The Survey of Employment Agencies and Personnel Suppliers provides financial and services statistics for the industry. Employment data from the Survey of Employment, Payrolls and Hours are available only for the combined industries of employment agencies and personnel suppliers. However, employment agencies are distinct from personnel suppliers. The former provide an intermediary service of matching job seekers with employers seeking workers, while the latter place their own

employees in other firms on temporary assignments.

Temporary or contract workers are those reporting a job with a specific end-date. The analysis of these workers is restricted to paid workers aged 15 to 64. Data are also available from the 1991 SWA; however, the definition of temporary or contract jobs for this survey was limited to jobs with a specified end-date within six months.

Hourly rate of pay and weekly earnings were derived from information collected by the Survey of Work

Arrangements. Both hourly rate of pay and weekly earnings apply to all paid workers. This includes both hourly paid and salaried workers.

Usual weekly hours of work at main job as defined by the Labour Force Survey prior to January 1997 were the number of hours worked by the respondent in a typical week, regardless of whether all these hours were paid.

Industry analysis in this study uses the 1980 Standard Industrial Classification. Some industry groups have been combined to facilitate the analysis. Primary

industries include agriculture, fishing, forestry and mining. Community, business and personal services also include miscellaneous services.

Occupation analysis in this study uses the 1980 Standard Occupational Classification. Some occupational groups have been combined to facilitate the analysis. Professional and technical occupations include natural and social sciences, religion, teaching, medicine, and artistic.

Table 1
Job permanency and non-permanent job type by region and province

		All paid workers **	Workers with permanent jobs	Workers with non-permanent jobs			
				Total †	Temporary, term and contract	Casual and on-call	Seasonal
Canada	'000	11,084.5	9,683.5	1,271.6	633.6	415.8	182.2
	%	100	87	11	6	4	2
Atlantic provinces	'000	787.2	627.7	153.8	59.5	49.7	42.2
	%	100	80	20	8	6	5
Newfoundland	'000	163.0	120.2	41.9	16.5	14.2 *	9.9 *
	%	100	74	26	10	9 *	6 *
Prince Edward Island	'000	45.3	35.6	9.2	2.9 *	2.6 *	3.4 *
	%	100	79	20	6 *	6 *	7 *
Nova Scotia	'000	320.8	272.1	47.1	19.5	14.6	12.9 *
	%	100	85	15	6	5	4 *
New Brunswick	'000	258.2	199.8	55.7	20.6	18.3	16.0
	%	100	77	22	8	7	6
Quebec	'000	2,670.5	2,277.6	369.3	192.0	113.5	49.9
	%	100	85	14	7	4	2
Ontario	'000	4,407.2	3,940.7	425.9	230.7	132.7	46.0 *
	%	100	89	10	5	3	1 *
Prairies	'000	1,812.6	1,599.0	192.5	87.4	72.7	27.1 *
	%	100	88	11	5	4	1 *
Manitoba	'000	418.7	371.2	41.0	19.2 *	15.8 *	--
	%	100	89	10	5 *	4 *	--
Saskatchewan	'000	326.0	285.9	36.5	18.0	12.6 *	--
	%	100	88	11	6	4 *	--
Alberta	'000	1,067.9	941.8	115.0	50.2	44.3	16.4 *
	%	100	88	11	5	4	2 *
British Columbia	'000	1,406.9	1,238.5	130.1	64.0	47.3	--
	%	100	88	9	5	3	--

Source: Survey of Work Arrangements, 1995

* Qualified data (see Data sources, concepts and definitions).

** Includes workers who did not state their job permanency status.

† Includes workers in temporary help services and in other types of non-permanent jobs not listed above, as well as those who did not state their type of non-permanent job.

Workers in non-permanent jobs are diverse

The increase in temporary and contract jobs, along with the growth in temporary help services, has raised concerns about a growing “disposable” workforce (Castro, 1993). The conventional image of workers in non-permanent jobs is that of young and low-skilled persons in clerical, service or manual jobs with limited opportunities for advancement and few benefits. However, applying such descriptors to all such jobs and workers masks their diversity.

Using cluster analysis, this study grouped together workers with common job and personal characteristics (see *Statistical techniques*). Four groups (or clusters) of workers with non-permanent jobs were identified on the basis of sex, age, level of education, marital status, job tenure, occupation group and weekly earnings. These clusters are of roughly equal size.

Cluster One workers are primarily young (15 to 24 years), single, male and students with short job tenure. These workers are broadly employed in sales; service; primary; transportation; and fabricating, material handling and processing occupations. On average, they have a low hourly rate of pay with less than full-time hours at the main job, and relatively low weekly earnings (Table 2).

Cluster Two consists mostly of married, adult (25 to 69 years) men. These workers are also broadly employed in managerial and administrative; natural sciences; teaching; primary; construction; transportation; and fabricating, machining, processing and other crafts occupations. They generally have longer job tenure than other workers with non-permanent jobs. Most people in this group also have a postsecondary certificate or university degree. Relatively high hourly rates of pay, longer work weeks, and high weekly earnings are characteristic of this group of workers.

Statistical techniques

Cluster analysis

Cluster analysis groups similar observations into a specified number of clusters. The use of four clusters in this study produced the most distinct groups of workers. This analysis is purely descriptive and is used simply to see how the data in the sample might be grouped.

The analysis was based on unweighted survey data. Each observation was included in only one cluster. The averages for hourly rate of pay, usual weekly hours worked, and weekly earnings by cluster (Table 2) were from weighted survey data.

Multiple linear regression

A linear regression model, $E(y) = \beta X$, was fit to the data to examine the relationship between a dependent variable, y , and a set of independent or explanatory variables, X . The set of parameters, β , was to be estimated from the data. In this analysis, the dependent variables were hourly rate of pay, weekly earnings, and usual hours worked.

When all explanatory variables are categorical, a special case of linear regression occurs, called analysis of variance (ANOVA). This forms the basis of this analysis. The explanatory variables investigated were permanent/non-permanent work status, age, sex, marital status, level of education, industry, occupation, job tenure, size of firm, contract coverage or union membership, school enrolment, province, and class of worker. As well, interactions involving permanent/non-permanent work status were included in the model. Hypothesis tests for the coefficients ($\hat{\beta}$) were conducted to determine whether the coefficient was not zero, that is, whether the independent variable explained a statis-

tically significant proportion of the total variance of the dependent variable. In particular, the relationship between permanent and non-permanent work status and the dependent variables was evaluated.

Because of the intercorrelations among the explanatory variables, these coefficients must be interpreted within the context of the model. The explanatory variables were chosen on the basis of subject matter interest and statistical significance of their relationship with the dependent variables.

The exploratory analysis determined which variables of interest entered into the model at a significance level of $\alpha = 0.05$, and detected any problems arising from correlations among the explanatory variables. The regression coefficients were estimated and hypotheses tested, taking into account the stratified, multi-stage, clustered sampling design of the Survey of Work Arrangements. (Regression analysis procedures, which assume simple random sampling, may lead to invalid inferences.) For hourly rate of pay, weekly earnings, and usual hours worked, the coefficients for all variables appear in Table 7. The intercept is the baseline value of the dependent variable (hourly rate of pay, weekly earnings, or usual hours worked), that is, the mean value of the dependent variable when the independent variables are equal to the reference levels. The estimated regression coefficients ($\hat{\beta}$) for the independent categorical variables give the differential increase or decrease in the mean or expected value of the dependent variable for each level of the categorical variable versus the reference level.

For more information about techniques and software used, contact Barbara Chun at (613) 951-4687.

Table 2
Attributes of non-permanent jobs by shared characteristics of workers *

	Hourly rate of pay	Usual weekly hours	Weekly earnings **
	\$		\$
Cluster † 1	9.40	25.0	258
2	17.28	35.8	625
3	11.16	22.7	259
4	12.85	25.5	350

Source: Survey of Work Arrangements, 1995

* Excludes seasonal workers and workers who did not describe their type of non-permanent job.

** See note 7.

† See Statistical techniques.

Young, single, female students with short job tenure typify Cluster Three. Their principal occupations are in social sciences, clerical work, sales and service. A relatively low hourly rate of pay, shorter work week and lower weekly earnings are typical of this group.

Married and adult women with a postsecondary certificate or university degree, working in managerial and administrative, social sciences, teaching, medicine and health, clerical, or service occupations, form much of Cluster Four. Most of these workers have medium-to-long job tenure. Their moderately good weekly earnings are the result of relatively high hourly pay rates but less than full-time work.

Average earnings and hours worked are lower for adult women (Cluster Four) than for their male counterparts (Cluster Two). Weekly earnings for the two "younger" clusters (One and Three) are similar to one another.

How do permanent and non-permanent jobs compare?

Generally, higher rates of pay and more hours of work were offered with permanent jobs in November 1995

(Table 3). As a consequence, the average weekly earnings of workers with permanent jobs were 55% higher than those of workers with non-permanent jobs. As well, each major type of non-wage benefit was available to a higher percentage of workers in permanent jobs (Table 4).

These differences in job characteristics are cited by some theorists as evidence of a division of the labour market into segments with "good jobs" and "bad jobs" (Hipple and Stewart, 1996). They argue that one segment provides supplementary jobs with lower wage rates, fewer hours of work and, consequently,

lower weekly earnings and fewer non-wage benefits than those offered by the other. However, job characteristics other than permanency may also influence these attributes.

Several factors may account for the discrepancies. For instance, the higher concentration of workers with permanent jobs in larger firms, and with union membership or collective agreement coverage, may account for some of their higher pay and hours worked (Table 5).

Occupation also makes a difference. Of all employees with permanent jobs, for example, 16% were in managerial and administrative positions in November 1995, compared with 6% of workers with non-permanent jobs.

Characteristics of workers make a difference

Workers in non-permanent jobs are more likely to be young, single or female, or to have shorter job tenure than workers in permanent jobs (Table 6 and Chart). These differences between workers could explain some of the differences between permanent and non-permanent jobs.

Job permanency is related to weekly hours and earnings

To see how job permanency is related to hourly rate of pay, hours worked

Table 3
Average earnings and hours by job permanency

	Paid workers with	
	Permanent jobs	Non-permanent jobs *
Hourly rate of pay (\$)	15.39	12.70
Usual weekly hours worked	36.9	27.2
Weekly earnings (\$)	579	374

Source: Survey of Work Arrangements, 1995

* Excludes seasonal workers and workers who did not describe their type of non-permanent job.

Table 4
Percentage of workers with non-wage benefits, and type of work schedule, by job permanency

	Paid workers with	
	Permanent jobs	Non-permanent jobs *
	%	
Employer-provided benefits		
Pension plan or group RRSP	55	20
Supplementary health care plan	64	19
Dental care plan	60	16
Paid sick leave	62	20
Paid vacation leave **	78	29
Flexible time schedule	24	22
Work schedule		
Regular daytime	70	52
Regular evening, night or graveyard shift	7	9
Rotating or split shift	11	10
On-call or casual	1	11
Irregular or other schedule	11	18

Source: *Survey of Work Arrangements, 1995*

* Excludes seasonal workers and workers who did not describe their type of non-permanent job.

** See note 8.

and usual weekly pay, it is necessary to control for possible effects due to other job and personal characteristics. This study used three multiple linear regression models to obtain the difference (coefficient) between the expected value of each of the above for each level of the explanatory (independent) variables, and the reference level. (see *Statistical techniques*).

The following interpretation also identifies which other job and personal characteristics were found to have statistically significant relationships with these three dependent variables.

Hourly rate of pay

No statistically significant difference was found for average hourly rate of pay between workers with permanent

jobs and those with non-permanent jobs when other characteristics were held constant. These include age, sex, marital status, education, job tenure, firm size, class of worker, province, industry, occupation, and union membership or collective agreement coverage. The intercept term of \$9.64 (column 1 in Table 7) represents the expected value of hourly rate of pay for the reference group; each subsequent coefficient ($\hat{\beta}$) represents the difference in hourly rate of pay relative to the reference level for each explanatory variable.

Usual number of weekly hours worked

Employees with permanent jobs usually had longer work weeks (roughly six more hours on average) than those with non-permanent jobs when all else

was equal. This difference held across the workforce, which means that for this dependent variable no interactions between independent variables were found. The expected number of hours worked for the reference group was around 29.

Weekly earnings

Although job permanency was not related to hourly rate of pay, it was related to weekly earnings, which were, in turn, a function of hourly rate of pay and number of hours worked. The expected value for the reference group was approximately \$282.

Average weekly earnings of workers in permanent and non-permanent jobs varied by workers' sex and education level. (In other words, these independent variables interacted.) The difference was greater for men than for women. When all other conditions were the same, high school-educated women with permanent jobs earned approximately \$34 more each week than those with non-permanent jobs. Among men, the gap increased by approximately \$61 to a cumulative difference of \$95. The difference between workers in permanent and non-permanent jobs was greater for university graduates than for those with any other level of education.

Related characteristics

A number of other job and personal characteristics had a statistically significant relationship with at least one of the dependent variables.

When all other conditions were equal, hourly rate of pay, weekly hours usually worked, and weekly earnings were each related to job tenure, occupation, industry, union or collective agreement coverage, local firm size, marital status and province. Public workers had higher rates of pay and weekly earnings than private sector workers. As expected, students with jobs had fewer weekly hours and lower weekly earnings than workers not in school. Higher average earnings and longer average hours were

Table 5
Job characteristics by job permanency

	Paid workers with	
	Permanent jobs	Non-permanent jobs *
	%	
Union coverage		
Union member and/or covered by a collective agreement	39	31
Neither union member nor covered by a collective agreement	61	69
Class of worker		
Public employee	18	24
Private employee	82	76
Occupation		
Managerial and administrative	16	6
Professional and technical †	19	29
Clerical	17	16
Sales	8	10
Service	12	16
Primary ††	2	--
Construction	4	5
Transportation	4	3 **
Fabricating, material handling, machining, processing and other crafts	18	13
Industry		
Primary and construction	7	7
Manufacturing	19	9
Transportation, communication and other utilities	8	5
Trade	17	17
Finance, insurance and real estate	6	3 **
Community, business and personal services	36	51
Public administration	7	8
Local firm size		
Under 20 employees	34	43
20 to 99 employees	33	28
100 to 500 employees	22	17
Over 500 employees	11	11

Source: Survey of Work Arrangements, 1995

* Excludes seasonal workers and workers who did not describe their type of non-permanent job.

** Qualified data (see Data sources, concepts and definitions).

† Natural sciences, social sciences, religion, teaching, medicine and health, and artistic occupations.

†† Farming, fishing, forestry and mining.

also more likely for workers who were male, married, university-educated, in a managerial or administrative occupation, or in a long-term job.

Conclusion

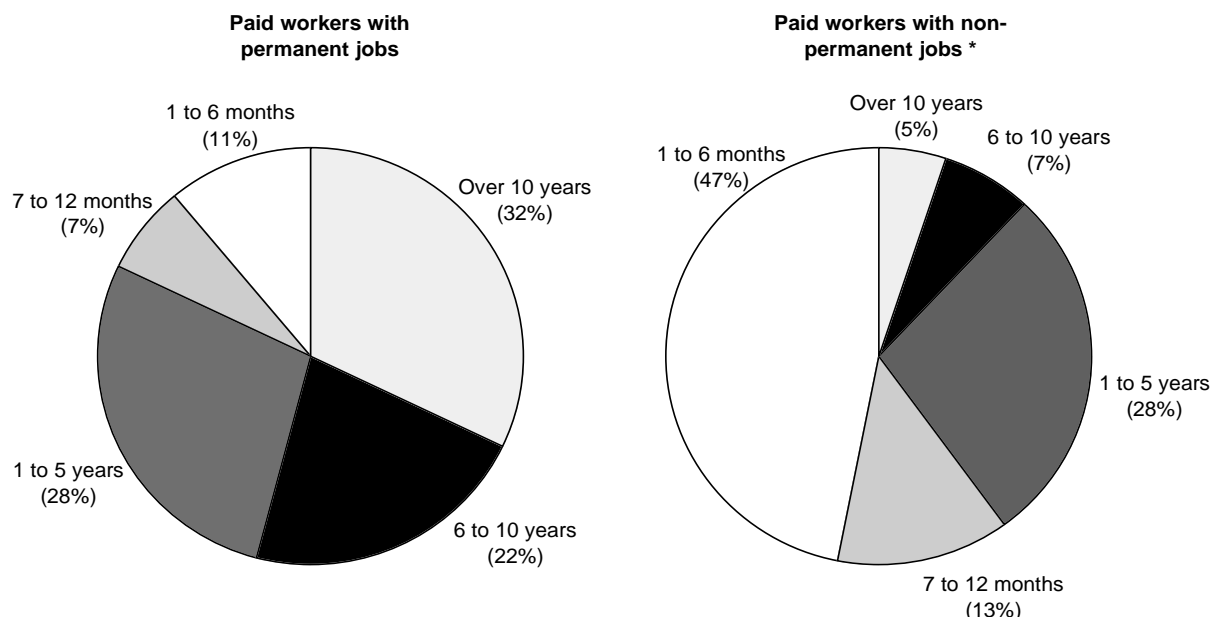
A growing number of workers have temporary jobs. Together with a thriving temporary help services industry and a polarization in job tenure, this suggests that new work arrangements are gaining ground.

According to the 1995 Survey of Work Arrangements, workers with non-permanent jobs included men and women of all ages and levels of education in many different occupations and industries. Generally, adult women in non-permanent jobs had lower averages than adult men for hourly rates of pay, usual number of weekly hours worked, and weekly earnings, while younger women and men had similar averages. Women tended to be concentrated in a narrower range of occupations than did men.

Job permanency does not seem to be related to an employee's hourly rate of pay, but rather to the number of hours usually worked in a week. Because workers in non-permanent jobs have fewer weekly hours of work, they have lower weekly earnings than workers in permanent jobs. The difference in weekly earnings is greater among men than women, and among university graduates. □

Chart

Workers with permanent jobs are more likely to have long job tenure.



Source: Survey of Work Arrangements, 1995

* Excludes seasonal workers and workers who did not describe their type of non-permanent job.

Contingent workers in the United States

The U.S. Bureau of Labor Statistics (BLS) defines contingent work as any job in which an individual does not have an explicit or implicit contract for long-term employment; it is a job structured to be of limited duration (Polivka, 1996). The BLS conducted a special supplementary survey on alternative work arrangements as part of the Current Population Survey (CPS) in February 1995. That survey provided the first measure of contingent workers in the United States using this definition. With various levels of restrictions on the definition, three measures of the contingent workforce were produced.

The broadest definition of contingent workers includes all employees who do not expect their job to last indefinitely, as well as self-employed or independent contractors who have worked as such for a year or less and who expect to continue working this way for only another year or less. According to this definition, six million Americans (5% of the U.S. workforce) are contingent workers. This broad definition is most similar to that of non-permanent jobs used in this study. However, while the BLS definition includes self-employed workers, the SWA does not.

A second BLS measure includes wage and salaried workers and self-employed and independent contractors who expect to be and have been in such employment for one year or less. Some 3% (3.4 million) of the American workforce fit this definition.

The most restrictive BLS definition includes only wage and salaried workers who expect to work in their current jobs for one year or less and who have worked for their current employer for one year or less. Under this definition, 2% or 2.7 million Americans are contingent workers.

Table 6
Selected characteristics of paid workers by job permanency

	Paid workers with	
	Permanent jobs	Non-permanent jobs *
	%	
Men	53	43
Women	47	57
Age		
15 to 16	1	3 **
17 to 19	4	11
20 to 24	9	19
25 to 34	27	28
35 to 44	31	22
45 to 54	20	12
55 to 64	7	4
65 to 69	--	--
Highest level of education		
0 to 8 years	4	4
Some secondary	14	14
High school graduation	23	19
Some postsecondary	9	12
Postsecondary certificate or diploma	32	29
University degree	18	23
Marital status		
Married or common-law union	66	49
Single and never-married	26	46
Other	8	5
School enrolment		
Not enrolled	91	74
Enrolled full- or part-time	8	25
Not applicable †	--	--

Source: Survey of Work Arrangements, 1995

* Excludes seasonal workers and workers who did not describe their type of non-permanent job.

** Qualified data (see Data sources, concepts and definitions).

† Respondents aged 65 years or older were not asked for their enrolment status.

Notes

1 The GSS Cycle 4 was conducted in January and February of 1989, and Cycle 9, over all 12 months of 1994. Comparisons between the two may be affected by seasonal factors.

2 These industries included in Krahn's study are food, beverages and accommodation; recreation; and other personal services.

3 These are paid workers whose main job is not permanent. A paid worker's main job is the one with the greatest number of usual weekly hours of work. In this study, analysis of multiple jobholders is limited to the main job.

4 The redesigned Labour Force Survey began providing monthly estimates of permanent and non-permanent jobs and types of non-permanent jobs in January 1997. Its new data at the time of writing were for the early months of 1997, and thus were not seasonally comparable with the SWA estimates from November 1995.

5 This estimate is qualified (see *Data sources, concepts and definitions*).

6 Seasonal jobs have been an important form of work throughout Canada's labour market history. In 1995, roughly 182,000 or 2% of all paid workers had main jobs that were seasonal. Two out of three non-permanent main jobs in primary industries were seasonal, as were nearly half (47%) of all non-permanent jobs in construction and 39% in transportation. However, many of these employees have been able to count on having work at specific periods of the year. So this study concerns, instead, the more recent emergence of non-permanent main jobs that are not seasonal.

7 For individual workers, weekly earnings are the hourly rate of pay multiplied by the weekly hours of work. An estimated average is calculated for all workers who reported *both* their hourly rate and weekly hours worked. Simply multiplying the averages for hourly rate and hours worked will not necessarily yield the average for reported weekly earnings, however, as some workers did not report their rate of pay (recorded as "not stated").

8 Some workers who were expected to take pay in lieu of vacation time may have responded negatively to the relevant question.

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Table 7
Estimated regression coefficients ($\hat{\beta}$)

Variable	Hourly rate of pay	Usual hours worked	Weekly earnings
	\$		\$
Intercept	9.64	28.55	281.80
Job permanency			
Permanent job	**	5.97	34.03
<i>Reference level: non-permanent job</i>			
Sex			
Male	2.65	4.92	116.89
<i>Reference level: female</i>			
Marital status			
Married and common-law	1.57	0.01 *	56.69
Other	1.12	1.01	53.21
<i>Reference level: single and never-married</i>			
Highest level of education			
0-8 years	-2.27	0.14 *	-60.05 *
Some secondary	-0.90	-0.82	16.11 *
Some postsecondary	0.55	-0.46 *	66.56
Postsecondary certificate or diploma	1.32	0.06 *	62.91
University degree	4.59	2.06	143.44
<i>Reference level: high school graduation</i>			
Industry			
Agriculture and other primary	3.18	3.86 *	170.33
Manufacturing	0.70	4.94	64.76
Construction	2.96	5.12	144.96
Transportation	1.41	2.24 *	85.05
Communication and other utilities	2.00	2.08 *	91.37
Trade	-0.92	-1.62 *	-30.64
Finance, insurance and real estate	1.10	3.52	42.82
Public administration	1.01	4.20	49.05
<i>Reference level: business, community and personal services</i>			
Occupation			
Managerial and administrative	3.69	3.71	193.52
Professional and technical [†]	2.99	0.79	107.53
Sales	0.12 *	0.32 *	12.86 *
Service	-1.28	-0.99	-43.37
Primary ^{††}	-1.37	4.26	-13.39 *
Construction	1.31	1.32	85.89
Transportation	-0.41 *	3.94	24.16 *
Fabricating, material handling, machining, processing and other crafts	0.28 *	1.07	23.89
<i>Reference level: clerical</i>			
Job tenure			
1 to 6 months	-0.61	-1.90	-40.03
7 to 12 months	-0.61	-0.27 *	-26.22
6 to 10 years	1.46	0.42 *	63.01
11 to 20 years	2.70	0.81	117.50
Over 20 years	3.74	1.07	166.78
<i>Reference level: 1 to 5 years</i>			

* Not significant at the $\alpha = .05$ level.

** In the initial estimation of the model, none of the levels for this variable was significant. The variable was excluded and the model was re-estimated.

[†] Natural sciences, social sciences, religion, teaching, medicine and health, and artistic occupations.

^{††} Farming, fishing, forestry and mining.

Table 7
Estimated regression coefficients ($\hat{\beta}$) (concluded)

Variable	Hourly rate of pay	Usual hours worked	Weekly earnings
	\$		\$
Firm size (employees) at location where respondent works			
Under 20	-2.09	-0.59	-94.16
20 to 99	-1.24	0.11 *	-47.35
Over 500	1.37	0.25 *	51.56
<i>Reference level: 100 to 500</i>			
Age			
15 to 19	-0.85	-8.71	-71.08
20 to 24	-1.28	-1.96	-61.94
35 to 44	1.06	-0.80	33.75
45 to 54	1.58	-0.79	59.04
55 to 64	0.43 *	-2.07	-10.64 *
65 to 69	-1.09 *	-6.85	-154.55
<i>Reference level: 25 to 34</i>			
School enrolment			
Enrolled	**	-9.12	-92.45
<i>Reference level: not enrolled</i>			
Province			
Newfoundland	-2.36	1.11	-78.78
Prince Edward Island	-3.27	0.43 *	-118.98
Nova Scotia	-2.92	0.47 *	-107.39
New Brunswick	-2.55	1.15	-83.76
Quebec	-0.98	-0.88	-54.70
Manitoba	-2.10	-0.18 *	-81.50
Saskatchewan	-1.78	-0.55 *	-78.08
Alberta	-1.06	0.71	-30.71
British Columbia	0.95	-0.52 *	24.54
<i>Reference level: Ontario</i>			
Union membership or collective agreement coverage status			
"Yes"	0.65	-0.87	**
<i>Reference level: "no"</i>			
Class of worker			
Public sector employee	1.40	**	50.77
<i>Reference level: private sector employee</i>			
Interaction effects			
Permanent job, male	**	**	61.02
Permanent job, highest level of education			
0 to 8 years	**	**	-21.15 *
Some secondary	**	**	-53.18
Some postsecondary	**	**	-44.83 *
Postsecondary certificate or diploma	**	**	-10.47 *
University degree	**	**	83.29

Source: Survey of Work Arrangements
 * Not significant at the $\alpha = .05$ level.
 ** In the initial estimation of the model, none of the levels for this variable was significant. The variable was excluded and the model was re-estimated.