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Recent Youth Labour Market Experiences in Canada

by

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ABSTRACT

The labour market experiences of Canadian youth improved during the 1980s when measured by the absolute and relative unemployment rate, the participation rate, the employment-to-population ratio, and the incidence of involuntary part-time work. However, with the onset of the 1990-92 recession, youth labour market outcomes have deteriorated considerably. In addition to the difficulties stemming from macroeconomic conditions, young workers face continuing problems getting access to well-paid, entry-level jobs in the goods sector and certain service industries.

During the 1980s, relative annual earnings of young workers fell. This decline occurred in conjunction with a decrease in relative hourly wages. The fall in relative hourly wages, which had earlier been documented for the 1981-86 period, still held in 1989, suggesting that it was not simply a response to cyclical conditions. Decreasing relative hourly wages for young workers were widespread in the 1980s : they occurred within all educational, major industrial, and occupational groups.

There are divergent views on the issue of scarring, i.e. on the extent to which labour market experiences upon entry affect subsequent employment outcomes. A simple tracking exercise done for young workers produces mixed results.

Key words : youth; employment; unemployment; wages; scarring.

Introduction

This paper is meant to provide an overview of the recent labour market experiences of Canadian youth. In the first section, we summarize the basic statistical trends regarding population, labour force, employment, unemployment, and educational attainment. Following this, trends in the relative earnings of young workers are reviewed. In section 3, the scarring issue is addressed. The analysis is summarized in the final section.

1. Youth Labour Force and Employment Trends

Population

The population trends for the 15-24 year age group over the 1966-92 period are summarized in Panel A, Table 1. In absolute numbers, the 15-24 year age group grew rapidly in the 1960s and 1970s, before declining continuously in the 1980s and early 1990s; by 1992, it was 835,000 smaller than it had been at its peak in 1980. In relative terms, the share of the total working age population accounted for by this group actually peaked in 1971 at 26.4 per cent, remained relatively stable at around this level until the late 1970s, and then began falling significantly, reaching 17.7 per cent in 1992. According to population projections, the absolute numbers of youth will not decline further in this decade but there will be a continued slight decrease in relative terms.[1] As we will see, these population trends represent an important factor in understanding the recent labour market experiences of Canadian youth.

Labour Force Participation

Participation rate statistics are shown in Panel B, Table 1. For much of the past quarter century, there was a strong upward trend in the youth participation rate which rose from 56.2 per cent in 1966 to a high of 70.2 per cent in 1989. Note that since then, this rate has dropped five points with the onset of the recession. Both young males and females followed the overall trend although the increase in female participation was particularly dramatic. As well, both the 15-19

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[1] Statistics Canada, Population Projections for Canada, Catalogue 91-520, 1990.

year and 20-24 year groups echoed the overall pattern, with part rate increases until 1989 especially large for the younger group.

The youth participation rate trends have been roughly similar to the aggregate part rate movements; as a consequence, their labour force share has reflected demographic trends, tracking the youth source population share remarkably closely (see Panel C, Table 1). Young workers, as a percentage of the total workforce, peaked in 1974 at 27.2 per cent, remained at around this level for the rest of the 1970s, before falling off precipitously reaching a low of 17.5 per cent in 1992. On the basis of population projections, the decline in the youth share is basically over and the youth share should be relatively stable for the remainder of the decade.

Employment

Employment trends for young workers over the past quarter-century have been largely demographic driven. As a result, the patterns observed for the population and labour force apply here as well. Employment in the 15-24 year age group grew rapidly in the late 1960s and the 1970s followed by no absolute growth and declines in employment share during the 1980s (Panel A, Table 2). Since 1989, with the recession, youth employment has fallen substantially.

Employment-to-population ratios. These ratios, summarized in Panel B, Table 2, reflect trends in the participation rate and the unemployment rate. During the 1980s, the upward trend in the participation rate and the downward trend in the unemployment rate boosted the youth employment-to-population ratio to a peak of 62.3 per cent in 1989. By 1992, however, this ratio had dropped down to 53.5 per cent, almost identical to the 1966 level.

Part-time employment. Youth part-time employment increased significantly during the 1980s both in absolute and in relative terms (Panel C, Table 2). This growth was largely due to a preference on the part of young workers for part-time jobs: between 1981 and 1989, the proportion of 15-24 year-old part-time workers who would have preferred full-time jobs actually decreased from 21.0 per cent to 17.6 per cent. Since 1989, youth part-time employment has

continued to grow strongly despite an overall decline in youth employment; as a consequence, the part-time share of total youth employment increased substantially, reaching 41.4 per cent in 1992. There was an important involuntary component to youth part-time employment growth over the 1989-92 period with the involuntary share increasing from 17.6 per cent to 26.1 per cent.

Employment by industry. Table 3 presents youth employment data by industry for 1981 and 1989, two years that were characterized by similar cyclical conditions. As the table indicates, most young workers were employed, and increasingly so, in the service sector during the 1980s. Within services, youth are particularly over-represented in retail trade and accommodation and food, concentrations that became more marked between 1981 and 1989. Also, note the substantial absolute decline of youth employment in the goods sector and in public administration, health, social services, and education. For earlier generations of young people, these industries typically offered good entry-level opportunities.[2]

Unemployment

The youth unemployment rate has generally risen over the past quarter-century as aggregate unemployment has increased (Panel A, Table 4). During the late 1980s, however, the youth rate did decline until it rose sharply again with the recession of the early 1990s. Young females have lower unemployment rates than young males. The 15-19 year age group has higher rates than the 20-24 year age group although the gap has been narrowing over time.

Youth unemployment rates are always above the national average. During the 1970s and early 1980s when the youth cohort was large, this gap was in the 75-80 per cent range (Panel A, Table 4). The differential fell substantially in the 1980s (reaching 50.7 per cent in 1989) as the youth share of the labour force declined. Nevertheless, the persistently high youth unemployment

[2] The occupational distribution of young workers follows from the pattern of industry employment. They are under-represented in professional, technical, and managerial occupations and processing occupations and over-represented in sales and service positions.

rates suggest a basic problem of transition from school to work.

While young workers may have higher than average unemployment rates, the duration of their unemployment spells is below average (Panel B, Table 4). On the basis of duration of (incomplete) spells, young workers, on average, have reported being unemployed for about six weeks shorter than the unemployed workforce at large. A very small proportion of unemployed youth falls into the "long-term" category. In 1992, this figure was 5.3 per cent (using 53 weeks of continuous unemployment as the standard for "long-term") compared to 11.1 per cent for all age groups.[3]

Educational Attainment

School enrolment rates for youth were on an upward trend in the 1980s and then jumped dramatically in the early 1990s as opportunities in the labour market diminished.[4] The percentage of the 15-24 year-old population enrolled full-time was 32.1 per cent in 1981, 38.4 per cent in 1989, and 53.5 per cent in 1992. Patterns for young men and women have been very similar.[5] With respect to post-secondary education, enrolment growth has been greatest for undergraduate university; in 1982-83, 19.7 per cent of the 18-21 year olds were enrolled full-time as undergraduates and by 1990-91, this figure had risen to 30.1 per cent.[6]

As a result of high enrolment rates and the expansion of post-secondary studies, the

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[3] Similarly, few young people are "discouraged" workers, less than one per cent in 1992 according to Labour Force Survey estimates. Interestingly, the discouraged worker rate in the recession of the early 1980s was twice as high as during the recent recession.

[4] At the same time, secondary school dropout rates appear to have increased in recent years. Current estimates are generally in the 30 per cent range. See Economic Council of Canada, A Lot to Learn (Ottawa: Supply and Services Canada, 1992).

[5] These figures are based on Labour Force Survey data. Note that in 1989, the LFS changed the reference period for estimating enrolment rates.

[6] Statistics Canada, Education in Canada, Catalogue 81-229, selected years.

educational attainment of the youth labour force has continued to rise. In 1981, 74.5 per cent of the labour force aged 15-24 years had only secondary schooling or less while, by 1992, this figure had fallen to 59.4 per cent. On the other hand, the share with a post-secondary certificate, diploma, or degree had increased from 13.2 per cent to 24.9 per cent.

As the educational attainment of the youth labour force has risen, employment outcomes for young people with relatively low levels of schooling have deteriorated. Youth unemployment rates by educational attainment in 1981 and 1989 are shown in Table 5. As one would expect, unemployment rates in both years were negatively related to the amount of schooling. Table 5 also compares these rates to the aggregate unemployment rate in each year. This highlights the growing disadvantage of poorly educated young workers. Between 1981 and 1989, the relative unemployment rate increased for those with secondary schooling or less while the relative rate decreased for those with a post-secondary diploma, certificate, or degree.

International Comparisons

The following points provide a summary comparison of the recent youth labour market experience in Canada with OECD countries:

- The decline in Canada's youth population in the 1980s was the largest among OECD countries.
- Youth participation rates in Canada during the 1980s were above average for the OECD as a whole. As well, Canada was one of the few OECD countries where youth participation rates rose during the 1980s.
- Recently, absolute youth unemployment rates in Canada have been in the middle of the pack within the OECD. However, considering youth unemployment rates relative to aggregate rates, Canada's youth unemployment has been below average. As Table 6 indicates, among a selection of 12 major OECD countries, only Germany and the United Kingdom had lower relative youth unemployment rates in 1991.
- In terms of educational enrolment, Canada is among the highest in the OECD with respect

to post-secondary schooling. However, our performance is not as good when we consider enrolment at the secondary level. In 1987-88, for example, 75.7 per cent of Canadian 17 year-olds were enrolled in an educational institute. While this figure was above the OECD average (71.6 per cent), it was well below that for Germany (81.7 per cent), Japan (89.3 per cent), and the United States (89.0 per cent).[7]

2. Trends in relative earnings of young workers

Table 7 shows how the annual wages and salaries of young workers have evolved between 1967 and 1989 relative to those of workers aged 25 to 64. Figures are presented for samples of full-year, full-time workers[8] as well as for (the larger) samples of individuals receiving wages and salaries in a given year. Relative wages and salaries are measured using both the median and the average wages and salaries. Whatever sample or measure is used, Table 7 shows that relative wages and salaries of young workers decreased substantially after 1981.[9] For instance, annual earnings of young men working full-year full-time amounted to 64 per cent of those of their older counterparts in 1981; in 1986, that figure was 9 percentage points lower (Panel II, Table 7).

One may argue that when unemployment is relatively high (as it was in 1986), young workers are the most likely to experience very weak (if not negative) growth in real earnings and thus, that the decrease in relative earnings which was observed between 1981 and 1986 merely reflects cyclical effects. Table 8 does not support that contention. In 1989, the unemployment rate (7.5 per cent) was equal to that of 1981; yet, relative earnings of young full-year, full-time

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[7] OECD, Employment Outlook, 1992 (Paris: OECD, 1992).

[8] A full-year full-time worker is defined as a person who worked 30 hours or more per week for at least 49 weeks in a given year.

[9] More precisely: a) relative wages and salaries of young workers working full-year full-time were fairly constant between 1967 and 1981 and then dropped between 1981 and 1989, b) relative wages and salaries of young workers receiving wages and salaries in a given year decreased between 1967 and 1973, remained virtually unchanged between 1973 and 1981 and then declined after 1981.

workers were still 8 percentage points lower than those observed in 1981. Thus, the decline in relative earnings of young workers does not appear to have merely reflected the effect of the 1981-82 recession.

Looking at the time path of relative earnings in 1973-75 and 1981-86, Table 8 suggests that the 1980s were somewhat different from the 1970s. Between 1973 and 1975, unemployment rose by one and a half percentage points. Despite this, relative earnings of young men and women did not exhibit any decrease. On the other hand, relative earnings fell between 1981 and 1986, a period in which unemployment increased by two percentage points. Thus, while relative earnings fell substantially after 1981, they remained virtually unchanged following the 1974-75 recession.

The decrease in relative earnings of young individuals observed between 1981 and 1989 was associated with a decrease in their relative unemployment rate. Between 1981 and 1989, young individuals' unemployment rate fell from 2.4 to 1.7 relative to that of older individuals. This suggests that the decline in relative earnings may have increased firms' labour demand for young workers.

Why did relative earnings of young workers fall after 1981? One possibility is that the decrease simply results from an increase in the relative supply of young workers on the labour market. We have seen in the previous section, however, that the youth labour force declined in the 1980s (recall Table 1). Thus, at the very least, the decline in relative earnings of young workers was not a short-run response to an increase in their relative supply.

Annual earnings reflect the influence of both hourly wages and the number of hours worked in a single job or in different jobs during a year. Even when attention is restricted to full-year, full-time workers, a given change in annual earnings may be partly the result of a change in annual hours worked. To check whether changes took place in the pay rates received by young individuals relative to their older counterparts, one needs data on hourly wages. The Survey of Work History (1981) and the Labour Market Activity Survey (1986, 1988, 1989)

provide these data.

Tables 9 to 13 examine how hourly wages of young workers have evolved during the eighties. Since changes in the coding of education levels do not allow comparisons after 1988 [10], results are presented for the period 1981-1988 whenever the education variable is used and for the period 1981-1989 otherwise. Table 9 confirms that the decline in relative earnings observed between 1981 and 1989 was associated with a decrease in relative hourly wages paid to young workers.[11] During that period, relative hourly wages of young men and women holding full-time jobs fell by 14 and 12 percentage points, respectively.[12] The decrease in relative hourly wages was widespread. For both men and women, it occurred within all education levels (Table 10), within all major industrial groups (Table 11), and all major occupational groups (Table 12). Most important, for both men and women, the decline in relative hourly wages persisted between 1981 and 1988 even after removing the effect of education, industry, and occupation (Table 13). This means that the decrease in relative wages of young workers was not simply due to an increase in the proportion of jobs they held in low-wage occupations and industries such as those related

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[10] The categories used to determine individuals' education level in the Labour Force Survey, and thus in the Labour Market Activity Survey, changed in January 1990. The new categories are not comparable to those used previously. Since LMAS is conducted in year t to collect data on hourly wages in year t-1, this change affects individuals' education categories for the reference year 1989. As a result, relative hourly wages by education level can be presented only for the 1981-88 period.

[11] These results also hold for individuals aged 20 to 24. The ratio of average wages and salaries of full-year full-time male (female) workers aged 20 to 24 to those of full-year full-time male (female) workers aged 25 to 64 declined from 0.67 (0.80) to 0.59 (0.72) between 1981 and 1989. During that period, relative hourly wages of men (women) aged 20 to 24 fell from 0.77 (0.82) to 0.62 (0.71) in full-time jobs.

[12] The sample of young workers used in the Survey of Work History consists of individuals aged 15 to 24, whereas that used in the Labour Market Activity Survey (1986, 1988, 1989) consists of individuals aged 16 to 24. As long as individuals aged 15 generally receive lower wages than those aged 16 to 24, this tends to bias relative hourly wages of young workers downwards in 1981. Thus, other things being equal, relative wages of young workers should be higher in 1986, 1988 and 1989 than in 1981. The fact that they are lower, despite this difference in the age composition of the sample, strengthens our findings.

to consumer services.[13]

3. The Scarring Issue

An important question when thinking about youth employment concerns whether early experiences have an impact on an individual's longer-run labour market outcomes. While there is no consensus on the issue, evidence suggesting the possibility of "scarring" has come from recent research. Corak has analyzed repeater use of unemployment insurance among workers in their first twenty years in the labour force and identified a strong relationship between previous unemployment history and the probability of experiencing another claim.[14] Preston, Saiyed, and Burns modelled unemployment over the 1953-90 period and found that the unemployment rate of a cohort of workers at any point in time depended on, among other things, that cohort's history in the labour market.[15]

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[13] The decline in relative annual earnings of young workers in the 1980s is not unique to Canada. Davis shows that between 1975 and 1987, annual earnings of workers aged 20-24 fell relative to those of workers aged 45-49 in the United States and that annual earnings of workers aged 21-24 fell relative to those of workers aged 40-49 in the United Kingdom. See Steven J. Davis, "Cross-Country Patterns of Change in Relative Wages," in Olivier Jean Blanchard and Stanley Fischer (eds.), NBER Macroeconomics Annual, 1992 (Cambridge, MA: MIT Press, 1992), pp. 239-292. Moreover, Gottschalk and Joyce show that during the 1980s, annual earnings of workers aged 25-30 declined relative to those of workers aged 40-55 in Canada as well as in the U.S., the U.K., West Germany, France, and the Netherlands. See Peter Gottschalk and Mary Joyce, "Is Earnings Inequality Also Rising in Other Industrialized Countries?" Boston College, Department of Economics Working Paper No. 223, Boston, 1992.

[14] Corak notes, however, that a "neoclassical" and a "state-dependence" hypothesis exist as candidate explanations for this association. Only the latter would support a scarring implication. See Miles Corak, "Unemployment Insurance Once Again: The Incidence of Repeat Participation in the Canadian U.I. Program," Canadian Public Policy, forthcoming and "Longitudinal Patterns in the Duration of Unemployment Insurance Claims: A Vicious Circle?" Industrial and Labor Relations Review, forthcoming.

[15] R.S. Preston, Haider Saiyed, and Andrew Burns (with the assistance of Pat Nevin), "The Natural Rate, Scarring, Cycles, Shocks, Persistence, and Hysteresis," Economic Council of Canada, Working Paper No. 44, Ottawa, 1992.

Panel data with a long sample period are best suited to analyzing the scarring hypothesis. While such a file does not exist in this country, "synthetic" cohorts can be created using data from the Labour Force Survey disaggregated to single years of age. One can take an age grouping for a given year, say 15-24 year-olds in 1975, add the data in 1976 for the 16-25 year-old group, then the 17-26 age group in 1977, and so on. The ensuing exercise is based on three such cohorts, identified as 15-24 year-old groups in 1975, 1978, and 1983.[16] These years were selected because of their variation in labour market conditions: looking over the entire 1975-92 period when data are available, 1975, 1978, and 1983 had favourable, average, and unfavourable conditions, respectively. The logic of the analysis was to observe whether the subsequent experiences of each cohort reflected the labour market conditions at its time of entry.

Table 14 provides some dataset details and a brief characterization of the general labour market conditions prevailing in each of the starting years. In the exercise, we focused on the three labour market outcomes included in this table. A scarring hypothesis would predict the following outcome trajectories: the highest unemployment rates and part-time incidence rates for the 1983 cohort with the lowest rates for the 1975 group; and the lowest employment-to-population ratios for the 1983 cohort with the highest for the 1975 group.

The limitations of the exercise should be made explicit. First, the cohorts analyzed are not new-entrant cohorts but are age-group proxies. Second, the relatively short length of the panels precludes observation of very long-term effects. Third, the LFS data used offer virtually no detail on individuals other than age and sex and, consequently, the analysis cannot consider a range of potentially relevant information.

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[16] Given our focus on tracking the experiences of a cohort of new entrants over time, a cohort ideally should have been defined in its initial state as a group of new entrants in a specified year. Unfortunately, the LFS data do not make it possible to operationalize such a definition. Accordingly, we based our definition on the 15-24 year age-group proxy. In the analysis, 15-19 year and 20-24 year age groupings were also examined separately. Given typical school attendance patterns, it could be argued that this latter group more closely approximates the new entrant cohort than the 15-24 category. While this may be the case, we found that the tracking analysis was very similar under both definitions.

Figure 1 plots the unemployment rate, employment-to-population ratio, and part-time incidence rate trends in the first decade after entry for the cohorts. Three observations flow from the descriptive evidence presented in these graphs. First, the initial outcomes for the cohorts reflect the prevailing labour markets faced by each upon entry: the 1975 group entering in the most favourable labour market had the best starting outcomes, followed by the 1978 and 1983 groups, respectively. Second, this ranking did not hold through the ten-year period, in itself, then, offering no direct evidence of scarring. Third, the trajectories over the period were clearly influenced by cyclical factors, making it difficult to isolate any scarring effects from overall labour market conditions.

In the next stage of the exercise, simple regressions were estimated with a data series pooling the observations for the three groups. The intent of these regressions was to separate cohort influences from other potentially significant determinants of cohort outcomes. Without attempting to completely specify a labour-outcome model, two factors that have already been discussed were controlled for: cyclical conditions and cohort population share.[17]

The regression for the unemployment rate indicator took the following form:

$$(1)\quad U_{it} = a + b_1 YEAR_{it} + b_2 U3544_t + b_3 POPSH_{it} + b_4 COH78 + b_5 COH83$$

where U_{it} is the unemployment rate of cohort i in year t, $YEAR_{it}$ is the number of years of experience of cohort i in year t, $U3544_t$ is the unemployment rate for the 35-44 year age group in year t, $POPSH_{it}$ is the population share of cohort i in year t, and COH78 and COH83 are dummy variables indicating whether cohort i is the 1978 or 1983 group. Corresponding regressions were run with the other two outcome indicators, substituting the employment-to-population rates and, then, the part-time incidence rates for the unemployment rates in equation 1.

[17] Recall the influence of this latter variable in the statistical description of youth labour market trends presented in the first section of this paper.

A scarring hypothesis would anticipate positive coefficients for b_4 and b_5, with a larger value for b_5, in the unemployment and part-time regressions. Since higher employment-to-population ratios indicate more favourable outcomes, the expected signs for these coefficients would be negative in that regression.

The regression results are presented in Table 15. Focusing on the cohort dummy variables, we get mixed evidence with respect to the scarring hypothesis. In the unemployment rate equation, the estimated coefficients for the 1978 and 1983 cohort variables are unexpectedly negative but statistically insignificant. In each of the other two regressions, however, the COH83 coefficient has the sign predicted by the scarring hypothesis and is significant at the .01 level. Interpreting the results, once aggregate conditions and the benefits of its relatively small size are controlled for, the 1983 cohort had substantially lower employment-to-population rates and higher part-time incidence rates than the 1975 cohort.

4. Conclusion

The labour market experiences of Canadian youth actually improved during the 1980s when measured by the absolute and relative unemployment rate, the participation rate, the employment-to-population ratio, and the incidence of involuntary part-time work. These gains were largely driven by demographic trends as the declining youth share of the total working age population has resulted in a relatively small youth cohort since the beginning of the 1980s. Nevertheless, with the onset of the recession at the end of the decade, youth labour market outcomes have deteriorated considerably. In addition to the difficulties stemming from macroeconomic conditions, young workers face continuing problems getting access to well-paid, entry-level jobs in the goods sector and certain service industries.

During the 1980s, relative annual earnings of young workers fell. This decline occurred in conjunction with a decrease in relative hourly wages. The fall in relative hourly wages, which had earlier been documented for the 1981-86 period, still held in 1989, suggesting that it was not simply a response to cyclical conditions. Decreasing relative hourly wages for young workers

were widespread in the 1980s; they occurred within all educational, major industrial, and occupational groups. This implies that relative wages of young workers did not fall simply in response to a change in their educational, industrial, or occupational distribution of employment.

Finally, this paper has raised the issue of scarring. While there are divergent views on the extent to which labour market experiences upon entry affect subsequent employment outcomes, there is a growing body of research that is at least consistent with the scarring hypothesis. A simple tracking exercise reported here, however, produced mixed results. Certainly, given the difficult times many young workers are experiencing in the labour market, scarring should emerge as an important issue for researchers and policy-makers.

Table 1
Youth Population and Labour Force Trends
Canada, 1966-92, Selected Years

		1966	1971	1976	1981	1986	1989	1992
A.	POPULATION:							
	Population, 15-24 year olds (000's)	3221	3927	4391	4537	4075	3807	3719
	15-24 year-olds as % share of total working age (15-64) population	24.6	26.4	26.3	24.7	21.0	18.9	17.7
B.	PARTICIPATION RATES:							
	Both sexes, 15-24	56.2	56.7	62.4	67.8	68.4	70.2	65.1
	Males, 15-24 years	64.1	62.7	67.9	72.3	71.0	73.0	67.0
	Females, 15-24 years	48.4	50.8	56.8	63.2	65.7	67.4	63.1
	Both sexes, 15-19 years	n/a	42.9	49.8	55.7	54.2	58.6	52.0
	Both sexes, 20-24 years	n/a	72.4	76.2	79.7	80.6	81.0	77.4
C.	LABOUR FORCE:							
	Labour force, 15-24 year-olds (000's)	1810	2228	2740	3074	2787	2674	2421
	15-24 year olds as 7% share of total labour force	24.2	25.8	26.8	25.8	21.9	19.8	17.5

Source: Statistics Canada, Historical Labour Force Statistics, 1992, Catalogue 71-201, February, 1993.

Table 2
Summary of Employment Trends for Youth
Canada, 1966-92, Selected Years

	1966	1971	1976	1981	1986	1989	1992
A. EMPLOYMENT							
Employment, 15-24 year-olds (000's)	1708	1982	2391	2667	2367	2372	1989
15-24 year-olds as % share of total employment	23.6	24.5	25.2	24.2	20.5	19.0	16.3
B. EMPLOYMENT-TO-POPULATION RATIOS							
Both sexes, 15-24 years	53.0	50.5	54.5	58.8	58.1	62.3	53.5
Males, 15-24 years	60.1	55.1	58.9	62.1	59.4	64.0	53.4
Females, 15-24 years	46.0	45.8	50.0	55.4	56.8	60.6	53.5
Both sexes, 15-19 years	n/a	36.4	42.0	46.6	45.1	50.9	41.7
Both sexes, 20-24 years	n/a	66.3	68.2	70.8	69.3	72.8	64.5
C. PART-TIME EMPLOYMENT							
Part-time employment 15-24 year-olds (000's)	n/a	n/a	489	652	762	796	823
As a % share of total employment, 15-24 year-olds	n/a	n/a	20.5	24.4	32.2	33.6	41.4
Involuntary part-time employment as % share of total part-time employment, 15-24 year olds	n/a	n/a	n/a	21.0	26.2	17.6	26.1

Source: See Table 1.

Table 3
Youth Employment by Industry
Canada, 1981 and 1989

	Employment 15-24 years (000's)		% distribution	
	1981	1989	1981	1989
All industries	2667	2372	100.0	100.0
Goods sector	809	575	30.3	24.2
Service sector	1858	1797	69.7	75.8
Transportation, communications	142	95	5.3	4.0
Wholesale trade	113	90	4.2	3.8
Retail trade	498	539	18.7	22.7
Finance, insurance, real estate	144	110	5.4	4.6
Community, business, personal services	824	876	30.9	36.9
Amusement, recreation	57	59	2.1	2.5
Services to business management	102	108	3.8	4.6
Personal household services	100	97	3.7	4.1
Accommodation, food	269	325	10.1	13.7
Miscellaneous services	55	70	2.1	3.0
Education	76	66	2.8	2.8
Health, social services	160	147	6.0	6.2
Religious organizations	5	4	0.2	0.2
Public administration	137	87	5.1	3.7

Source: Statistics Canada, Labour Force Annual Averages, 1991, Catalogue 71-200.

Table 4
Summary of Unemployment Trends for Youth, Canada, 1966-92, Selected Years

		1966	1971	1976	1981	1986	1989	1992
A.	UNEMPLOYMENT RATE							
	Both sexes, 15-24 years	5.6	11.1	12.7	13.2	15.1	11.3	17.8
	Males, 15-24 years	6.3	12.0	13.2	14.1	16.4	12.4	20.2
	Females, 15-24 years	4.8	9.8	12.1	12.3	13.6	10.1	15.2
	Youth unemployment rate as a % of the national rate	164.7	179.0	178.9	176.0	158.9	150.7	157.5
B.	UNEMPLOYMENT DURATION							
	Average number of weeks for (incomplete) spells:							
	15-24 years	n/a	n/a	n/a	13.0	14.4	11.3	15.8
	All ages	n/a	n/a	n/a	15.1	20.3	17.9	22.6

Source: See Table 1.

Table 5
Youth Unemployment Rates, Absolute and Relative, by Educational Attainment, Canada, 1981 and 1989

	Unemployment rate, 15-24 years		As a % of aggregate unemployment rate	
	1981	1989	1981	1989
Educational attainment				
0-8 years	22.1	23.2	167.4	205.3
9-13 years	14.2	12.7	107.6	112.4
Some post-secondary	10.2	8.6	75.8	76.1
Post-secondary diploma, certificate	8.0	6.6	60.6	58.4
University degree	7.4	5.9	56.1	52.2
Aggregate unemployment rate	13.2	11.3	100.0	100.0

Source: See Table 3.

Table 6
Youth Unemployment Rates, Absolute and Relative, Selected OECD Countries, 1991

	Unemployment rate, 15-24 year-olds	As a % of aggregate unemployment rate
Canada	16.2	157.3
Australia	17.2	179.2
France	19.5	207.4
Germany (1989)	6.4	116.4
Italy	30.8	280.0
Japan	4.5	214.3
Netherlands	10.5	178.0
Norway	12.8	232.7
Spain	31.1	190.8
Sweden	6.1	225.9
United Kingdom	12.9	155.4
United States	12.9	192.5

Source: OECD, Employment Outlook, 1992.

Table 7
Ratio of Wages and Salaries of Individuals Aged 16 to 24 to Those of Individuals Aged 25 to 64, 1967-89, Selected Years

	1967	1973	1975	1981	1986	1988	1989
I. Ratio of median wages and salaries							
A. Individuals with positive wages and salaries:							
- Men	0.36	0.31	0.32	0.31	0.22	0.22	0.23
- Women	0.61	0.47	0.48	0.48	0.38	0.35	0.36
B. Full-year full-time workers with positive wages and salaries:							
- Men	0.66	0.66	0.67	0.67	0.53	0.55	0.58
- Women	0.83	0.81	0.83	0.82	0.68	0.70	0.73
II. Ratio of average wages and salaries							
A. Individuals with positive wages and salaries:							
- Men	0.44	0.38	0.38	0.41	0.34	0.33	0.34
- Women	0.69	0.60	0.62	0.59	0.49	0.49	0.49
B. Full-year full-time workers with positive wages and salaries:							
- Men	0.62	0.62	0.62	0.64	0.55	0.55	0.56
- Women	0.76	0.76	0.79	0.78	0.67	0.71	0.71

Source : Survey of Consumer Finances.

Table 8
Ratio of Average Wages and Salaries of Individuals Aged 16 to 24 to Those of Individuals Aged 25 to 64 (Full-year Full-time Workers) and Selected Statistics, 1967-89, Selected Years

	1967	1973	1975	1981	1986	1988	1989
I. Ratio of average wages and salaries:							
- Men	0.62	0.62	0.62	0.64	0.55	0.55	0.56
- Women	0.76	0.76	0.79	0.78	0.67	0.71	0.71
II. Selected statistics							
Unemployment rate (%) :							
a) All individuals	3.8	5.5	6.9	7.5	9.5	7.8	7.5
b) Men 25+	3.0	3.4	4.3	4.8	7.6	6.7	6.1
c) Individuals 25+	2.9	4.1	5.0	5.6	8.0	6.7	6.6
d) Individuals 15-24	6.5	9.6	12.0	13.2	15.1	12.0	11.3
e) = d / c	2.2	2.3	2.4	2.4	1.9	1.9	1.7
Proportion of individuals aged 15-24 in the labour force (%)	24.7	26.6	27.1	25.8	21.9	20.4	19.8
Number of individuals aged 15-24 in the labour force ('000)	1,911	2,468	2,701	3,074	2,787	2,714	2,674

Source : Survey of Consumer Finances : Canadian Economic Observer - Historical Supplement 1990/91, p. 36; Historical Labour Force Statistics (1992), p. 2-3.

Table 9
Ratio of Hourly Wages of Individuals Aged 16 to 24 to Hourly Wages of Individuals Aged 25 to 64, 1981-89, Selected Years

	1981	1986	1988	1989
I. Ratio of median hourly wages[1]				
A) All jobs held by paid workers				
- Men	0.68	0.54	0.56	0.54
- Women	0.76	0.63	0.67	0.64
B) Full-time jobs held by paid workers				
- Men	0.70	0.57	0.59	0.57
- Women	0.78	0.64	0.71	0.66
II. Ratio of average hourly wages[1]				
A) All jobs held by paid workers				
- Men	0.71	0.55	0.57	0.56
- Women	0.79	0.65	0.66	0.66
B) Full-time jobs held by paid workers				
- Men	0.72	0.57	0.59	0.58
- Women	0.80	0.66	0.68	0.68

Source : Survey of Work History (1981); Labour Market Activity Survey (1986, 1988, 1989).

[1] Median hourly wages are calculated so as to partition the distribution of yearly hours worked into two halves. Average hourly wages are calculated by weighting each job by the number of hours worked in a year. Thus, for both the median and the average wages, the unit of analysis is the number of hours worked in a year in the set of jobs selected.

Table 10
Average Hourly Wages of Individuals Aged 16 to 24 Relative to Those of Individuals Aged 25 to 64, by Education : Full-time Jobs, 1981-88, Selected Years

	1981	1986	1988
Men:			
None or elementary	0.79	0.62	0.71
High school (some or completed)	0.74	0.61	0.62
Some post-secondary	0.70	0.56	0.57
Post-secondary certificate or diploma	0.77	0.63	0.65
University degree	0.71	0.50	0.54
All education levels	0.72	0.57	0.59
Women:			
None or elementary	0.78	0.61	0.72
High school (some or completed)	0.81	0.69	0.74
Some post-secondary	0.96	0.62	0.64
Post-secondary certificate or diploma	0.78	0.72	0.74
University degree	0.74	0.64	0.63
All education levels	0.80	0.66	0.68

Source : Survey of Work History (1981); Labour Market Activity Survey (1986, 1989).

Table 11
Average Hourly Wages of Individuals Aged 16 to 24 Relative to Those of Individuals Aged 25 to 64, by Major Industrial Group : Full-time Job, 1981-89, Selected Years

	1981	1986	1989
Men:			
Agriculture	0.75	0.67	0.72
Forestry and Mining	0.89	0.67	0.65
Construction	0.74	0.63	0.64
Manufacturing	0.78	0.63	0.67
Distributive Services	0.76	0.64	0.63
Business Services	0.65	0.53	0.49
Consumer Services	0.76	0.63	0.61
Public Services	0.66	0.55	0.61
All industries	0.72	0.57	0.58
	1981	1986	1989
Women:			
Agriculture	1.04	0.76	0.86
Forestry and Mining	0.89	0.79	0.75
Construction	-	-	-
Manufacturing	0.88	0.76	0.83
Distributive Services	0.82	0.71	0.74
Business Services	0.82	0.73	0.72
Consumer Services	0.94	0.75	0.76
Public Services	0.77	0.68	0.68
All industries	0.80	0.66	0.68

Source : Survey of Work History (1981); Labour Market Activity Survey (1986, 1989).

Table 12
Average Hourly Wages of Individuals Aged 16 to 24 Relative to Those of Individuals Aged 25 to 64, by Major Occupational Group : Full-time Job, 1981-89, Selected Years

	1981	1986	1989
Men:			
Professionals and Managers	0.67	0.50	0.53
Natural and Social Sciences	0.71	0.54	0.52
Clerical	0.73	0.58	0.62
Sales	0.74	0.52	0.53
Services	0.69	0.59	0.61
Primary and Processing	0.78	0.65	0.66
Construction	0.77	0.64	0.63
Other	0.80	0.68	0.64
All occupations	0.72	0.57	0.58
Women:			
Professionals and Managers	0.79	0.68	0.65
Natural and Social Sciences	0.90	0.68	0.67
Clerical	0.85	0.73	0.75
Sales	0.86	0.68	0.65
Services	0.84	0.74	0.75
Primary and Processing	0.93	0.76	0.88
Construction	-	-	-
Other	0.89	0.66	0.80
All occupations	0.80	0.66	0.68

Source : Survey of Work History (1981); Labour Market Activity Survey (1986, 1989).

Table 13
Average Hourly Wages of Individuals Aged 16 to 24 Relative to Those of Individuals Aged 25 to 64 (%) : Full-time Jobs. Regression results[1] :

	1981	1986	1988
Men	83.1	74.4	74.5
Women	87.0	77.2	81.4

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[1] The dependent variable is the natural logarithm of hourly wages. Regressors include a constant term, one dummy for age (age1624 = 1 if person is aged 16 to 24, 0 otherwise), one dummy for marital status, four dummies for education, seven dummies for major industrial groups, seven dummies for major occupational groups, one dummy for union status and nine dummies for provinces. The categories "aged 25 to 64", "not married", "no schooling or elementary", "manufacturing", "clerical occupations", "non unionized" and "Quebec" are the reference groups. Regressions are run separately for each year and for men and women, using ordinary least squares. Each job is weighted by the number of hours worked during the year. The figures presented in this table equal the antilog of the age coefficient, expressed as a percentage. For instance, age1624 equals -0.1853 for men in 1981. Thus, relative wages of young men equal 83.1 %, i.e. exp(-0.1853) in 1981. All age coefficients are statistically significant at the 0.1 % level (two-tailed test).

Table 14
Summary of 15-24 Year-Old Entry Cohorts Sampled

Cohort	Entry Year	Initial Labour Market Conditions			Number of Years of Data	Dates of First 10 Years
		U-rate (%)	Emp-to-Pop (%)	Part-Time Share of Employ.		
Favourable conditions	1975	6.9	56.9	10.6	18	1975-84
Average conditions	1978	8.3	57.5	12.1	15	1978-87
Unfavourable conditions	1983	11.8	56.8	15.4	10	1983-92

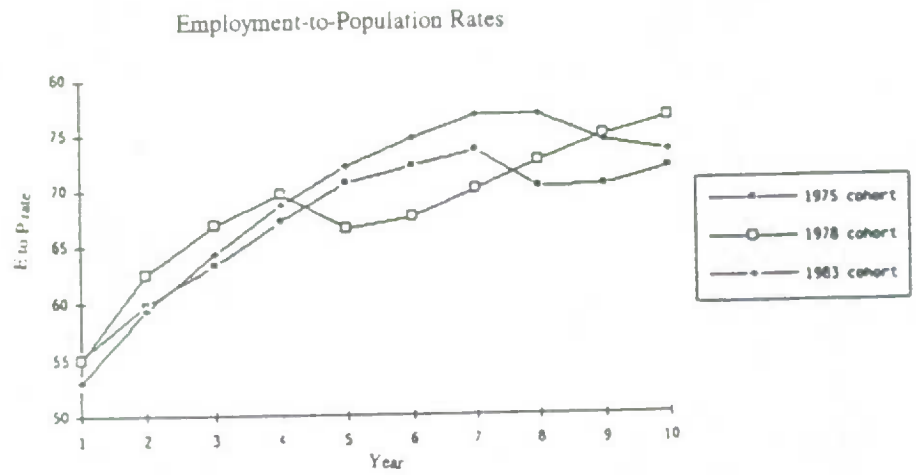
Source: Labour Force Survey

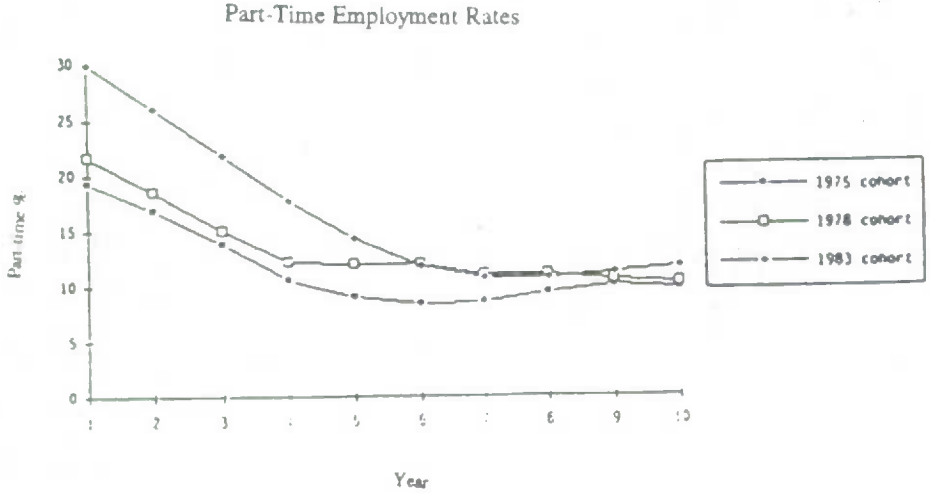
Table 15
Regression Results for Estimating Cohort Effects on Labour Market Outcomes[1]

	Dependent Variable		
	(1) Cohort Unemployment rate	(2) Cohort E-to-P ratio	(3) Cohort Part-time rate
Independent Variables			
Year	-0.58	-0.25	0.66
	(-5.57)	(-0.72)	(1.38)
Unemployment rate, 35-44 year olds	1.63		
	(15.10)		
E-to-P ratio, 35-44 year olds		1.61	
		(5.38)	
Part-time incidence, 35-44 year olds			2.47
			(2.33)
1978 cohort	-0.36	1.23	-0.98
	(-1.26)	(-1.17)	(-0.74)
1983 cohort	-0.94	-9.99	12.89
	(-1.04)	(-3.28)	(3.13)
Cohort population share	0.28	-2.94	6.06
	(0.67)	(-2.11)	(2.80)
Intercept	-1.47	20.99	-160.81
	(-0.14)	(0.46)	(-2.62)
R-square	0.93	0.88	0.55
F	99.75	52.43	9.14
N	43	43	43

[1] T-statistics in parentheses.

Figure 1
Labour Market Outcomes, First Ten Years, 15-24 Year Cohorts in 1975, 1978 and 1983





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