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Full-time Employment, 1976 to 2014

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- . not available for any reference period
- .. not available for a specific reference period
- ... not applicable
- 0 true zero or a value rounded to zero
- 0^s value rounded to 0 (zero) where there is a meaningful distinction between true zero and the value that was rounded
- ^P preliminary
- ^r revised
- X suppressed to meet the confidentiality requirements of the *Statistics Act*
- ^E use with caution
- F too unreliable to be published
- * significantly different from reference category ($p < 0.05$)

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Full-time Employment, 1976 to 2014

by René Morissette, Feng Hou, and Grant Schellenberg, Social Analysis and Modelling Division

This *Economic Insights* article addresses three questions: (1) How has the full-time employment rate—the percentage of the population employed full time—evolved since the mid-1970s overall? (2) How has the full-time employment rate changed across age groups, education levels, sex, and regions? (3) To what extent have movements in full-time employment rates been driven by changes in the socio-demographic characteristics of Canadians and by changes in labour market participation rates, unemployment rates, and part-time employment rates? The study combines data from the Labour Force Survey, the Census of Population, the Survey of Work History of 1981, and the National Household Survey of 2011 to examine these issues. Attention is restricted to individuals who are aged 17 to 64 and who are not full-time students.¹

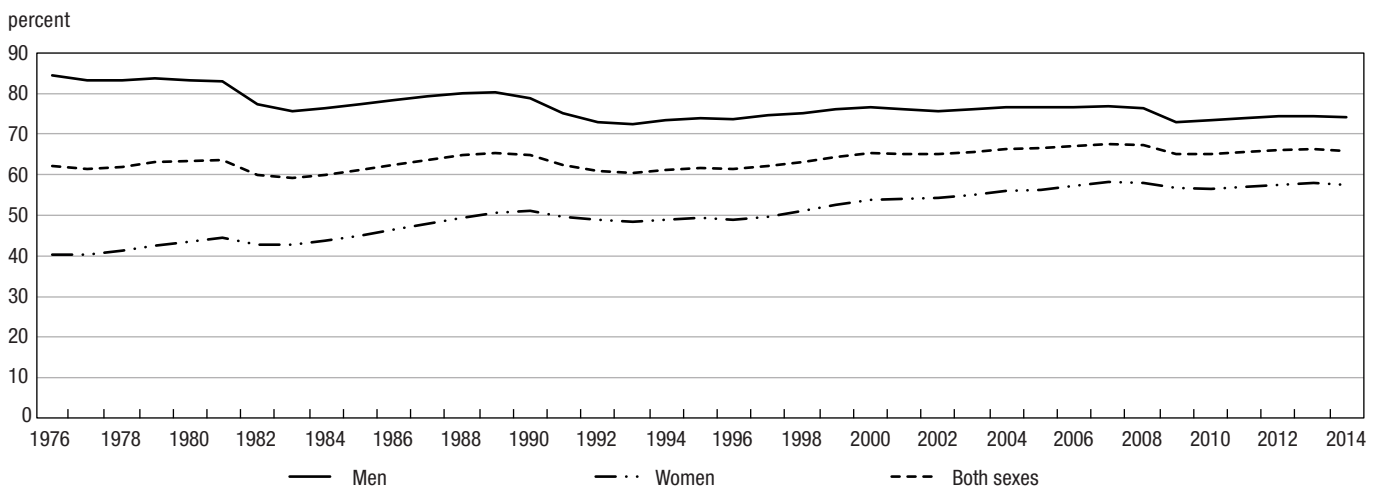
Introduction

Full-time employment is an important labour market indicator from the perspective of both labour supply and demand. On the supply side, full-time jobs are the main channel through which working-age Canadians generate income and are a key determinant of financial well-being. Full-time employment also reveals information about the success of some groups in the labour market. For groups who have a strong attachment to the labour market, the proportion employed full time, along

with the unemployment rate, is an important dimension along which success can be gauged. On the demand side, the creation of full-time jobs is one indicator of economic performance, with commentators often drawing attention to the share of employment growth accounted for by full-time jobs.

The full-time employment rate is defined as the share of the total population aged 17 to 64 employed at least 30 hours per week in their main job (i.e., the job involving the greatest numbers of weekly hours).² It may have changed over the last few

Chart 1
Percentage of population employed full time in their main job, by sex, 1976 to 2014



Note: The population consists of individuals aged 17 to 64 who are not full-time students. Full-time employment is defined as working usually 30 hours or more per week. The main job is the job with the greatest number of weekly work hours.

Source: Statistics Canada, Labour Force Survey, 1976 to 2014.

1. Full-time students are excluded because the vast majority of them are not available for full-time work and thus, are quite unlikely to be employed full time. Individuals aged less than 17 are excluded because compulsory schooling laws in many provinces require them to attend school full time.

2. Trends in full-time employment rates are shown using a full-time employment concept based on usual hours worked in the main job. The definition of usual hours changed with the re-design of the Labour Force Survey (LFS) in 1997. As the *Guide to the Labour Force Survey* (p. 18) states: "Prior to January 1997, usual hours were the number of hours usually worked by the respondent in a typical week, regardless of whether they were paid. Beginning January 1997, usual hours for employees refer to their normal paid or contract hours, not counting any overtime." To ensure that the findings of the study are not affected by this definitional change, full-time employment rates based on actual hours worked during the reference week were also computed (excluding from the computation of these alternative rates individuals who were employed but absent from work during the reference week). All of the conclusions obtained regarding trends in full-time employment rates hold under these alternative full-time employment rates.



decades for various reasons. For example, employers' propensity to offer full-time jobs may have increased or decreased in response to changing economic conditions and the competitive environments in which they operate. Evolving preferences and attitudes, such as the desire to balance work and family, may have increased preferences for part-time employment, while evolving transitions over the life course, such as school-to-work transitions or retirement, may have affected full-time employment rates within age groups.

The trends

In aggregate, the percentage of people employed full time has increased slightly since the mid-1970s. Of all individuals aged 17 to 64 who were not attending school full time, 66% were employed full time as employees or self-employed workers in 2014, up from 62% in 1976 (Table 1).³ The full-time employment rate reached a high of 68% in 2007, prior to the last recession, following a secular increase in the percentage of women holding full-time jobs (Chart 1).

Indeed, the overall increase observed since the mid-1970s masks divergent trends among men and women. The proportion of men working full time fell by 10 percentage points from 1976 to 2014. Virtually all this decline occurred between the mid-1970s and the early 1990s, with the rate remaining around 75% since then (Chart 1). In contrast, the full-time employment rate of women increased by 17 percentage points over the 1976-to-2014 period, rising from 40% to 57%.

These aggregate trends also conceal important differences across age groups. In particular, large declines in full-time employment have been observed among youth (again excluding full-time students). From 1976 to 2014, the full-time employment rate declined by about 18 percentage points among men aged 17 to 24 and by about 11 percentage points among women in that age group (Table 2).⁴ A substantial portion of these declines occurred between 2007 and 2014 (Chart 2). A similar pattern was evident among men aged 25 to 29, with the full-time employment rate declining by 10 percentage points from 1976 to 2014. About two-fifths of that decline occurred between 2007 and 2014. The full-time employment rate of women aged 25 to 29 also declined in recent years, offsetting some of the gains observed earlier.⁵

In addition to declines among youth, the full-time employment rate fell among men in their 'prime' working years, with an 8-percentage-point drop observed among men aged 30 to 54. As was the case for younger men, the rate fell substantially between the mid-1970s and the early 1990s (Chart 3).

An even larger decline was observed among men aged 55 to 64, at least until the mid-1990s.⁶ Among women aged 25 or older, substantial increases in the full-time employment rate were observed.

Quite clearly, the shares of youth and of men engaged in full-time employment fell since the mid-1970s. While one might view the declines among younger and older male workers as consequences of changing life course or retirement transitions, it is not obvious what might account for the decline among men aged 30 to 54 (Chart 3).

Table 1
Percentage of population employed full time in their main job, by sex, 1976 to 2014

| | Percentage of population aged 17 to 64 employed full time as | | Percentage of population aged 25 to 54 employed full time as | |
|-------------------|--|----------------------------|--|----------------------------|
| | Employees | Employees or self-employed | Employees | Employees or self-employed |
| | percent | | | |
| Both sexes | | | | |
| 1976 | 55.1 | 62.1 | 55.7 | 64.0 |
| 1981 | 56.3 | 63.6 | 57.7 | 66.6 |
| 1989 | 56.8 | 65.4 | 60.6 | 70.4 |
| 1992 | 52.3 | 61.0 | 57.0 | 66.8 |
| 1995 | 52.6 | 61.7 | 57.7 | 67.9 |
| 1997 | 52.2 | 62.1 | 57.2 | 68.3 |
| 2007 | 57.6 | 67.6 | 63.3 | 74.3 |
| 2014 | 56.8 | 65.8 | 63.4 | 73.1 |
| Men | | | | |
| 1976 | 72.8 | 84.4 | 76.2 | 89.8 |
| 1981 | 71.0 | 82.9 | 74.2 | 88.5 |
| 1989 | 67.1 | 80.2 | 71.4 | 86.2 |
| 1992 | 59.9 | 73.0 | 65.2 | 79.8 |
| 1995 | 60.6 | 74.0 | 66.1 | 80.9 |
| 1997 | 60.1 | 74.6 | 65.3 | 81.3 |
| 2007 | 62.8 | 76.9 | 68.4 | 83.8 |
| 2014 | 61.6 | 74.2 | 68.4 | 82.0 |
| Women | | | | |
| 1976 | 37.7 | 40.2 | 35.2 | 38.0 |
| 1981 | 41.7 | 44.4 | 41.0 | 44.5 |
| 1989 | 46.6 | 50.6 | 49.7 | 54.6 |
| 1992 | 44.7 | 49.0 | 48.9 | 53.8 |
| 1995 | 44.7 | 49.5 | 49.4 | 54.9 |
| 1997 | 44.2 | 49.6 | 49.2 | 55.4 |
| 2007 | 52.4 | 58.2 | 58.2 | 64.7 |
| 2014 | 52.0 | 57.4 | 58.4 | 64.2 |

Note: The population consists of individuals aged 17 to 64 who are not full-time students.

Full-time employment is defined as working usually 30 hours or more per week. The main job is the job with the greatest number of weekly work hours.

Source: Statistics Canada, Labour Force Survey, 1976 to 2014.

3. The percentage of individuals holding full-time jobs as employees increased from 55% to 57%.

4. Youth unemployment rates were fairly similar in 1976 and 2014. Of all men aged 17 to 24 who were not full-time students, 14.3% were unemployed in 2014, compared with 13.5% in 1976. The unemployment rates of women aged 17 to 24 were 11.2% in 2014 and 11.8% in 1976.

5. For a detailed analysis of youth labour market outcomes, see Galarnau, Morissette and Usalca (2013) and Bernard (2013).

6. As will be shown below, the drop in the full-time employment rate of men aged 55 to 64 from the mid-1970s to the mid-1990s resulted mainly from falling labour market participation. Subsequently, the participation rate and full-time employment rate of this group increased. See Schirle (2008) for an analysis of the factors underlying the rise in labour force participation rates of men aged 55 to 64 since the mid-1990s.

Table 2
Percentage of population employed full time in their main job, by age group and sex, 1976 to 2014

| | Percentage of men employed full time as | | Percentage of women employed full time as | |
|---------------------------------|---|----------------------------|---|----------------------------|
| | Employees | Employees or self-employed | Employees | Employees or self-employed |
| | percent | | | |
| Population aged 17 to 24 | | | | |
| 1976 | 73.0 | 76.8 | 57.2 | 58.7 |
| 1997 | 58.7 | 62.3 | 43.7 | 45.6 |
| 2007 | 64.8 | 67.6 | 53.6 | 54.9 |
| 2014 | 56.8 | 59.1 | 47.1 | 48.0 |
| 1976 to 2014 | -16.2 | -17.7 | -10.2 | -10.7 |
| Population aged 25 to 29 | | | | |
| 1976 | 81.2 | 89.1 | 42.5 | 44.3 |
| 1997 | 70.5 | 79.4 | 55.6 | 59.1 |
| 2007 | 74.1 | 82.8 | 64.7 | 68.3 |
| 2014 | 71.2 | 78.8 | 61.4 | 64.9 |
| 1976 to 2014 | -10.1 | -10.2 | 18.9 | 20.6 |
| Population aged 30 to 54 | | | | |
| 1976 | 74.7 | 90.0 | 33.0 | 36.1 |
| 1997 | 64.4 | 81.6 | 48.1 | 54.7 |
| 2007 | 67.5 | 84.0 | 57.1 | 64.1 |
| 2014 | 67.9 | 82.6 | 57.8 | 64.1 |
| 1976 to 2014 | -6.8 | -7.5 | 24.8 | 28.0 |
| Population aged 55 to 64 | | | | |
| 1976 | 56.8 | 70.2 | 20.3 | 22.8 |
| 1997 | 34.3 | 49.6 | 18.9 | 23.1 |
| 2007 | 40.8 | 56.9 | 30.8 | 36.3 |
| 2014 | 43.1 | 58.3 | 34.8 | 40.8 |
| 1976 to 2014 | -13.6 | -11.9 | 14.5 | 18.1 |

Note: The population consists of individuals who are not full-time students. Full-time employment is defined as working usually 30 hours or more per week. The main job is the job with the greatest number of weekly work hours.

Source: Statistics Canada, Labour Force Survey, 1976 to 2014.

Decomposing the trends: an accounting exercise

One way to shed light on this issue is to decompose changes in full-time employment rates into three components. In an accounting sense, the percentage of men employed full time may have dropped because proportionately: (a) fewer of them were participating in the labour market, i.e., were employed or actively looking for work; (b) fewer of those participating in the labour market were employed; and/or (c) more of those employed worked part time. In other words, men's full-time employment rate may have fallen because of a decline in their labour market participation rate, an increase in their unemployment rate, or an increase in the incidence of part-time employment.⁷

Table 3 quantifies the contribution of these three components. It shows that almost 40% of the decline in the full-time employment rate of men aged 30 to 54 observed from 1976 to 2014 was due to a decline in their labour force participation⁸ while 41% was due to an increase in the relative importance of part-time employment. The remaining portion (almost 20%) was due, in an accounting sense, to increases in unemployment. Qualitatively similar findings hold for men aged 25 to 29 and 55 to 64.

In contrast, rising rates of labour force participation were the main factor behind the rise in the full-time employment rates of women aged 25 and over. Increasing labour force participation accounted for 85% of the increase in the full-time employment rate of women aged 30 to 54 observed from 1976 to 2014. The story was much the same among women aged 25 to 29 and 55 to 64.

Among youth, declines in the full-time employment rate were largely the result of the increasing incidence of part-time employment. This component contributed to almost three-quarters of the decline in full-time employment among men aged 17 to 24 and for more than the entire decline observed among young women. For young women, the downward pressure that rising part-time employment exerted on their full-time employment rate more than offset the upward pressure resulting from rising labour force participation.

A separate analysis of the 1976-to-1997 period and the 1997-to-2014 period reveals interesting patterns. As Table 2 and Chart 3 showed, the full-time employment rates of men aged 25 to 29 and of men aged 30 to 54 changed very little from 1997 to 2014. The same was true for men overall.⁹ Second, changes in the labour market participation of men aged 55 to 64 accounted for about two-thirds of the substantial decline in their full-time employment rate from 1976 to 1997 and almost entirely for the more modest increase in their full-time employment rate afterwards. Declines in the participation rate of men aged 17 to 24 contributed to about half of the relatively small drop in their full-time employment rate from 1997 to 2014.

Considering the entire 1976-to-2014 period, declines in participation rates and in the incidence of full-time employment were the two main factors underlying the drop in men's full-time employment rates. Rising part-time employment drove the entire decline in the full-time employment rate of women aged 17 to 24. Because rising participation rates accounted for most of the increase in adult women's full-time employment rates from 1976 to 2014 and has been the subject of much scholarly research,¹⁰ the remainder of this article focuses on the declines observed among men and youth.

7. Full-time employment rates are the product of three components: (1) the ratio of full-time employment to total employment, (2) the ratio of total employment to the labour force (one minus the unemployment rate); and (3) the labour force / population ratio (the participation rate). Taking the logarithm of full-time employment rates and first-differencing the resulting logarithmic values yields an additive decomposition of the percentage change in full-time employment rates into the (first-differenced logarithmic values of the) three aforementioned components.

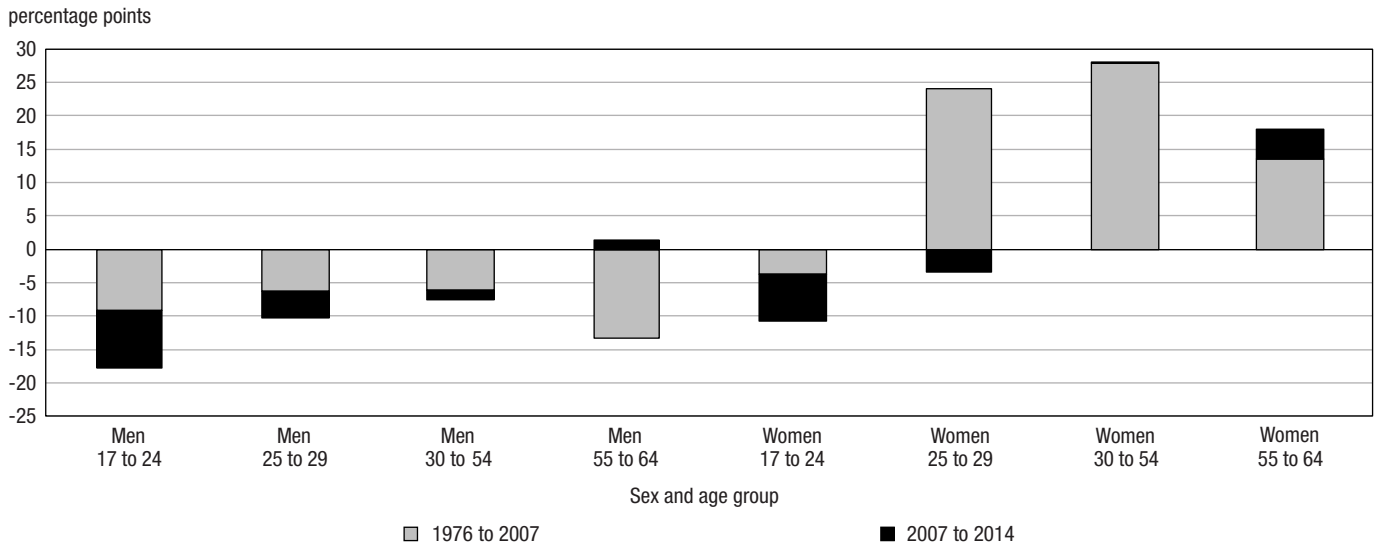
8. Strictly speaking, the numbers in Table 3 account for the percentage change in full-time employment rates observed from 1976 to 2014. For instance, the full-time employment rate of men aged 30 to 54 fell from 90.0% in 1976 to 82.6% in 2014. This drop of roughly 7.5 percentage points (after accounting for rounding) represents an 8.3% decline (i.e., 7.5% divided by 90.0%). The numbers in Table 3 account for this 8.3% decline.

9. For this reason, decompositions of changes in the full-time employment rates of these groups from 1997 to 2014 are not meaningful.

10. For a review of this research, see Goldin (2006).



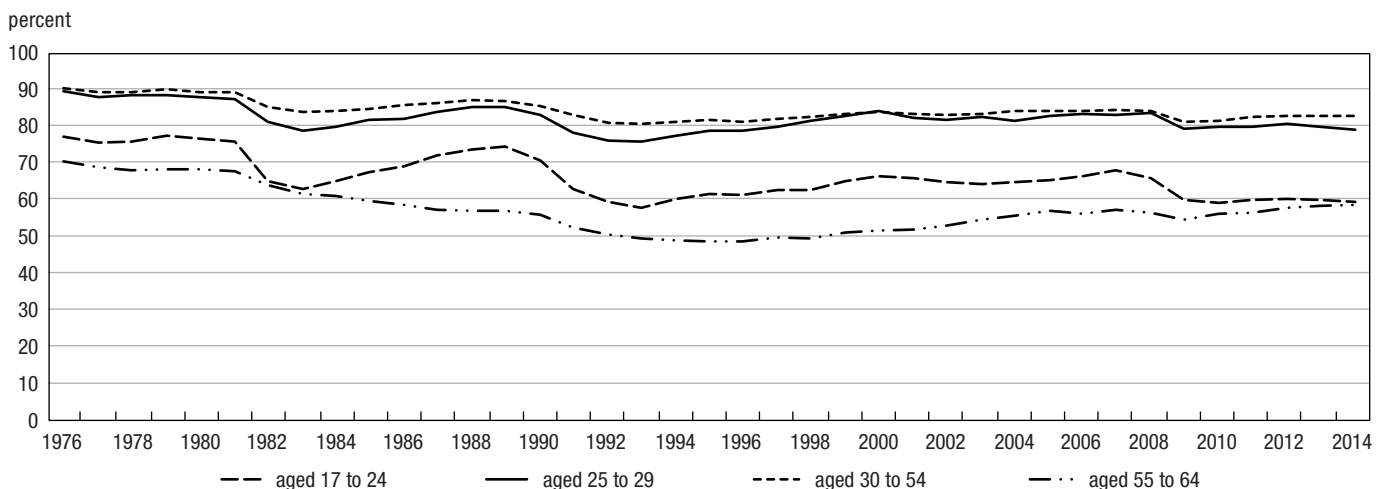
Chart 2
Changes in the percentage of population employed full time in their main job, by sex and age group, 1976 to 2014



Note: The population consists of individuals who are not full-time students. Full-time employment is defined as working usually 30 hours or more per week. The main job is the job with the greatest number of weekly work hours.

Source: Statistics Canada, Labour Force Survey, 1976 to 2014.

Chart 3
Percentage of men employed full time in their main job, by age group, 1976 to 2014



Note: Men who are not full-time students. Full-time employment is defined as working usually 30 hours or more per week. The main job is the job with the greatest number of weekly work hours.

Source: Statistics Canada, Labour Force Survey, 1976 to 2014.

Compositional changes

The socio-demographic characteristics of men in Canada changed considerably since the mid-1970s. Their average age increased, potentially raising the prevalence of activity limitations and lowering labour market participation.¹¹ However, they also obtained higher levels of education—a trend that might

have increased their likelihood of being employed full time. They also became more likely to have an employed spouse, and their distribution across provinces changed as economic activity shifted towards the oil-producing provinces of Alberta, Saskatchewan, and Newfoundland and Labrador. To estimate the extent to which such changes might have affected men's full-time employment rates, multivariate analyses were conducted.¹²

11. The decline over time in the relative importance of physically demanding occupations may have had an opposite effect.

12. Data from 1976 and 2014 were pooled. A binary indicator for whether an individual was employed full time was regressed on the following variables: a quadratic term in age; being permanently unable to work; having a university degree; being self-employed; being married and having a spouse who is (a) not employed (b) employed part time (c) employed full time (d) permanently unable to work (e) a university graduate; number of children; province of residence; and a binary indicator for 2014.



Table 3
Accounting for changes in full-time employment rates from 1976 to 2014

| | 1976 to 2014 | | 1976 to 1997 | | 1997 to 2014 | |
|--|--------------|-------|--------------|-------|--------------|-------|
| | Men | Women | Men | Women | Men | Women |
| | percent | | | | | |
| Individuals aged 17 to 24 | | | | | | |
| Percentage change in full-time employment rate | -23.1 | -18.2 | -18.9 | -22.2 | -5.1 | 5.2 |
| Proportion due to changes in: | | | | | | |
| Participation | 23.8 | -58.1 | 15.0 | -30.0 | 58.6 | 81.6 |
| Unemployment | 3.7 | -3.3 | 14.0 | 13.8 | -37.4 | 81.8 |
| Part-time employment | 72.5 | 161.3 | 71.0 | 116.2 | 78.8 | -63.4 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Individuals aged 25 to 29 | | | | | | |
| Percentage change in full-time employment rate | -11.5 | 46.5 | -10.8 | 33.4 | -0.7 | 9.8 |
| Proportion due to changes in: | | | | | | |
| Participation | 35.7 | 97.9 | 22.0 | 116.0 | ... | 42.1 |
| Unemployment | 21.7 | 6.3 | 40.1 | 0.5 | ... | 24.3 |
| Part-time employment | 42.5 | -4.2 | 37.9 | -16.5 | ... | 33.6 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | ... | 100.0 |
| Individuals aged 30 to 54 | | | | | | |
| Percentage change in full-time employment rate | -8.3 | 77.4 | -9.3 | 51.4 | 1.1 | 17.1 |
| Proportion due to changes in: | | | | | | |
| Participation | 39.5 | 85.2 | 30.7 | 101.4 | ... | 42.6 |
| Unemployment | 19.7 | 1.9 | 39.2 | -3.2 | ... | 15.4 |
| Part-time employment | 40.8 | 12.9 | 30.2 | 1.8 | ... | 42.1 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | ... | 100.0 |
| Individuals aged 55 to 64 | | | | | | |
| Percentage change in full-time employment rate | -17.0 | 79.3 | -29.3 | 1.6 | 17.4 | 76.5 |
| Proportion due to changes in: | | | | | | |
| Participation | 45.5 | 107.0 | 68.9 | ... | 96.0 | 82.8 |
| Unemployment | 15.4 | -1.5 | 10.8 | ... | 5.5 | 4.1 |
| Part-time employment | 39.1 | -5.5 | 20.3 | ... | -1.5 | 13.1 |
| Total | 100.0 | 100.0 | 100.0 | ... | 100.0 | 100.0 |
| Individuals aged 17 to 64 | | | | | | |
| Percentage change in full-time employment rate | -12.0 | 42.9 | -11.6 | 23.5 | -0.5 | 15.7 |
| Proportion due to changes in: | | | | | | |
| Participation | 48.5 | 102.1 | 41.4 | 137.3 | ... | 51.1 |
| Unemployment | 6.7 | 6.2 | 22.7 | -2.1 | ... | 18.2 |
| Part-time employment | 44.8 | -8.3 | 35.9 | -35.2 | ... | 30.7 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | ... | 100.0 |

... not applicable

Note: Changes in full-time employment rates for individuals who are not full-time students. Full-time employment rates equal the percentage of individuals usually working 30 hours or more per week as employees or self-employed workers in their main job. The main job is the job with the greatest number of weekly hours of work. Sources of change may not add to 100.0 because of rounding.

Source: Statistics Canada, Labour Force Survey, 1976 and 2014.

The results show that, of the 7.5-percentage-point decline in the full-time employment rate observed among men aged 30 to 54 from 1976 to 2014, 6.1 percentage points remain once changes in socio-demographic characteristics are taken into account. In other words, approximately four-fifths of the decline in the full-time employment rate of men aged 30 to 54 remain unexplained and thus, are due to factors that are not measured in the Labour Force Survey (LFS).¹³

The deterioration in labour market outcomes of immigrant men is one potential factor that may have exerted downward pressure on the full-time employment rate of men overall. This possibility cannot be assessed using the LFS because immigration status is only available on that survey since 2006. Census data from 1981 to 2006 show that the full-time employment rate of immigrant men aged 30 to 54 fell by 7 to 14 percentage points, depending on their duration of residence in Canada.¹⁴ However, the drop in the full-time employment rate was not limited to immigrant men as census data also show that Canadian-born men in that age group experienced a 4-percentage-point decline in their full-time employment rate over that period. This decline is very similar to the 5-percentage-point drop observed among men aged 30 to 54 overall.¹⁵ Hence, the deterioration in labour market outcomes observed among immigrant men only partly accounts for the broader decline in full-time employment.

As was the case for men aged 30 to 54, changes in socio-economic characteristics were not key factors underlying the declines in full-time employment rates of youth. All of the drop in the full-time employment rate of men aged 17 to 24 (again excluding full-time students) remains when socio-demographic characteristics are taken into account. This is also the case among women in that age group. Among men aged 25 to 29, changes in socio-demographic characteristics account for about 2 percentage points of the 10.2-percentage-point decline in the full-time employment rate—or about 20%. In sum, compositional effects were not the main drivers behind the decline in the full-time employment rates of men under 55.

Labour force participation

Whether one considers men aged 17 to 24, 25 to 29, or 30 to 54, at least two-thirds—and sometimes almost all—of the decline in labour force participation observed from 1976 to 2014 remains after controlling for the aforementioned socio-economic characteristics (excluding the self-employment indicator).¹⁶ This suggests that other factors played an important role.

13. An alternative approach is to focus on the full-time employment rate of men aged 30 to 54 who are not permanently unable to work, which fell by 6.6 percentage points from 1976 to 2014. Once changes in socio-economic characteristics are taken into account, a decline of 6.2 percentage points remains for this group.

14. These full-time employment rates are based on actual hours worked at all jobs during the census reference week. Along with individuals who attended school (part time or full time) in the nine months prior to the reference week, employed individuals who were absent from work during that week are excluded from the calculation of these rates. Conceptually comparable data from the LFS from the month of May and from the Census of Population show that the full-time employment rate of (the entire population of) men aged 30 to 54 fell by between 5.2 and 5.7 percentage points from 1981 to 2006.

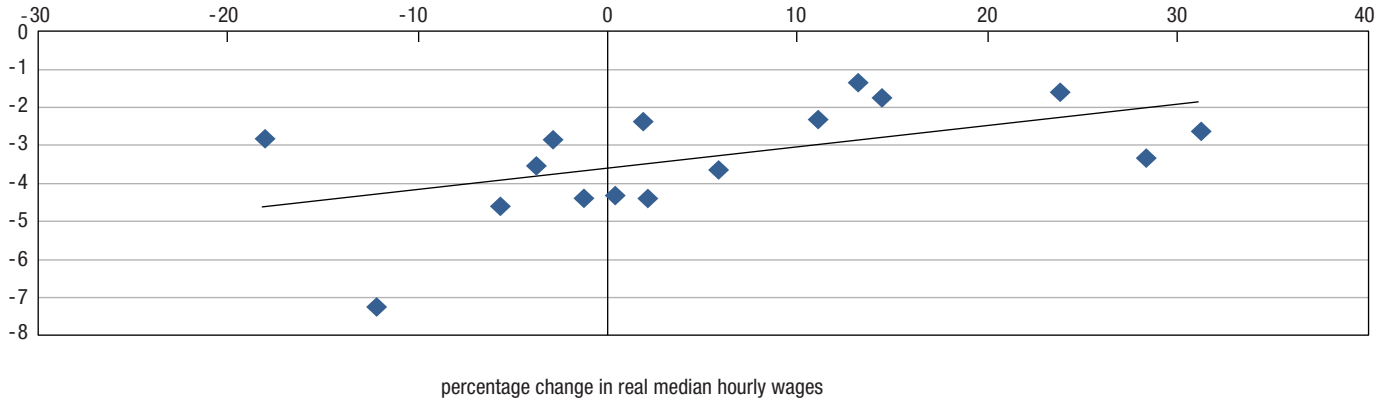
15. Census data show that the full-time employment rate of all men aged 30 to 54 dropped from 86.9% in 1981 to 81.7% in 2006. The corresponding percentages for Canadian-born men in the same age group are 85.8% and 81.8%. Using the National Household Survey (NHS) to extend the observation period yields full-time employment rates for 2011 that equal 80.7% for all men aged 30 to 54 and 81.2% for those born in Canada.

16. From 1976 to 2014, the participation rates of these groups fell by 6 percentage points, 4 percentage points and 3 percentage points, respectively.



Chart 4

Changes in real median hourly wages in full-time jobs and changes in labour force participation rates from 1981 to 2014, by age group, education, and region — Men aged 17 to 54

Change in labour force participation rates
(percentage points)

Note: Changes in participation rates of men aged 17 to 54 who are not full-time students are correlated, over the 1981-to-2014 period, with percentage changes in real median hourly wages of men aged 17 to 54 employed full time. Data are grouped by age groups (17 to 24; 25 to 34; 35 to 44; 45 to 54), education (having a university degree or not), and region (oil-producing provinces and other provinces), thereby yielding 16 observations. Oil-producing provinces include Alberta, Saskatchewan as well as Newfoundland and Labrador.

Sources: Statistics Canada, Survey of Work History of 1981 and Labour Force Survey, 1981 and 2014.

Changes in the wage structure are potentially one of these factors. From the early 1980s to 2014, real wages grew at a different pace across age groups, education levels, and regions. For instance, men aged 17 to 24 with no university degree, living in the oil-producing provinces of Alberta, Saskatchewan, and Newfoundland and Labrador and employed full time earned very similar real median hourly wages in 1981 and 2014. In contrast, their counterparts living in other provinces saw their real median hourly wages drop by 12% during that period. Since lower wages makes labour market participation relatively less attractive, one would expect groups of men who experienced the sharpest declines in median wages during the 1981-to-2014 period to display the largest decrease in participation.

This is what happened. Grouping the data by age, education level, and region shows that changes in men's participation rates were positively correlated with changes in their real median wages during that period (Chart 4). Specifically, a 10% decline in real median hourly wages was associated with a 1-percentage-point decline in labour market participation.¹⁷ While a thorough assessment of the degree to which changes in the wage structure reduced men's participation requires formal econometric analyses, the evidence shown in Chart 4 suggests that such changes contributed to reducing the participation rate of some men aged under 55.

Preferences for part-time work

Changes in work-hour preferences, for instance the increased demand for part-time employment, are another potential explanation for the decline in full-time employment rates, particularly among youth, men aged 25 to 29 and men aged 30 to 54. Analyses of whether or not this is the case must take account of the fact that the questions used to define involuntary part-time work changed with the re-design of the LFS in 1997. As a result, comparable concepts of involuntary part-time work are available within two periods: 1976 to 1995 and 1997 to 2014.¹⁸ The examination of these two periods suggests that both an increase in involuntary part-time employment and growing preferences for part-time work played a role.

The first point to note is that most of the growth—between 71% and 84%—in the incidence of part-time employment observed since the mid-1970s took place during the 1976-to-1995 period.¹⁹ During that period, growing involuntary part-time work was a dominant factor, generally accounting for at least three-quarters of the growth in the incidence of part-time employment among youth and men aged 25 to 54. For instance, of the 13-percentage-point increase in part-time employment experienced by employed men aged 17 to 24 from 1976 to 1995, 10 percentage points—or over 75% of the increase—were

17. This finding results from regressing the group-level changes in participation rates shown in Chart 4 on a constant term and percentage changes in real median hourly wages, using the mean population of each group in 1981 and 2014 as weights.

18. The introduction of the new concept of involuntary part-time work in September 1996 resulted in a break in the initial series during that year. Prior to September 1996, the reason for working part time was asked of all individuals whose total usual hours in all jobs were below 30 per week. Subsequently, this information was collected for all individuals who worked less than 30 hours per week at their main job or only job. Under the revised questionnaire, workers are defined as being involuntarily employed part time if they respond that: (a) they want to work 30 hours or more per week, and (b) the main reason for working less than 30 hours per week is "business conditions" or "could not find work with 30 or more hours," whether or not they looked for work with 30 or more hours per week during the past four weeks. Under the old questionnaire, workers were defined as being involuntarily employed part time if they responded that they "could only find part-time work."

19. The percentage of employed men aged 17 to 24 working part time in their main job grew from 4% in 1976 to 17% in 1995 and from 17% in 1997 to 21% in 2014. The percentage of employed women aged 17 to 24 working part time rose from 10% in 1976 to 30% in 1995 and from 33% in 1997 to 35% in 2014. Employed men aged 30 to 54 experienced more modest increases in part-time employment: the percentage working part time grew from 1% in 1976 to 4% in 1995 and from 4% in 1997 to 5% in 2014. Very similar patterns were observed among employed men aged 25 to 29.



Table 4
Sources of increase in part-time employment among employed workers, selected age groups

| Increase in part-time employment | Men aged | | | | Women aged |
|----------------------------------|----------|----------|----------|----------|------------|
| | 17 to 24 | 25 to 29 | 30 to 54 | 55 to 64 | 17 to 24 |
| percentage points | | | | | |
| From 1976 to 1995 | | | | | |
| Involuntary part-time employment | 10.0 | 3.6 | 1.9 | 2.4 | 15.3 |
| Voluntary part-time employment | 3.2 | 0.7 | 0.7 | 3.5 | 4.2 |
| Total | 13.2 | 4.3 | 2.6 | 5.9 | 19.5 |
| From 1997 to 2014 | | | | | |
| Involuntary part-time employment | -0.5 | 0.0 | -0.1 | 0.4 | -2.1 |
| Voluntary part-time employment | 3.9 | 0.8 | 0.7 | -0.2 | 4.2 |
| Total | 3.4 | 0.8 | 0.6 | 0.2 | 2.1 |

Note: The concepts of involuntary and voluntary part-time employment used from 1976 to 1995 differ from those used from 1997 onwards. For this reason, numbers from the 1976-to-1995 period cannot be summed with those of the 1997-to-2014 period. Numbers are shown for women aged 17 to 24 and men aged 17 to 64, groups for which changes in the incidence of part-time employment account for a large proportion of the changes in full-time employment rates observed from 1976 to 2014.

Source: Labour Force Survey, 1976, 1995, 1997 and 2014.

due to higher involuntary part-time employment (Table 4). The corresponding numbers for employed women aged 17 to 24 are 20 percentage points and 15 percentage points, respectively. The important role played by involuntary part-time employment during that period is consistent with the fact that the Canadian labour market was fairly weak several years after the 1990-1992 recession.²⁰

The story was different from 1997 to 2014. Among men under 55 and women aged 17 to 24, the entire growth in part-time employment during that period resulted from voluntary part-time work. However, part-time employment grew relatively little during that period.

Regional differences

The hypothesis that changes in employment preferences have driven the decline in full-time employment among men and youth is also belied by the regional dimension of these trends. In the oil-producing provinces of Alberta, Saskatchewan as well as Newfoundland and Labrador, the full-time employment rate of men aged 30 to 54 declined by 3.0 percentage points between 1976 and 2014 compared with a decline of 8.4 percentage points in other provinces (Table 5). Similarly, among men aged 25 to 29, the rate declined by 4.3 percentage points in oil-producing provinces compared with 11.7 percentage points elsewhere. Among women aged 17 to 24, the full-time employment rate fell marginally in oil-producing provinces but declined by 12.6 percentage points elsewhere. Many of these regional

differences hold when the data are further disaggregated by education level (Table 6). It appears unlikely that employment preferences towards part-time work changed so dramatically along these regional lines. Instead, differences in labour demand growth across provinces likely drove much of the changes in the full-time employment rates of these groups.²¹ Both in oil-producing provinces and in other provinces, declines in labour force participation rates and increases in the incidence of part-time employment accounted for at least 90% of the overall decline in men's full-time employment rates (Table 7).

Summary

Although the percentage of Canadians employed full time has risen modestly over the last four decades, this change masks diverging trends across sexes, age groups, and regions. Women aged 25 and over have massively increased their presence in the ranks of the Canadian workforce employed full time. In contrast, men of all ages, especially those under 25 in the non-oil-producing provinces, have experienced a decline in their full-time employment rates. Women under 25 living in these provinces were also employed full time in smaller proportions in 2014 than their counterparts were in 1976.

The evidence gathered in this article does not support the conjecture that the decline in the full-time employment rates of men and of youth resulted simply from growing preferences for part-time employment. Instead, it shows that, for these groups, much of the increase in the incidence of part-time employment was generally involuntary, i.e., reflected the willingness to work full time and the inability to find full-time employment. The study also showed that the decline in men's full-time employment rates cannot be explained solely by the deterioration in employment opportunities of immigrant men.

While the increase in the full-time employment rates of women aged 25 and over was driven almost entirely by the growing participation rates of these women, the decline in men's rates of full-time employment came from numerous sources. Rising part-time employment as well as—for men aged 25 and over—increases in inactivity contributed significantly to the drop in the proportion of men employed full time. Increases in unemployment generally did not play a primary role, although they did account for some of the changes in full-time employment rates. In fact, some groups—for example, men and women aged 17 to 24—had substantially lower full-time employment rates in 2014 than in 1976 even though their unemployment rates during these two years were fairly similar. This fact is an important reminder that aggregate measures sometimes do not provide a complete picture and that rigorous assessments of the degree of success of people in the Canadian labour market require considering jointly numerous labour market indicators.

20. For instance, the unemployment rate of men aged 25 to 54 averaged 8.7% in 1995, compared with 6.3% in 1989 (CANSIM Table 282-0002).

21. These regional differences do not simply reflect the strong employment growth observed in Alberta during the 2000s. From 2001 to 2008—a period during which oil prices received by Canada's oil producers more than doubled (Morissette, Chan, and Lu 2015)—the full-time employment rates of youth and men aged 25 to 54 increased faster in Newfoundland and Labrador and Saskatchewan than they did in non-oil-producing provinces, considered collectively.



Table 5

Percentage of population employed full time in their main job (as employees or self-employed), by age group, sex and region, 1976 to 2014

| | Men aged | | | | Women aged | | | |
|--------------------------------|----------|----------|----------|----------|------------|----------|----------|----------|
| | 17 to 24 | 25 to 29 | 30 to 54 | 55 to 64 | 17 to 24 | 25 to 29 | 30 to 54 | 55 to 64 |
| | percent | | | | | | | |
| Oil-producing provinces | | | | | | | | |
| 1976 | 81.4 | 89.9 | 90.5 | 71.1 | 58.3 | 39.7 | 34.6 | 23.7 |
| 2007 | 77.8 | 88.6 | 88.4 | 65.2 | 63.1 | 66.2 | 64.1 | 42.0 |
| 2014 | 72.5 | 85.6 | 87.5 | 65.9 | 56.6 | 65.8 | 62.6 | 44.5 |
| 1976 to 2014 | -8.9 | -4.3 | -3.0 | -5.3 | -1.6 | 26.1 | 28.0 | 20.9 |
| Other provinces | | | | | | | | |
| 1976 | 75.9 | 88.9 | 90.0 | 70.0 | 58.7 | 45.1 | 36.4 | 22.6 |
| 2007 | 65.2 | 81.6 | 83.2 | 55.5 | 53.1 | 68.7 | 64.1 | 35.4 |
| 2014 | 56.2 | 77.2 | 81.5 | 56.9 | 46.1 | 64.7 | 64.4 | 40.2 |
| 1976 to 2014 | -19.8 | -11.7 | -8.4 | -13.1 | -12.6 | 19.7 | 28.0 | 17.6 |

Note: The population consists of individuals who are not full-time students. Full-time employment is defined as working usually 30 hours or more per week. The main job is the job with the greatest number of weekly work hours. Oil-producing provinces include Alberta, Saskatchewan, and Newfoundland and Labrador.

Source: Statistics Canada, Labour Force Survey, 1976 to 2014.

Table 6

Percentage of population employed full time in their main job (as employees or self-employed), by age group, sex, education and region, 1976 to 2014

| | Men aged | | | | Women aged | | | |
|--|----------|----------|----------|----------|------------|----------|----------|----------|
| | 17 to 24 | 25 to 29 | 30 to 54 | 55 to 64 | 17 to 24 | 25 to 29 | 30 to 54 | 55 to 64 |
| | percent | | | | | | | |
| Individuals with no university degree | | | | | | | | |
| Oil-producing provinces | | | | | | | | |
| 1976 | 80.8 | 88.6 | 89.6 | 70.4 | 57.3 | 36.4 | 33.5 | 22.7 |
| 2007 | 77.4 | 87.7 | 87.4 | 64.4 | 61.8 | 61.5 | 62.6 | 41.4 |
| 2014 | 72.3 | 84.8 | 86.3 | 65.7 | 54.9 | 59.3 | 60.3 | 44.5 |
| 1976 to 2014 | -8.6 | -3.8 | -3.4 | -4.7 | -2.4 | 22.8 | 26.7 | 21.8 |
| Other provinces | | | | | | | | |
| 1976 | 75.6 | 88.4 | 89.2 | 69.0 | 58.0 | 42.4 | 35.5 | 22.0 |
| 2007 | 64.6 | 80.3 | 81.4 | 53.9 | 51.5 | 64.5 | 61.4 | 33.5 |
| 2014 | 55.2 | 75.7 | 79.8 | 55.4 | 44.0 | 59.3 | 60.9 | 38.8 |
| 1976 to 2014 | -20.4 | -12.7 | -9.4 | -13.5 | -13.9 | 16.9 | 25.4 | 16.7 |
| All provinces | | | | | | | | |
| 1976 | 76.4 | 88.4 | 89.3 | 69.2 | 57.9 | 41.6 | 35.3 | 22.1 |
| 2007 | 67.0 | 81.6 | 82.4 | 55.4 | 53.5 | 64.0 | 61.6 | 34.5 |
| 2014 | 58.3 | 77.5 | 80.9 | 57.1 | 46.0 | 59.3 | 60.8 | 39.6 |
| 1976 to 2014 | -18.1 | -10.9 | -8.3 | -12.1 | -11.9 | 17.7 | 25.6 | 17.5 |
| Individuals with a university degree | | | | | | | | |
| Oil-producing provinces | | | | | | | | |
| 1976 | F | F | 97.2 | F | F | F | F | F |
| 2007 | F | F | 92.0 | 68.4 | F | 78.5 | 69.2 | 45.1 |
| 2014 | F | 88.2 | 91.4 | 66.5 | F | 77.8 | 68.0 | 44.9 |
| 1976 to 2014 | F | F | -5.8 | F | F | F | F | F |
| Other provinces | | | | | | | | |
| 1976 | 84.7 | 91.5 | 95.2 | 82.7 | 76.6 | 66.6 | 50.6 | 39.6 |
| 2007 | 75.5 | 86.1 | 88.6 | 60.6 | 65.7 | 77.5 | 71.6 | 44.1 |
| 2014 | 68.4 | 81.3 | 86.0 | 61.6 | 59.1 | 74.1 | 71.6 | 45.5 |
| 1976 to 2014 | -16.3 | -10.2 | -9.2 | -21.1 | -17.5 | 7.5 | 21.0 | 6.0 |
| All provinces | | | | | | | | |
| 1976 | 86.1 | 92.2 | 95.5 | 82.9 | 76.9 | 66.1 | 50.5 | 40.8 |
| 2007 | 76.9 | 87.0 | 89.0 | 61.5 | 67.3 | 77.7 | 71.3 | 44.2 |
| 2014 | 69.5 | 82.5 | 86.8 | 62.3 | 60.7 | 74.8 | 71.1 | 45.4 |
| 1976 to 2014 | -16.6 | -9.6 | -8.6 | -20.6 | -16.2 | 8.7 | 20.5 | 4.6 |

F too unreliable to be published

Note: The population consists of individuals who are not full-time students. Full-time employment is defined as working usually 30 hours or more per week. The main job is the job with the greatest number of weekly work hours. Oil-producing provinces include Alberta, Saskatchewan, and Newfoundland and Labrador.

Source: Statistics Canada, Labour Force Survey, 1976 to 2014.



Table 7
Accounting for changes in full-time employment rates from 1976 to 2014, by sex and region

| | Men | | Women | |
|--|-----------------|-------------------------|-----------------|-------------------------|
| | Other provinces | Oil-producing provinces | Other provinces | Oil-producing provinces |
| | percent | | | |
| Individuals aged 17 to 24 | | | | |
| Percentage change in full-time employment rate | -26.0 | -11.0 | -21.5 | -2.8 |
| Proportion due to changes in: | | | | |
| Participation | 23.2 | 25.0 | -47.4 | ... |
| Unemployment | 5.2 | -6.7 | -3.0 | ... |
| Part-time employment | 71.6 | 81.6 | 150.4 | ... |
| Total | 100.0 | 100.0 | 100.0 | ... |
| Individuals aged 25 to 29 | | | | |
| Percentage change in full-time employment rate | -13.2 | -4.8 | 43.7 | 65.8 |
| Proportion due to changes in: | | | | |
| Participation | 35.3 | 30.5 | 102.2 | 82.5 |
| Unemployment | 22.6 | 22.8 | 6.5 | 3.3 |
| Part-time employment | 42.1 | 46.6 | -8.7 | 14.3 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 |
| Individuals aged 30 to 54 | | | | |
| Percentage change in full-time employment rate | -9.4 | -3.3 | 77.1 | 80.9 |
| Proportion due to changes in: | | | | |
| Participation | 40.3 | 22.3 | 86.1 | 78.6 |
| Unemployment | 19.6 | 30.2 | 2.4 | -1.2 |
| Part-time employment | 40.0 | 47.5 | 11.5 | 22.5 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 |
| Individuals aged 55 to 64 | | | | |
| Percentage change in full-time employment rate | -18.8 | -7.4 | 77.6 | 88.2 |
| Proportion due to changes in: | | | | |
| Participation | 47.4 | 18.5 | 108.3 | 99.9 |
| Unemployment | 13.8 | 39.7 | -1.5 | -1.9 |
| Part-time employment | 38.8 | 41.8 | -6.8 | 1.9 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 |
| Individuals aged 17 to 64 | | | | |
| Percentage change in full-time employment rate | -13.6 | -5.1 | 41.8 | 49.2 |
| Proportion due to changes in: | | | | |
| Participation | 48.6 | 40.4 | 103.9 | 92.9 |
| Unemployment | 7.5 | 5.2 | 6.9 | 1.7 |
| Part-time employment | 43.9 | 54.4 | -10.8 | 5.4 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 |

... not applicable

Note: Changes in full-time employment rates for individuals who are not full-time students. Full-time employment rates equal the percentage of individuals usually working 30 hours or more per week as employees or self-employed workers in their main job. The main job is the job with the greatest number of weekly hours of work. Sources of change may not add to 100.0 because of rounding. Oil-producing provinces include Alberta, Saskatchewan, and Newfoundland and Labrador.

Source: Statistics Canada, Labour Force Survey, 1976 and 2014.

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