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.. not available for a specific reference period
... not applicable
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$0^{\text {s }}$ 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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# The Canada-U.S. gap in women's labour market participation 

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## Overview of the study

This study reports on the trends in the labour force participation rate (LFPR) of prime-aged women (25 to 54) in both Canada and the United States. The paper examines the population groups that have been behind the rising divergence in the LFPR between the two countries over the past two decades.

- In 1997, the labour force participation rates (LFPRs) of women aged 25 to 54 in Canada and in the United States were close, at $76 \%$ and $77 \%$ respectively. In 2015, the LFPR of women aged 25 to 54 was $81 \%$ in Canada, compared with $74 \%$ in the United States, a gap of 7 percentage points.
- In the United States, the LFPR declined by almost 3 percentage points between 1997 and 2015-mainly as a result of a decline in the LFPR of younger women (aged 25 to 44).
- In Canada, the LFPR increased by 5 percentage points over the same period. The increase was mainly the result of an increase in the LFPR of women aged 45 to 54.
- In Canada, rising levels of educational attainment explained the entire increase in the LFPR of women aged 25 to 44 and about one-third of the increase in the LFPR of women aged 45 to 54. In the United States, without the positive contribution of rising educational attainment, the female LFPR would have declined even more over the period.
- In both countries, there has been a reduction in the male-female gap in participation rates. In Canada, the reduction mostly came from increases in the LFPR of women. In the United States, the reduction largely came from a reduction in the LFPR of men.


## Introduction

Substantial increases in the labour force participation of women are a striking feature of the labour market developments in most Western nations.' While the growth in participation began at different times and has advanced at different rates, the quantitative changes in the North American labour market over the past three decades have been remarkable.

According to the Organisation for Economic Cooperation and Development (OECD), in 1990, women in Canada and the United States had the 5th and 6th highest labour force participation rates (LFPRs) among 22 Western economically advanced nations. ${ }^{2}$ By 2014, however, both Canada and the United States saw their international rankings slip to IIth and 20th positions, respectively. This decline in rankings was
due to the fact that the average LFPR of women in the other OECD countries grew faster than in Canada and the United States. ${ }^{3}$

Given the linked nature of the Canadian and American economies, comparisons between labour markets in Canada and the United States have garnered considerable attention. While the difference in the participation rate remained relatively small between Canadian and U.S. men in recent years, the participation rate of females diverged between the two countries. Why is it that the labour force participation rate of Canadian women is so different from the rate of their American counterparts?

This article attempts to sort through various explanations to create a comprehensive picture of the Canada-U.S. gap in the labour force participation rates of prime-aged
women (aged 25 to 54). Restricting the comparison to the core working age population simplifies the analysis, since it minimizes the potential impact of the changes in years of schooling and age of retirement that took place during the period studied.

In this paper, data from the Labour Force Survey (LFS) are used to study Canadian trends. The Current Population Survey (CPS) is the source of data for the United States. Both the LFS and the CPS are monthly household surveys that use similar methodologies. Throughout the paper, the results for Canada have been adjusted to make them comparable with the U.S. concepts (see Data sources, methods and definitions).

## Diverging trends in labour force participation rates

Since the late 1990s, Canadian women have had relatively higher rates of labour force participation than American women (Chart I). This contrasts with the 1970s and 1980s when participation rates in the United States were slightly higher than those in Canada. For example, in 1976 the LFPR was $52 \%$ for Canadian women compared with 57\% for American women.

The labour force participation rate in both countries exhibited strong growth during the 1980s, although it increased at a faster pace in Canada. As a result, Canadian women caught up to their American counterparts by the late 1980s, and, in 1989, the labour force participation rate of women aged 25 to 54 in both countries was 74\%.

An equally salient development was the stagnation in the women's labour force participation rate in both Canada and the U.S. throughout the early to mid-1990s-when it hovered around $75 \%$.

The slow growth during the 1990s led observers in both countries to consider whether the rising trend of women participating in the workforce was almost over. In a study from the late 1990s, it was predicted, at least in relation to Canada circa 1994, that "large increases in the participation and employment rates are clearly a thing of the past" and that "there is still room for a 2-3 percentage point increase in the rates if the macroeconomic situation continues to improve." ${ }^{4}$ The plateau reached in the female LFPR also led some pundits to believe thata "natural rate" of participation had been reached in the United States, although the rising participation of working mothers led others to question whether the data supported the evidence of such a natural rate. ${ }^{5}$

In the late 1990s, however, the data started contrasting with previous trends. The labour force participation of Canadian women continued its
upward trend while the rate for American women began to decline. ${ }^{6}$ After 1997, the LFPR of women in Canada always remained higher than that of their counterparts in the United States. Some observers in the U.S. concluded that the dip in the participation rate in the early 2000s was due to a sluggish labour market characterized by low employment growth. ${ }^{\text {² }}$
The divergence in the participation rates between Canada and the United States might partly reflect the relative strength of the Canadian labour market. While the recession of the late 2000s resulted in significant job losses in both countries, it has been described as the most severe recession of the post-war period in the United States ${ }^{8}$ while, in Canada, it was considered less severe than recessions that began in 1981 and $1990 .{ }^{9}$ Canada lost fewer jobs during the recession of the late 2000s and employment has grown at a faster rate since the recession ended. ${ }^{10} \mathrm{By}$

Chart 1
Labour force participation rates in Canada and the United States, women aged 25 to 54, 1976 to 2015


[^0]2015, the labour force participation rate of Canadian women was $81 \%$ compared with 74\% for American women. ${ }^{11}$

## Canadian women have higher employment rates than their U.S. counterparts

The labour force consists of persons in the eligible population who participate in the labour market as either employed or unemployed. The employment rate-the proportion of the labour force that is employed during the reference week divided by the total workingage population-captures another perspective. Similar to the LFPR, the employment rate in the United States trended downwards after 2000 and through the last recession while, in Canada, it continued its upward trend. By 2015, the employment rate in Canada was 7 percentage points higher than in the U.S. (Chart 2).
Hours worked by those employed in the labour force is another key dimension that differs between Canada and the United States. Historically, the proportion of women aged 25 to 54 working full time ( 35 hours or more per week, in the main or only job) ${ }^{12}$ has been higher in the United States than in Canada. In 1997, 58\% of American women had a full-time job, compared with $48 \%$ of Canadian women. ${ }^{13}$ In 2015, the gap was much smaller (55\% in Canada versus 56\% in the United States), largely because of an increase in the full-time employment rate of Canadian women.

The unemployment rate-the proportion of the labour force that is unemployed during the reference week-provides useful additional information. Labour force participation can be responsive to changes in overall unemployment, and, in some
instances, when the unemployment rate is high, some of the unemployed might stop looking for work and drop out of the labour force.

Between 1977 and 2007, the unemployment rate among primeaged women in Canada was consistently higher than the rate in

Chart 2
Employment rates in Canada and the United States, women aged 25 to 54, 1980 to 2015


Note: In this chart, full-time is defined as working 35 hours or more at the main job. Comparable data for the United States are not available prior to 1994, when the CPS underwent a major redesign.
Sources: Statistics Canada, Labour Force Survey, adjusted for comparability to U.S. data; United States Bureau of Labor Statistics, Current Population Survey.

Chart 3
Unemployment rates in Canada and the United States, women aged 25 to 54, 1976 to 2015


[^1]the U.S. (Chart 3). However, the gap started closing in the mid-1990s and, following the recession of the late 2000s-from 2008 to 2014-the unemployment rate in the U.S. exceeded that in Canada. Recently, however, the U.S. rate declined while the Canadian rate remained relatively stable. In 2015, the two countries had a similar unemployment rate. ${ }^{14}$
The next section investigates the recent divergence in the labour force participation rates in both countries, using 1997 as a starting point. The age groups that contributed the most to the difference are examined first, followed by the potential role played by rising levels of women's educational attainment in both countries.

## Labour force participation on the rise among older Canadian women

In I997, the female labour market participation rates in Canada and the United States were half a percentage point apart. Over the next 18 years, the LFPR rose by 5 percentage points in Canada and declined by 3 percentage points in the United States. The decline in the U.S. took place mostly after 2007-in the aftermath of the 2008-09 recession. In Canada, most of the increase took place from 1997 to 2007.
To gain a better understanding of the source of the Canada-U.S. LFPR divergence that occurred after 1997, it is important to identify the age groups that have contributed the most to changes in both countries.

In Canada, the overall participation rate increased largely because of women aged 45 to 54 , for whom the participation rate increased from $72 \%$ to $82 \%$ over the period. In fact, more than one-half of the overall
increase was due to an increase in the LFPR of women aged 45 to 54 in Canada (Table I). ${ }^{15}$

In the United States, most of the decline was due to a decrease in the LFPR of women aged 25 to $44 .{ }^{16}$ Between 1997 and 2015, the participation of U.S. women in this age group fell by three percentage points, from $77 \%$ to $74 \%$. This compared with a Canadian increase of three percentage points among women in the same age group (from $78 \%$ to $81 \%)$.

## The changes in labour force participation varied by level of education

Within age groups, there were differences across education levels. In general, differences were more pronounced among less-educated women.

Among Canadian women aged 45 to 54, the largest increase took place in the two lowest educational attainment categories (Table 2). Among women with a high school diploma or less, the rate increased by 8 percentage points (from 64\% to $72 \%$ ), and among those with a college-level education, the rate increased by 7 percentage points (from 78\% to 85\%). University graduates also recorded a gain, but of a smaller magnitude.

In contrast, the participation rate of U.S. women aged 45 to 54 declined most among those who were in the two lowest categories of educational attainment. For those with at most a high school diploma, the LFPR declined from 68\% to 64\%; similarly, the LFPR declined from $81 \%$ to $76 \%$ for those with a college-level education.
Similar trends were found in the case of younger women. In the United States, the decline in the LFPR of younger women (aged 25 to 44) was especially more pronounced among those in the two lowest categories of educational attainment-by a margin of 9 percentage points for those with a high school diploma or less and 4 percentage points for those with a college-level education. ${ }^{17}$ The participation rates of those with a university degree also declined, but by a smaller margin (2 percentage points).
In comparison, the LFPR of Canadian women aged 25 to 44 who had at most a high school diploma also declined, but by a smaller margin than their U.S. counterparts (3 percentage points). Canadian women in this age group who had a college-level education recorded a small increase, while the LFPR of those who had a university degree changed little.

Table 1
Decomposition of percentage change in labour force participation rates of women aged 25 to 54 across age groups, Canada and United States, 1997 to 2015

|  | Changes <br> among those <br> aged 25 to 44 | Changes <br> among those <br> aged 45 to 54 | Changes in <br> group shares | Total |
| :--- | ---: | ---: | ---: | ---: |
|  | percentage point |  |  |  |
| Canada | 2.0 | 2.8 | 0.2 | 5.0 |
| United States | -2.0 | -0.7 | -0.2 | -2.8 |
| Difference | 4.0 | 3.5 | 0.4 | 7.8 |

Note: Percentages do not always add up due to rounding.
Sources: Statistics Canada, Labour Force Survey, adjusted for comparability to U.S. data; United States Bureau of Labor Statistics, Current Population Survey.

Table 2
Labour force participation rates of women aged 25 to 54 by age group and education, Canada and the United States, 1997 to 2015

|  | All | High school or less | College, trade or other postsecondary | University degree |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  | percent |  |
| Canada |  |  |  |  |
| Aged 25 to 54 |  |  |  |  |
| 1997 | 76.2 | 66.6 | 81.0 | 86.3 |
| 2000 | 77.9 | 68.9 | 81.9 | 86.2 |
| 2007 | 81.5 | 72.3 | 84.9 | 86.3 |
| 2015 | 81.3 | 68.0 | 84.4 | 86.6 |
| Aged 25 to 44 |  |  |  |  |
| 1997 | 77.8 | 68.2 | 82.0 | 86.6 |
| 2000 | 79.4 | 70.8 | 82.5 | 86.0 |
| 2007 | 82.0 | 72.3 | 85.1 | 85.4 |
| 2015 | 80.9 | 65.2 | 84.0 | 86.0 |
| Aged 45 to 54 |  |  |  |  |
| 1997 | 72.3 | 63.5 | 78.0 | 85.3 |
| 2000 | 74.8 | 65.6 | 80.1 | 86.5 |
| 2007 | 80.8 | 72.3 | 84.7 | 88.5 |
| 2015 | 82.0 | 71.8 | 85.0 | 88.3 |
| United States |  |  |  |  |
| Aged 25 to 54 |  |  |  |  |
| 1997 | 76.7 | 69.7 | 80.6 | 84.6 |
| 2000 | 76.8 | 70.1 | 80.4 | 83.0 |
| 2007 | 75.5 | 67.0 | 79.2 | 82.3 |
| 2015 | 73.9 | 62.3 | 76.1 | 82.4 |
| Aged 25 to 44 |  |  |  |  |
| 1997 | 77.0 | 70.3 | 80.5 | 84.1 |
| 2000 | 76.9 | 70.7 | 80.3 | 82.3 |
| 2007 | 75.1 | 66.4 | 78.9 | 81.3 |
| 2015 | 74.0 | 61.5 | 76.4 | 82.2 |
| Aged 45 to 54 |  |  |  |  |
| 1997 | 76.1 | 68.2 | 81.0 | 85.9 |
| 2000 | 76.6 | 68.9 | 80.6 | 84.6 |
| 2007 | 76.2 | 68.0 | 79.8 | 84.2 |
| 2015 | 73.7 | 63.6 | 75.6 | 83.0 |

Sources: Statistics Canada, Labour Force Survey, adjusted for comparability to U.S. data, 1997 to 2015; United States Bureau of Labor Statistics, Current Population Survey, 1997 to 2015.

By 2015, Canadian women in all age and education categories were thus more likely to participate in the labour market than their U.S. counterparts (Chart 4). This represents a change from 1997, when only Canadian women aged 25 to 44 with a university degree or college education were more likely to participate in the labour market than their American counterparts.

The magnitude of the change was especially large in the case of women aged 45 to 54 with a high school diploma or a college education. In 1997, for example, U.S. women in this age group who had a high school education were 5 percentage points more likely than their counterparts in Canada to participate in the labour market. In 2015, Canadian women were more likely to participate-by a margin of 8 percentage points.

## Rising levels of educational attainment contributed positively to the LFPR of women in both countries

Between 1997 and 2015, the level of educational attainment of women rose in Canada and in the United States. The proportion of women with a university degree nearly doubled in Canada, as it increased from $18 \%$ to $35 \%$. In the United States, the proportion also rosealbeit less rapidly-from $26 \%$ to 38\% (Table 3).

The increase was larger in the case of women aged 25 to 44 , especially in Canada. The proportion of Canadian women aged 25 to 44 with a university degree increased nearly twofold over the period, from $20 \%$ to $39 \%$. In the United States, women in this age group were more likely than Canadian women to have a university degree in 1997 (27\%), but were about as likely as their Canadian counterparts to have a degree in 2015 ( $40 \%$ ).
To what extent have changes in the LFPR of both countries been impacted by the rising educational attainment of women in both countries? This question can be answered by isolating the changes related to education from those related to other factors by estimating a series of regression models. ${ }^{18}$ Because the highly educated are more likely to be employed than those with lower levels of education, it is likely that rising levels of education played a positive role in increasing the LFPR in both countries between 1997 and 2015.

Chart 4
Percentage difference between Canada and the United States in labour force participation rates of women aged 25 to 54, 1997 to 2015


Sources: Statistics Canada, Labour Force Survey, adjusted for comparability to U.S. data; United States Bureau of Labor Statistics, Current Population Survey.

Table 3
Highest level of educational attainment of women aged 25 to 54, Canada and United States, 1997 and 2015

|  | Canada |  | United States |  |
| :---: | :---: | :---: | :---: | :---: |
|  | 1997 | 2015 | 1997 | 2015 |
|  | percent |  |  |  |
| Aged 25 to 54 |  |  |  |  |
| High school or less | 39.7 | 23.5 | 45.1 | 33.4 |
| College, trade or other postsecondary | 42.0 | 41.4 | 28.5 | 28.8 |
| University degree | 18.3 | 35.1 | 26.4 | 37.8 |
| Aged 25 to 44 |  |  |  |  |
| High school or less | 36.7 | 20.5 | 43.8 | 31.5 |
| College, trade or other postsecondary | 43.8 | 40.5 | 29.3 | 28.9 |
| University degree | 19.5 | 39.0 | 26.9 | 39.7 |
| Aged 45 to 54 |  |  |  |  |
| High school or less | 47.0 | 29.2 | 48.0 | 37.2 |
| College, trade or other postsecondary | 37.6 | 43.0 | 26.7 | 28.6 |
| University degree | 15.5 | 27.8 | 25.3 | 34.2 |

Sources: Statistics Canada, Labour Force Survey, adjusted for comparability to U.S. data; United States Bureau of Labor Statistics, Current Population Survey.

While the increase in educational attainment contributed to the increase in the LFPR of Canadian women over the period, its role varied across age groups. Among those aged 25 to 44, the entire increase of 3 percentage points
in the LFPR of Canadian women between 1997 and 2015 was due to their rising level of educational attainment (Chart 5). Changes in educational attainment explained one-third of the 10 percentage point increase in the LFPR for those
aged 45 to 54, indicating that twothirds of the increase was due to other factors.

In addition, even though the rising educational attainment of women in the United States had a positive effect on the LFPR, that effect was more than offset by declines in the LFPR within educational categories. In fact, without the positive contribution of rising educational attainment, the LFPR would have declined by 5 percentage points among women aged 25 to 44 , and by 4 percentage points among those aged 45 to 54.

If educational differences do not fully explain the rising divergence of the LFPR in both countriesparticularly among those aged 45 to 54-then there might be other factors driving the increase in the LFPR of Canadian women, such as increased demand for labour in female-dominated occupations or differences in earnings growth.

## More full-time and private sector jobs among Canadian women aged 45 to 54

Additional insight can be gained by examining the characteristics of jobs held by Canadian women aged 45 to 54-particularly among those with a high school education or less and those with a college-level education.

From 1997 to 2007, for instance, the number of employed women aged 45 to 54 with at most a high school diploma rose by more than 120,000 in Canada. More than one-half of these additional jobs were sales and service occupations (such as customer and sales representatives, light duty cleaners and cashiers), the vast majority of which were full-time jobs in the private sector.

Over the same period, the number of employed college-educated women in this age group increased by approximately 333,000 . Again, the vast majority of these jobs were private sector and full-time jobs. More than one-third of these additional jobs were business, finance and administration occupations, and another quarter were sales and service occupations.

The labour force participation of Canadian women might also have been stimulated by a faster growth in real earnings (expressed in 2014 constant dollars). ${ }^{19}$ From 1997 to 2014, the median weekly earnings of women aged 25 and over who were working full time increased by 14\% in Canada compared with $11 \%$ in the United States. ${ }^{20}$ In the U.S., however, one-third of the increase took place between 1997 and 1998. From 1998 to 2014, weekly earnings grew by 14\% in Canada, compared with 7\% in the United States.

Chart 5
Impact of rising level of educational attainment on changes in labour force participation rates of women aged 25 to 54, Canada and United States, 1997 to 2015


Sources: Statistics Canada, Labour Force Survey, adjusted for comparability to U.S. data; United States Bureau of Labor Statistics, Current Population Survey.

## Chart 6

Gender gap in labour force participation rates among workers aged 25 to 54, Canada and the United States, 1976 to 2015


[^2] Statistics, Current Population Survey.

There was also a difference in the growth rate of earnings among those who had lower levels of education, which might have contributed to the increase in the labour supply of Canadian women. For instance, among women who did not complete high school, the real weekly earnings of women grew by $8 \%$ in Canada but by I\% in the U.S. between 1997 and 2014. ${ }^{21}$

## The gender gap in participation rates declined faster in Canada

A comparison with the relative status of men provides a clearer picture of the trends in women's labour force participation in Canada and the United States-rising women's labour force participation rates, coupled with a slow but steady decline in men's participation, has caused the gap in the LFPRs of men and women to narrow.

From 1990 to 2015, the LFPR of men aged 25 to 54 dropped 2 percentage points in Canada and 5 percentage points in the United States. In Canada, the LFPR gender gap narrowed from 18 percentage points in 1990 to 9 percentage points by 2015. In the U.S., it decreased from 19 to 14 percentage points during the same period (Chart 6).

Taken together, the overall decline in the Canadian LFPR gender gap resulted more from women's increasing LFPR than the drop in men's participation rate. The opposite holds true for the United States-the decline in the gender gap since 1990 resulted more from the decline in men's LFPR than changes in women's LFPR.

## Conclusion

This article presents a set of indicators on the state of the labour market participation of women in Canada and the United States. Through comparative analysis, the recent trends in the LFPR show that Canadian women aged 25 to 54 are more likely to participate in the labour market than their American counterparts. In the past two decades, the LFPR of Canadian women increased slightly, while the LFPR of American women declined.

In Canada, most of the increase in the LFPR of women could be attributed to a significant increase in the labour market participation of women aged 45 to 54 , especially for those with lower levels of education. In the United States, despite the positive impact of increasing education, labour market participation
decreased for women in both age groups ( 25 to 44 and 45 to 54), especially for younger women with lower levels of education. However, women in the U.S. were slightly more likely to work full time than their Canadian counterparts.

The increase in the labour market participation of women aged 45 to 54 in Canada remains a topic for further research. However, the fact that the increase mainly took place during a period of sustained economic growth prior to the downturn of the late 2000s-and that women with lower levels of education were behind the push in Canadian LFPRs-suggests that labour market conditions might have played a role.

In contrast, the United States was hit by the worst recession in decades in the late 2000s, which likely stymied employment opportunities for women-especially those with lower levels of education. Canada was also hit by a recession but did not experience the same drop in the LFPR of women during those years.

[^3]
## Data sources, methods and definitions

## Data sources

Data for Canada are drawn from Statistics Canada's Labour Force Survey (LFS) and labour market information for the United States is derived from the Current Population Survey (CPS). While the LFS and the CPS are both monthly household surveys that use similar methodologies, adjustments had to be made to the Canadian data to make it comparable with the U.S. concepts. ${ }^{22}$ The adjustments are explained below.

## Adjustments to Canadian data

The following adjustments were made to the Canadian Labour Force Survey (LFS) data to make it directly comparable with the U.S. Current Population Survey (CPS) data.
I. Three groups of people, considered unemployed in Canada, are deemed not to be participating in the labour force in the United States:
a. people who were looking for work but who only looked at job ads;
b. people who had not looked for work but who reported that they had a job that would start in the next four weeks; and
c. people who had reported that they were not available to work because of personal or family responsibilities.

These three groups of people were removed from the unemployed population in the LFS and were added to the population of people not participating in the labour force.
2. Full-time students who report that they are looking for full-time work are not considered participants in the labour force in Canada but are considered to be part of the unemployed population in the United States. These people were removed from the population that was not participating in the labour force in the LFS and were added to the unemployed population.

On average, the Canadian labour market participation rates (LFPRs) reported in this article were adjusted downwards by about 0.6 percentage points throughout the period from 1976 to 2013 . In addition-even though this does not have an impact on this particular study-readers should note that the CPS target population includes individuals aged 16 and over, while the LFS includes individuals aged 15 and over.

## Method for decomposition of percentage point change in labour force participation rate across age groups

$B_{y 2}-B_{y 1}=\left(B_{g 1, y 2} X_{g 1, y 2}+B_{g 2, y 2} X_{g 2, y 2}\right)-\left(B_{g 1, y 1} X_{g 1, y 1}+B_{g 2, y 1} X_{g 2, y 1}\right)$
$=\mathrm{B}_{g 1, y 2} \mathrm{X}_{g 1, y 2}+\mathrm{B}_{g_{2}, y 2} \mathrm{X}_{82, y 2}+\mathrm{B}_{g 1, y 1} \mathrm{X}_{g 1, y 2}-\mathrm{B}_{g 1, y 1} \mathrm{X}_{g 1, y 2}+\mathrm{B}_{82, y 2} \mathrm{X}_{g 2, y 1}$ $-B_{82, y 2} X_{82, y 1}-B_{81, y 1} X_{g 1, y 1}-B_{82, y 1} X_{g 2, y 1}$
$=$ changes in rates : $\left\{X_{g 1, y 2}\left(B_{g_{1, y 2}}-B_{81, y 1}\right)+X_{g 2, y 1}\left(B_{g 2, y 2}-B_{g 2, y 1}\right)\right\}$

+ changes in group shares : $\left\{\mathrm{B}_{g_{1, y 1}}\left(\mathrm{X}_{\mathrm{g}_{1, y 2}}-\mathrm{X}_{g_{1, y 1}}\right)+\mathrm{B}_{g_{22, y 2}}\left(\mathrm{X}_{\mathrm{g}_{2}, y_{2}}\right.\right.$ - $\mathrm{X}_{82, y 1}$ ) $\}$
where
gl: age group 25 to 44
g2: age group 45 to 54
yl: year 1997
y2: year 2015
B: average labour force participation rate of a given age group
X: share of the age group in the population aged 25 to 54


## Differences in labour market participation of mothers

Researchers in the United States have pointed to a number of policy initiatives designed to facilitate women's participation in the labour market (for example, entitlement to job-protected parental leave and the right to part-time work) as possible explanations for the decline in American women's position in their labour force participation rates relative to other OECD countries. ${ }^{23}$ Women-in both Canada and the United States-are having fewer children and are having them at more advanced ages. In Canada, the average age of first-time mothers increased by 5.3 years, from 23.7 years of age in 1970 to 29.0 years of age in 2012 . While the average age of first-time mothers increased by 4.2 years in the United States in the same period, first-time mothers were younger in the United States ( 25.6 years) than in Canada ( 29.0 years) in 2012. ${ }^{24}$ Among the reasons cited for delaying motherhood are the pursuit of higher levels of education and young women's commitment to their career.

The labour force participation of women with children has generally been increasing over the past three decades in both countries (Chart 7). ${ }^{25}$ By 2014, 70\% of Canadian women with children under the age of 3 participated in the labour force, more than double the figure in 1976, when 31\% of those women participated. The numbers for the United States were $34 \%$ in 1976 and $62 \%$ in $2014 .{ }^{26}$ Note that both Canadian and U.S. LFPRs were relatively close in the late 1990s, but they continued to increase in Canada (albeit slightly) over the 2000s, while remaining stable in the United States. As a result, the labour force participation in 2014 of Canadian mothers with young children was about 8 percentage points higher than the rate for mothers with young children in the United States.

## Differences in labour market participation of mothers (continued)

There are differences in the entitlement to parental leave between the two countries, which could account for differences in labour market participation. In Canada, mothers with 20 or more insurable weeks of earnings could claim up to 15 weeks of maternity benefits starting in 1971. In 1990, 10 weeks of parental leave were added, which the parents could share based on their needs. Starting in December 2000, parental leave benefits increased from 10 weeks to 35 weeks-raising the total paid leave parents could take from 6 months to 1 year. Employers are required to accept the employees back into their job, or an equivalent job, at the end of the mandated leave and at the same rate of pay with the same employment benefits. ${ }^{27}$ The early 2000s also coincided with the introduction of a program of universal subsidized daycare in Quebec, which led to a significant increase in the labour market participation of working mothers. ${ }^{28}$ In the United States, the 1993 federal

Family and Medical Leave Act (FMLA) requires employers to provide up to 12 weeks of unpaid leave for the birth of a baby. Before the law was enacted, the U.S. had no laws requiring that employers provide any leave. ${ }^{29}$

Research has shown that most women take the full amount of leave to which they are entitled and then return to their pre-birth job. According to a study based on Canadian data from 1993 to 1996, $16 \%$ of female employees in Canada went back to work by the end of the first month after the birth of their child and about $90 \%$ returned to work after one year. ${ }^{30}$ In comparison, according to a U.S. study based on 2001 data, ${ }^{31}$ about $11 \%$ of mothers employed at the time of the birth of their child were back at work within one month and nearly $90 \%$ were back at work 9 months after giving birth. Over $80 \%$ of mothers who returned to work returned to the same employer. ${ }^{32}$

Chart 7
Labour force participation rates of mothers with children under the age of 3, Canada and United States, 1976 to 2014


Sources: Statistics Canada, Labour Force Survey, adjusted for comparability to U.S. data; Annual Social and Economic Supplements of the Current Population Survey, reported in Women in the Labor Force: A Databook 2015 (U.S. Department of Labor).

## Notes

I. The labour force participation rate is defined as the number of labour force participants (working or unemployed) expressed as a percentage of the working-age population.
2. Data drawn from OECD Online Employment Database (see OECD, 2016), following the lead of Blau and Kahn (20|3).
3. Sweden had the highest labour force participation rate in both 1990 ( $91 \%$ ) and 2014 (88\%). Ireland made the largest gains in its LFPR over the period ( 30 percentage points).
4. See Beaudry and Lemieux (I999, p. 22). This study also reported that cohort effects helped explain the large increase in Canadian women's participation rates in the 1970s and 1980s as well as their stagnation in the 1990s. Such results were consistent with a convergence in the behaviour of men and women in the Canadian labour market-profiles of recent cohorts of women are closer to those of men than those of older women.
5. See Goldin (2006).
6. Among men aged 25 to 54 , the participation rates in both countries were separated by a few percentage points. In 1997, the LFPR of men was 91.9\% in the U.S. and $90.5 \%$ in Canada. In 2015, the rates were $88.3 \%$ for the U.S. and $90.3 \%$ for Canada.
7. See Goldin (2006).
8. See Elseby et al. (2010).
9. See Cross (201I). In addition, the recession in Canada affected men to a larger extent than women, given that the losses were primarily concentrated in manufacturing (see Gilmore and LaRochelle-Côté, 201I).
10. Bernard and Usalcas (2014) estimate that employment fell by $2.3 \%$ in Canada and by $5.9 \%$ in the United States from peak to trough during the recession of the late 2000s.

I I. According to the U.S. Bureau of Labor Statistics (20I5), the labour force participation rates of prime-aged American women vary by race. In 2013, the LFPR was highest for Black or African American women (75\%); followed by White (74\%); Asian (70\%) and Hispanic (66\%).
12. The U.S. Bureau of Labor Statistics defines full-time workers as persons who usually work 35 hours or more per week in their main job. As a result, the Canadian data had to be adjusted to meet the U.S. definition.

I3. Since U.S. data on work hours were collected differently prior to 1994, it was not possible to generate similar statistics for 1980 and 1989 (see Rones et al. 1997).
14. There are situations in which individuals may want to work, however, they are not in the labour force because they believe no work is available. These "discouraged workers" are not counted in the official labour statistics. In 1997, the share of women workers in the labour force considered "discouraged" was three times higher in Canada than in the United States ( $0.6 \%$ versus $0.2 \%)$, but the roles had changed by 2013 . In 2013, women in the United States were twice as likely as their counterparts in Canada to report being discouraged ( $0.2 \%$ versus $0.4 \%$ ). If these discouraged individuals were included in the official labour statistics, the labour force participation rates would-in theory-be smaller than previously reported. However, in empirical terms, this explanation accounts for a very small share of the observed difference since discouraged workers are a negligible portion of the overall labour force in both countries.
15. See Data sources, methods and definitions for an explanation of the decomposition method used in Table I.
16. The remaining part in Table I (changes in group shares) refers to changes in the proportions of each age group in the overall population of women aged 25 to 54. Because the proportion of women aged 45 to 54 increased in both countries, changes in shares did not contribute to the rising discrepancy in LFPR between the two countries.
17. In the United States, the lower labour market participation of younger women could be related to differences in the opportunity cost of raising children. See Differences in labour market participation of mothers for a discussion of Canada-U.S. differences in the LFPR of young mothers.

I8. For each age group and country, two linear regression models (ordinary least squares) were estimated to isolate the effect of educational attainment on the increase in labour force participation rates. To achieve this, microdata from 1997 and 2015 were pooled together. The dependent variable is whether or not an individual is a labour market participant. In the first regression, there is only one independent variable-a dummy indicating the year 2015. The coefficient of the dummy is the growth rate of labour market participation between the two years. In the second regression, dummy variables indicating the level of education are added. The effect of education can be seen by examining the extent to which the coefficient associated with the year dummy changes between the two sets of regression results.
19. The standard labour supply model predicts an increase in labour supply given an increase in the expected income.
20. Readily comparable data for the two countries are only available for those aged 25 and over and until 2014. Data from the U.S. are from the Bureau of Labor Statistics.
21. See U.S. Bureau of Labor Statistics (2015) and Morissette et al. (2012) for a detailed discussion on earnings and wage growth.
22. See Sunter (1998) and Bernard and Usalcas (2014) for additional details on Canada-U.S. comparisons of labour statistics.
23. See Blau and Kahn (2013).
24. The 1970 data for Canada and the United States are from Matthews and Hamilton (2009, Figure 5). The source of the 2012 estimates is the CIA World Fact Book (see Central Intelligence Agency, 2014).
25. Although the proportion of women with young children participating in the labour market has grown in both Canada and the United States, mothers still remain less likely to participate than women without children. By $2015,86 \%$ of Canadian women under the age of 55 with no children at home participated in the labour market, up from $65 \%$ in 1976. The gap between women with children under the age of 3 and those without children is now much smaller. In Canada, the gap narrowed from 33 percentage points in 1976 to 16 percentage points in 2015 (CANSIM table no. 282-02II). Similar qualitative results are reported for the United States (Boushey, 2005).
26. According to the U.S. Bureau of Labor Statistics (2015), the labour force participation rates of American women with children under the age of 3 vary by race. In 2014, the LFPR was highest for Black or African American mothers with children under the age of 3 ( $66 \%$ ), followed by White (62\%), Asian (51\%) and Hispanic (52\%). Again, the Canadian data are not broken down by race, so comparing the LFPR with controls for the composition of the labour force by race is not possible.
27. In order to qualify for these benefits, Canadian parents must have worked 600 hours in the past 52 weeks. The benefits equal $55 \%$ of the parent's average weekly insurable wage (Marshall, 2003).
28. See Milligan (2014).
29. Waldfogel (200I) estimated that the FMLA covers less than $50 \%$ of private sector workers in the United States. Blau and Kahn (2013) report that the FMLA applies only to employees who have been with the same employer for at least one year and who have worked at least I, 250 hours. The FMLA exempts small employers, defined as those with less than 50 employees. Some states have their own version of the FMLA and have even lower thresholds for employer exemption.
30. See Marshall (I999).
31. See Han et al. (2008).
32. See Marshall (1999) and U.S. Department of Labor (20|4).

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[^0]:    Sources: Statistics Canada, Labour Force Survey, adjusted for comparability to U.S. data; United States Bureau of Labor Statistics, Current Population Survey.

[^1]:    Sources: Statistics Canada, Labour Force Survey, adjusted for comparability to U.S. data; United States Bureau of Labor Statistics, Current Population Survey.

[^2]:    Sources: Statistics Canada, Labour Force Survey, adjusted for comparability to U.S. data; United States Bureau of Labor

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