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**Recent Patterns of Participation Rates:  
A Canada - United States Comparison**

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## 1. Introduction

An understanding of what drives the participation rate is necessary for the projection of labour force growth, a key input into the determination of the economy's production potential.<sup>1</sup> This paper reviews developments in the participation rate since the mid-1970s and considers those factors that might have had a significant impact on them, with the objective of providing a perspective on possible movements of the rate over the next decade or so. Because of the many similarities between the participation rates of Canada and the United States, the analysis is done in the context of a comparison between the two countries' rates.

Movements in the aggregate participation rate can occur for a number of reasons. Cyclical factors related to the macroeconomic environment can play a significant role and can persist for a period of time. Similarly, structural factors and demographic trends can also have a major impact. It is important to try to sort out these various influences. The implications for macroeconomic policies can be quite different if movements in the participation rate represent cyclical rather than structural or demographic factors.

From the mid-1970s to the end of the 1980s, the trends of the aggregate participation rates of Canada and the United States were broadly similar, rising to record highs by the end of the 1980s with only one significant interruption in the early 1980s (Figure 1<sup>2</sup>)<sup>3</sup>. Movements in the aggregate employment rates of the two countries were also very similar (Figure 2). The dominant influence on the total participation rates of both countries over this period was the strong increase in female participation rates, continuing a trend that had begun in the 1950s. Male participation rates shifted down slightly over the 1980s (Appendix Figures 13 and 14). There were, however, cyclical differences between the two countries, with participation rates in Canada tending to rise further in expansions and falling more in the 1981-82 recession than in the United States. For example, the condition of excess demand in the Canadian economy in the late 1980s pushed up wage rates sharply and drew workers, particularly youth, into the labour force at a rate above what

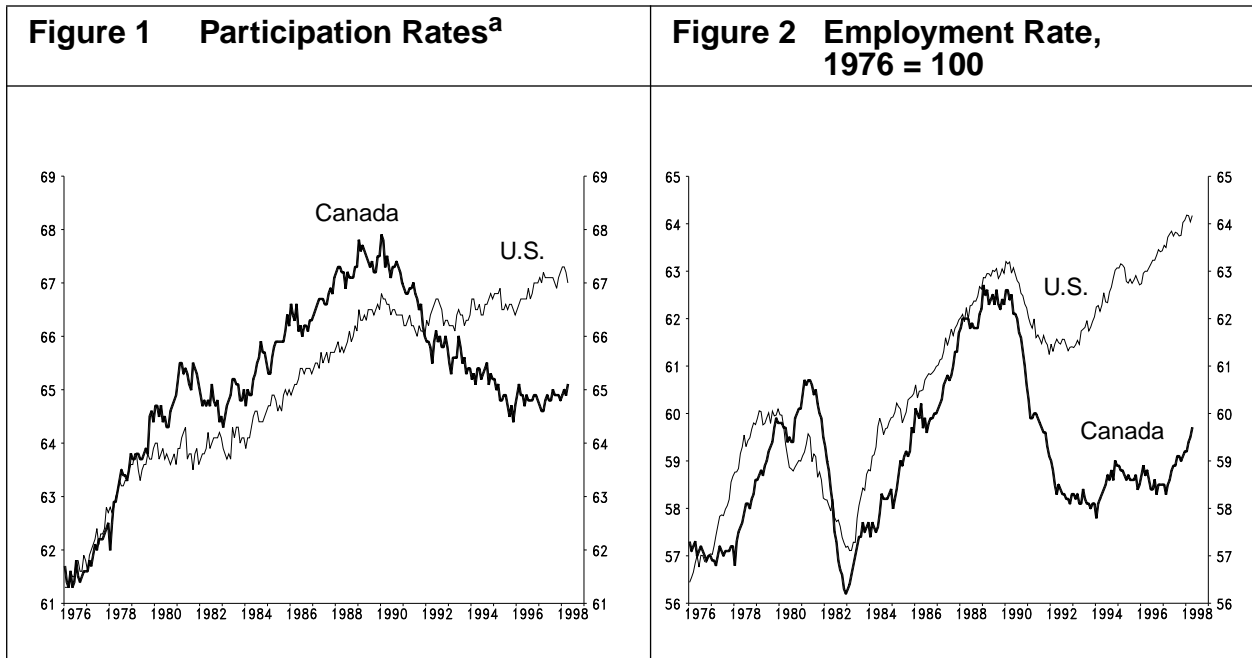
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1. The growth of population aged 15 and over, which is a function of birth and death rates and net immigration, interacts with changes in the participation rate to determine the growth of the labour force.

2. Except where noted, sources of historical data are Statistics Canada and the U.S. Bureau of Labor Statistics.

3. Because the composition of the Canadian and U.S. population has been different, the two aggregate participation rates are not strictly comparable. See Appendix Figure 12.

had been seen in the past. In the United States, where economic growth was not as strong, the rise in participation rates was less buoyant.



a. The levels are not directly comparable because of different weights of major cohorts. When Canadian weights are applied to the U.S. rate, the Canadian rate is lower throughout the period.

The 1990s, however, appear to have initiated a radical departure between the two countries participation and employment rates. Both these rates fell more in Canada than in the U.S. during the 1990-91 recession caused partly by relatively stronger economic growth before 1990 and the more severe recession. However, while the U.S. participation rate had begun to recover by 1994 and has since risen to a new high, the Canadian rate continued to fall over the next five years. It has been relatively steady at around 65 per cent since 1995. In the United States, female rates are once again responsible for the rise in the total participation rate as male rates have flattened out after their decline. The rate of increase of the female participation rate is, however, lower than in the 1980s. In Canada, male rates prolonged the decline but both male and female rates are responsible for the recent flat performance.

While cyclical influences are evident in the movements of the participation rates of Canada and the United States over the last two decades or so, various structural factors have likely been operating to influence the longer term trends. While in the 1970s and 1980s, the impact of

these factors appear to have been similar in both countries, in the 1990s either the effect was greater in Canada or there were different factors at work.

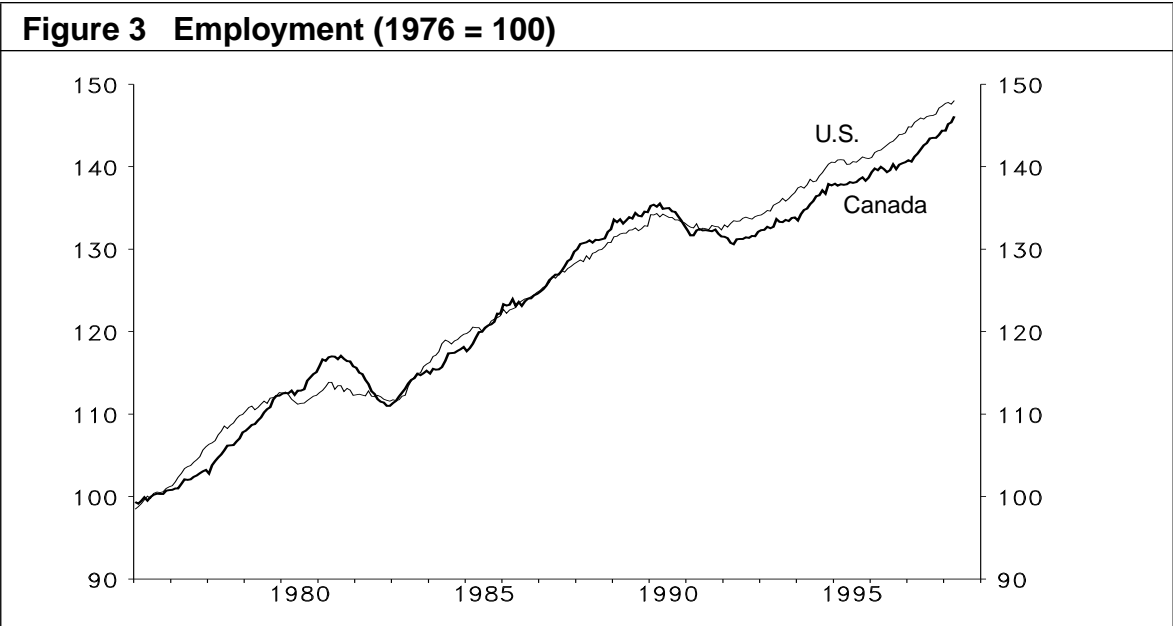
The factors explaining movements in the aggregate participation rate are complex and multifaceted and as a result, many developments, even long-term trends, have not been correctly predicted. Furthermore, it has also been difficult to explain these movements after the event. In particular, the strength and persistence of the rise in female rates in the 1970s and 1980s and the downward drift of prime age male rates in many industrial countries during that time was largely unexpected. In Canada, the size of the decline in the total Canadian participation rate in the first half of the 1990s and its subsequent flat performance took most observers by surprise and have not been entirely explained. To better understand these factors, and their implications for future movements in the aggregate participation rate, we examine first some of the demographic and industrial restructuring factors that appear to have influenced the aggregate participation rate. We then undertake a disaggregated analysis using age and gender groupings. Throughout, whenever they may shed some light on past and future Canadian developments, comparisons are made with the United States. The conclusion reached is that an increase in the aggregate participation rate should be expected over the medium term, but it is unlikely to return to its 1989 peak level or to track the U.S. rate as closely. The greatest uncertainty surrounds the direction of the participation rate for adult men in general and of 55 and over in particular.

## **2. Demographic and Structural Influences**

Akyeampong (1996) points out that major demographic events, including the post-World War II baby boom and high immigration levels in the post-war years, have the potential to lower the employment rate. Such shifts could also affect participation rates. Akyeampong notes that, during the years 1960 to 1989, the employment rate trended up, suggesting that the economy was able to create enough new employment over time to offset these downward pressures. Participation rates followed a similar trend.

Demographic factors appear to have influenced the direction of the employment and participation rates in the 1990s. As Figure 3 illustrates, though employment fell more in Canada than in the United States in the last recession, the somewhat weaker rate of growth in the last few years was not sufficient to account for all the difference in the employment rates. A major factor

in the rising disparity between the two countries' employment rates has been the faster population growth in Canada, a factor that may have also contributed to the weaker participation rate performance in Canada in the 1990s relative to the 1980s and to the United States. Since 1989, growth in employment has not been keeping up with growth in population of labour force age and this weaker employment rate has likely dampened the participation rate as well.



**2.1 Compositional Effects**

The aggregate participation rate is the current weighted average of the widely varying participation rates of the different age/gender groups. If the population shares of these groups change significantly, they could change the aggregate participation rate even if specific age group participation rates remained unchanged.

Over the last two decades, not only have the participation rates of many of the individual groups changed dramatically but so too have their shares in the source population as the baby bust generation replaced the aging baby boomers. The youth share fell dramatically in the 1980s as the baby boomers completed their passage through this age group. In Canada the share dropped from about 25 per cent in the 1970s to 19 per cent by the end of the 1980s.



The ages for peak participation in the labour force for both sexes are 25 to 44 and, after age 55, rates drop dramatically. Thus, the movement of the first wave of the baby boom generation beyond age 44 and the entry of the baby bust generation into the 25 to 44 age group, together with the further small decline of the youth group's population share (to 17 per cent in Canada by the mid-1990s), are having a dampening effect on the aggregate participation rate in the 1990s.

From 1976 to 1984, the compositional changes were roughly offsetting, but since then the negative contribution from the declining weight of young people in the population has more than offset the net positive contribution of a rising adult weight. From 1985 to 1989, the downward pressure of the compositional change was outweighed by the steady gains in the participation rates of adult women and youths, but since 1989 the negative effect of compositional change has exacerbated the decline in the participation rates for most age/gender groups. Figure 15 in the Appendix shows what happens when the participation rates of specific age groups are kept constant at 1976 levels. The move of the baby boomers into the 55 plus group in the next decade, will have a far more dramatic effect (Appendix Figure 23).

## ***2.2 Immigration Effects***

Another source of change to the aggregate participation rate could arise from an increase in the rate of immigration. Immigrants now constitute a large share of the Canadian population. The proportion of immigrants in the Canadian population has remained fairly flat around 15.0 and 16.0 per cent in the past censuses, but jumped to 17.4 per cent in 1996, the largest share in over 50 years<sup>4</sup> (Table 1). Immigrants also represent a growing share of the Canadian labour force — 20.7 per cent in 1996<sup>5</sup> compared to 18.5 per cent in 1991. This could have a significant impact on the Canadian labour market if the participation rate of the new arrivals is significantly different from the average of all immigrants or the Canadian born. In 1996, the average participation rate for immigrants was 60.7 percent, much lower than that for Canadian-born workers (66.9 per cent) in the same year. The participation rate for recent immigrants — the 1991-1996 cohort — was much lower than the average for all immigrants and for the Canadian born. It was also lower than that of cohorts who arrived between 1961 and 1990 (see Table 2 in the Appendix).

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4. Statistics Canada, 1996 Census, *The Daily*, November 4, 1997.

5. Statistics Canada, 1996 Census, unpublished tabulations.

This is not surprising in itself. Recent cohorts of immigrants need some time to adapt to the new labour force but their participation rate was also lower than that for the most recent immigrants at the time of the 1991 Census.<sup>6</sup> However, there are several sources of downward pressure on the Canadian participation rate stemming from recent immigration patterns, which may slow the convergence of the immigrant participation rate to that of the Canadian-born. These include geographical origins, age, gender, and educational attainment of recent immigrants.

The majority of immigrants still originate from Europe, but this proportion is falling (from 67 per cent in 1981 to 47 per cent in 1996; see Table 1), making way for migrants from Asia and the Middle East, less likely to know English or French, and who might, therefore, take more time to enter the labour force.

Another source of downward pressure is a changing age/gender mix. In 1991, the ratio of males-to-females was lower for immigrants (96.3 per cent) than it was for the Canadian-born (97.9 per cent)<sup>7</sup>. Although more men than women have immigrated to Canada historically, in 1981 the Census recorded more females than males among the immigrant population for the first time. The increase in the number of females immigrating to Canada as well as the higher survival rates of women explain the lower male-to-female ratio of immigrants. Although the gap between the Canadian-born and immigrant male-to-female ratios has narrowed over the years, this gap was lower for immigrants who came to Canada between 1981 and 1987<sup>8</sup>. Since women traditionally have lower participation rates, this may have had a downward impact on the Canadian participation rate. In addition, in 1996, 18.1 per cent of immigrants were 65 years old and over (from 17.0 per cent in 1986 and 17.7 per cent in 1991, see Table 3 in the Appendix) compared to 12.2 per cent of Canadians.<sup>9</sup> People over the age of 65 are also known to have lower participation rates. The fall in the immigrant male-to-female-ratio and the increase in the proportion of older immigrants are both consistent with the recent trend in the labour market intentions of landed immigrants: a falling proportion of immigrants intend to join the labour force<sup>10</sup>.

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6. This was the case for all age/gender groups of recent immigrants. Table 2 and Badets and Chui (1994, Table 5.1).

7. Statistics Canada, 1992, *Immigration and Citizenship*, 1991 Census, Catalogue number 93-316, Table 1, p. 8 and Table 2, p. 12.

8. Statistics Canada, 1992, *Immigration and Citizenship*, Catalogue number 93-316, Table 5, p. 134. Note, however, that this fall in the immigrant male-to-female ratio was reversed for the 1988-91 cohort.

9. Source: Statistics Canada, 1996 Census.

10. Statistics Canada, 1996, *Annual Demographic Statistics 1995*, Catalogue number 91-213-XPB, Table 4.4, p. 20.

Finally, there is some evidence of a falling educational advantage for immigrants. Although immigrants still seem to be more skilled than their Canadian counterparts, Baker and Benjamin (1994) and Green (1995) note that this educational advantage is smaller for more recent cohorts. Note that in recent years, the proportion of immigrants assessed for the skills they bring to the Canadian labour market has fallen, making way for more refugees and family reunifications.

**TABLE 1. Immigrants in the Labour Force<sup>11</sup>**

	<b>1981</b>	<b>1986</b>	<b>1991</b>	<b>1996</b>
<b>Foreign-born as a proportion of total population.</b>	16.1	15.4	16.1	17.4
<b>Foreign-born labour force as proportion of total labour force</b>	19.0	17.8	18.5	20.7
<b>Participation rate of Canadians</b>	64.8	66.5	67.9	65.5
<b>Participation rate of immigrants</b>	64.1	64.7	65.2	60.7
<b>Proportion of immigrants from Europe</b>	67.0	62.0	54.0	47.0
<b>Proportion of immigrants from the rest of the world</b>	33.0	38.0	46.0	53.0

These recent shifts in the composition of immigrant cohorts — origins, age/gender mix, and educational background — could explain part of the recent decline in the aggregate Canadian participation rate, absolutely as well as relative to the United States. One should expect immigrants to be more important to labour market outcomes in Canada than in the U.S. The ratio of Canadian to U.S. population has been on an upward trend since the 1970s. An important part of the growth in the Canadian population and labour force in recent years has come from immigration. In fact, although immigration rates in both Canada and the U.S. have followed

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11. For data sources, see the Appendix.

similar cyclical patterns, the immigration rate has always been higher in Canada than in the U.S. (at least since 1976)<sup>12</sup>.

### **2.3 Structural Changes**

In both countries structural factors, such as the increasing use of computer technology, have been important in the 1990s as well as the 1980s. As a result of new technology, there has been a shift towards higher-skilled workers, leading to older workers taking early retirement and youth staying in school longer.<sup>13</sup>

In Canada, both the financial and retail sectors have been undergoing significant intrasectoral rationalization as they come to terms with greater international competition in the 1990s. While the impact has likely been mostly felt by workers with low skills, it is not clear to what extent such changes have affected people's decision to seek work. More recently, fiscal consolidation has resulted in a massive reduction in employment in public administration, which may have led to more early retirements, although the acceleration in the growth of the share of self-employed persons in the labour force in the mid-1990s, may have been another outcome.

## **3. An Analysis of Major Age Groups**

Four age groups are considered here: the core labour force (ages 25 to 54), youths (ages 15 to 19 and 20 to 24) and older people (ages 55 and over).<sup>14</sup> The historically large decline in the participation rate for youths had the greatest impact on the aggregate participation rate in the 1990s, while the increasing weight of older people in the population will ensure that any change in their participation rate will have a significant impact over the next decade and beyond.

What stands out from the disaggregated data is the similarity between participation rate levels and trends in Canada and the United States for many of the cohorts, particularly before 1990 but after, as well, for the core age groups.

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12. The Canadian immigration-to-population ratio has been twice as large as that of the United States since 1991.

13. Industries, such as communications, that have used computer technology most intensively have also had the fastest growth in employment. The OECD found that, between 1980 and the early 1990s, the employment rate for low-skilled relative to skilled workers fell in all OECD countries due primarily to a relative demand shift. OECD (1997), p. 94.

14. These groupings are not always the ones that one would choose *a priori* for analysis but are the ones that are readily available.

### ***3.1 The Core Labour Force: ages 25 to 54***

The size of the 25 to 54 age group (about 59 per cent of the working age population in 1996 in Canada and 58 per cent in the United States<sup>15</sup>), together with the fact that it has the highest participation rate of the four groups considered here, ensures that it plays a major role in determining the level and trend of the aggregate rate. For example, much of the rise in the aggregate participation rate in the 1970s and 1980s can be explained by the sharp upward trend in the core group's rate. At the same time, because this group has a strong attachment to the labour force, its participation rate is relatively insensitive to changes in the macroeconomic environment, including employment prospects. Thus, while representing more than 70 per cent of the Canadian labour force, the fall in the core group participation rate accounted for less than 10 per cent of the drop in the aggregate Canadian participation rate from 1989 to 1997<sup>16</sup>.

Since the 1981-82 recession, Canadians have stayed in the labour force almost to the same degree that Americans have - both men and women - even though the employment rates have generally been much lower in Canada than in the United States. This indicates that Canadian adults have a stronger attachment to the labour force (Appendix Figure 16). The similarity in participation rates in the 1990s is particularly remarkable, taking into account the more severe recession in Canada in 1990-91 and the subsequent weaker expansion (Figure 4). This stronger attachment may be due to the higher probability that an unemployed worker in Canada will be receiving Unemployment Insurance (now called Employment Insurance (EI)) than in the United States. Since recipients of EI have to be searching for work, they are likely to report in the Labour Force Survey (LFS) that they are seeking work when they are not employed.<sup>17</sup>

For the core group as a whole, the steeply rising trend in the female participation rates in the 1970s and 1980s outweighed the declining trend in the rates for men.<sup>18</sup> In the 1990s, however, the rate for women flattened out in Canada and slowed considerably in the United States, while the decline in the rate for men accelerated. (Male employment rates have been much more cyclical

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15. Note that population shares are not perfectly comparable between Canada and the U.S. because of the inclusion of 15 year olds in the Canadian figures.

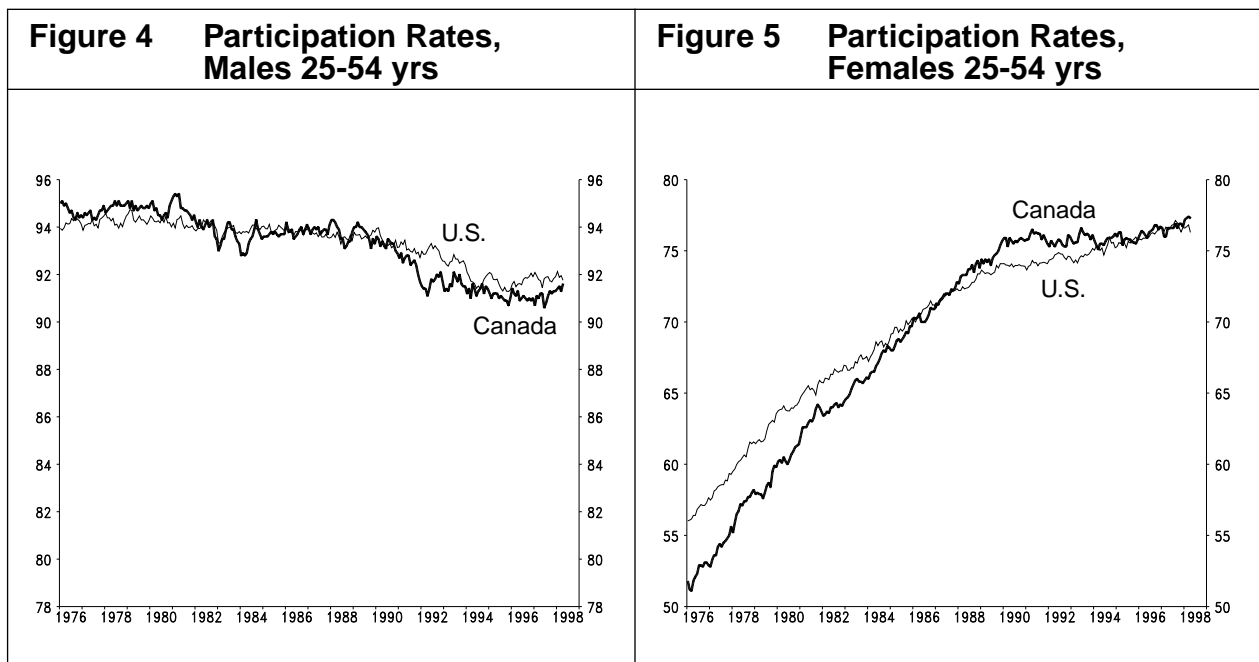
16. This calculation does not take into account the effect of changes in the youth population weight or in the composition of the aggregate rate.

17. See Riddell and Sharpe (1998) for a discussion of the role of EI and labour force attachment. The broader definition in Canada than in the United States of job-seeking activity also increases the probability of an individual, who is not working, being included in the labour force.

18. Data from the period 1966 to 1976 indicates that this trend was already underway before 1976.

in both countries, while female rates, like their participation rates, were on a strong rising trend until 1990.) In Canada, this age group experienced an overall drop of about one percentage point in its participation rate after 1989.

Until 1989, it appeared that structural factors were determining the direction of the rates for both men and women, although cyclical factors produced slight short-run deviations. For the 1990s, however, it is harder to untangle the cyclical and structural factors affecting participation rates. Although in Canada the severity of the 1990-91 recession undoubtedly had a negative effect on the rates for this core group, the fact that the pattern has been similar to those of the United States, as well as of a number of other industrial countries, suggests that structural factors continue to have a strong influence.



It is unclear why the male participation rate has been on a declining trend for so long in Canada and the United States and other industrial countries.<sup>19</sup> Accordingly, there is a great deal of uncertainty about the future direction and size of movement for this group.

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19. In an article on the employment outlook in the United States, Fullerton (1997, 29) notes, in passing, the paucity of research on the long-term decrease in participation rates of core-aged men.

One possible explanation of the long-term decline in the male participation rate is rooted in the rising skill levels required of the workforce in many sectors. When men with limited skill sets are laid-off from traditional, well-paid jobs in goods-producing industries, they may take a long time to adjust their wage rate expectations to the level that their experience and skill level can command in a restructured environment. Many of these men, unable to find “suitable” jobs, drop out of the labour force. Those who are able to take advantage of early retirement options may opt for permanent withdrawal. Others may switch roles with spouses, frequently moving in and out of the labour force. This explanation is consistent with the observation that, in the 1990s, declines in the participation rate for Canadian workers with fewer than eight years of education has been greater than those for groups with higher levels of education. Eventually, the positive impact of the rising school attendance rate of young men should begin to outweigh the negative effect of lay-offs and early retirements. This could lead to a reversal of the long-term downward trend of the rate for adult men. Since 1994, however, participation rates among core-age men have remained stable in both countries, as employment rates have crept up. This suggests that, as output approaches capacity in Canada and the employment rate rises further, the participation rate may be slow to follow.

The rising trend in the participation rates of women since the early 1950s generally reflects various sociological and economic factors that have been evident in most industrial countries: changes in societal attitudes towards working women, particularly those with family responsibilities; the larger percentage of women with post-secondary education; the more ambitious career aspirations of many women. Each generation of women has had a stronger attachment to the labour force than the preceding one, thus pushing up the core rate. The near absence of growth in the Canadian rate in the 1990s and the marked slow-down in the U.S. rate over the same time raise the question as to whether this ratcheting up process is nearing a limit.

Further disaggregation of this group suggests that, while this process is not yet over, additional ratcheting upward will indeed be much smaller. In the United States, participation rates for women with children under 18 have been rising faster than those of other women, with the result that there has been a considerable shrinking of the difference between the rates of these two groups.<sup>20</sup> Women aged 45 to 54 without children have also been a source of growth in the participation rate for U.S. core age women since the mid-1980s. The degree of convergence of the

rates for these sub-groups, as well as the rates for men and women, has already been considerable, suggesting a slowdown in the long-term rising trend of the participation rate for women aged 25 to 54. Similar movements appear to have been taking place in Canada. In fact, the rate for women aged 25 to 44 is now higher in Canada than in the United States. However, the rate for the 45 to 54 aged group in Canada, which rose significantly in the 1990s, is still below that for U.S. women of the same age and below that for Canadian women aged 25 to 44. There may, thus, be more room for the participation rate for Canadian women to rise than for women in the United States, despite the fact that the rates for Canadian and U.S. core age women were virtually identical in 1997.

Since the mid-1970s, participation rates for women in both Canada and the United States have been more highly correlated with employment rates than have participation rates for men, reflecting the generally weaker attachment of women to the labour force. During a strong economic expansion, when jobs are plentiful, many women are temporarily drawn into the labour force, combining their traditional role of homemaker with that of wage earner, often on a part-time basis.

Women's employment rates have, however, been more immune to recessions than have men's. One reason appears to be the greater willingness of women to take low-paying jobs, for which they are overqualified, while they are juggling work and domestic duties.<sup>21</sup> Furthermore, women who re-enter the labour market after a prolonged absence are less likely to be constrained by unrealistic wage expectations than men who have been laid-off. In Canada, these factors, as well as the ongoing rise in the full-time attendance rate, which has been relatively greater for young women than for young men, are likely to continue to exert a positive influence on the participation rate for women in the core group.

In the United States, media reports have associated the rise in the female participation rate, particularly among women with families, to recent pending cuts in welfare, which give a strong incentive to come back to the labour market but this effect does not appear to have been

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20. Hayghe (1997) notes that, in the United States, the participation rates for most groups of women in the 25 to 54 age group rose in the 1970s and 1980s, but that growth was greatest for mothers of children under age 18.

21. In a recent survey, Statistics Canada found that women were more likely than men to feel overqualified for their jobs. In 1994, 24 per cent of women with a degree or college diploma were likely to have a clerical or service job compared with 8 per cent of men. "One possible explanation is that more women than men may accept jobs with lower-level requirements in order to balance family demands and earning an income." Kelly, Howatson-Leo and Clark (1997, 12). Also, a much larger proportion of women than men work part-time.



quantified. Welfare reform in Canada may eventually have a positive impact on female employment and participation rates.

In Canada, changes to EI since 1989, have contributed to a halving of the probability that a non-working individual will receive benefits. If this development eventually leads to weaker labour force attachment, a cyclical increase in the overall employment rate for those in the core group may not be accompanied by as much of a rise in the participation rate. Over the next years or so, however, there appears to be room for an increase of about three percentage points, but only if male rates rise slightly (say by one percentage point). The U.S. Bureau of Labor Statistics (BLS) assumes that the male rate in the United States will decline over the next decade, their projection is for a 1.7 percentage point increase in the total core age rate from 1996 to 2006.<sup>22</sup>

### ***3.2 Youth: ages 24 and under***

Participation rates are more cyclical for youths than for adults but their impact on the aggregate rate varies with the share of youth in the population of labour force age. In spite of the decline in their population weight since the beginning of the 1980s, the decline in the youth participation (and employment) rate in Canada was so large following the 1990-91 recession, that it accounted for about two thirds of the drop in the aggregate participation rate from 1989 to 1997.<sup>23</sup>

Part of the decline in the youth participation rate was due to the rise in the rate of full-time school attendance. In Canada the attendance rate rose to over 58 per cent in 1997 from 50 per cent in 1989<sup>24</sup> (Appendix Figure 17). Although many full-time students either work or search for work during the school year, they are less likely than non-students to be participating in the labour force. (The participation rate for non-students in Canada was double that of students in 1997.) Thus, a rise in attendance rates will produce a lower overall youth participation rate, other things being equal. According to one estimate, this rise accounted for about 50 per cent of the decline in the Canadian youth rate from 1989 to 1997.<sup>25</sup>

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22. Fullerton (1997), Table 4.

23. This contribution does not include the further contribution from the decline in the youth population share and ignores the effect of the changes in composition of the aggregate rate.

24. The student ratios were calculated by Jennings (1998) as a percentage of the population for January to April and September to December.

25. Jennings (1998) attributes a further 38 per cent of the decline in the youth participation rate from 1989 to 1997 to the fall in full-time student participation rates and 11 per cent to the fall in non-student participation rates.

The persistent nature of the increase in the school attendance rate suggests that its rise is largely structural. Nevertheless, deviations from trend before and after 1989 indicate that it does respond to cyclical developments. The incentive to stay in school is likely to be stronger when there are fewer low-skill job opportunities, and these opportunities tend to be sensitive to the business cycle. The premium paid to workers with higher levels of education is another incentive to spend more years in school. Since, in Canada, there is no evidence that these premiums have increased, they do not account for the rising trend in attendance rates (Beaudry and Green 1997). The failure for these premiums to rise may be because the supply of educated youth has been growing faster than the demand for young educated workers. Nevertheless, because the unemployment rate is generally lower for those with higher levels of education, relatively more young people seem to be choosing to stay in school to improve their employment prospects.<sup>26</sup>

A factor that has exerted downward pressure on the youth participation rate is the immigrant youth population because the participation rate of the most recent immigrant cohort in this age group is much lower than the average of all immigrants and the Canadian-born. The differences were wider for the 1996 than for the 1991 Census. A modifying factor, however, is the smaller share of youth of the immigrant population than of the Canadian-born population.<sup>27</sup>

The labour market experiences of teens (15 to 19)<sup>28</sup> and young adults (20 to 24) are sufficiently different to warrant separate treatment here.<sup>29</sup>

### *3.2.1 Teens: 19 years and under*

In both Canada and the United States, the attachment of teenagers to the labour force is relatively weak, driven largely by job opportunities. Their participation rates are, therefore, very cyclical, tracking their employment rate very closely for some time (Appendix Figures 18 and 19). This is not surprising since, during the school year, the majority of teens are in school full-time and thus available for very few hours of work each week.<sup>30</sup> In general these young people are

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26. The OECD (1997, 95) found that even though the supply of workers with low education levels generally fell between the mid-1980s and the mid-1990s, their labour-market situation worsened in most countries.

27. Badets and Chui and unpublished 1996 Census data.

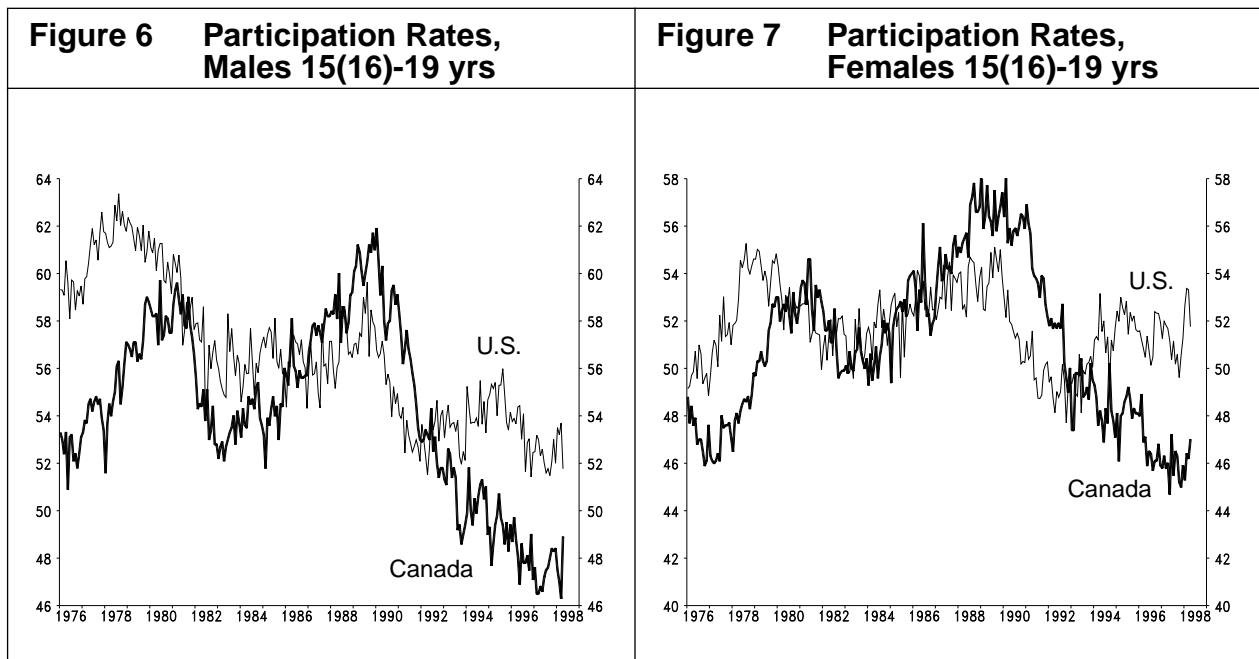
28. Ages 15 to 19 in Canada, 16 to 19 in the United States.

29. Since 1976 these two population groups have been roughly equal in Canada but, because the teen participation rate is much lower, their share of the labour force is less than 6 per cent compared with 10 per cent for the older group.

30. 95 per cent in Canada and 97 per cent in the United States of 15 to 16 year olds are attending school; for 17 to 19 year olds the figures are about 70 per cent in Canada and 71 per cent in the United States. Statistics Canada (1997) and Census Bureau (1995).

less skilled, so that their decision to look for work while in school, or to choose between school and full-time work, may be influenced by the demand for unskilled labour.

Although participation rates were lower in Canada than in the United States in the 1970s, they had caught up by the beginning of the 1980s and overtaken the American rate by the end of the decade (Figures 6 and 7). The relatively stronger expansion in Canada was a significant factor in the latter occurrence. Since the Canadian economy was operating above potential capacity by the late 1980s, the exceptionally high level reached by teens' employment and, therefore, participation rates was unsustainable and ensured that the decline in the 1990-91 recession would be larger in Canada than in the United States. However, the more persistent decline in participation rates in Canada and the depressed levels in the United States in the 1990s are indicative of structural change.



One structural development has been the rise in the teen school attendance rate (Appendix Figure 17). It rose in the 1980s in both Canada and the United States at the same time as employment rates rose and the further rise from 1990 to 1993 could have been as much a continuation of a trend as a response to job shortages. In both Canada and the United States the attendance<sup>31</sup> rates have tended to drift down since 1993 while employment rates were rising or

remaining stable. Although there was likely a certain response to cyclical factors, it is more likely that teens were influenced by the mix of jobs available. The proliferation of computer use may have increased young people's awareness of the need to be better prepared to compete in a market where there was an ongoing shift in demand from low- to higher-skilled jobs.

The effect of a higher school attendance rate on the teen participation rate may have been larger in Canada than in the United States. From 1989 to 1995, attendance rates for Canadians aged 15 to 19 rose about 6 percentage points, while enrolment rates for Americans aged 16 to 19 rose by only about 2.5 percentage points. In 1995, these rates were roughly equal.<sup>32</sup> The rise in the full-time school attendance rate in Canada has been estimated to account for about 21 per cent of the decline in the total teen participation rate from 1989 to 1997.<sup>33</sup> Thus, most of the decline stemmed from falling participation rates for both students and non-students. It would appear, therefore, that the larger increase of full-time school attendance in Canada than in the United States cannot account for the major part of the differential in teen participation rate developments in the two countries in the 1990s.

The performance of the student participation rates in Canada in the 1990s compared with the 1980s, especially in the summer months, (Appendix Figure 20) reflects a particularly difficult job market for these young people, one that was much more severe for all categories of teens in the 1990s than for older youths.<sup>34</sup> Canadian students may have been affected by the restructuring in sectors that have traditionally provided the kind of part-time or summer jobs teenagers typically fill, such as retail, which accounts for about 25 per cent of student employment.

Canadian teenagers who are not in school have also had difficulty finding jobs in the 1990s.<sup>35</sup> Their participation rate fell by almost 5 percentage points during the recession, and

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31. Data for Canada is for attendance at school but for the United States it is enrolment in school. Thus, there could be a small upward bias in the U.S. measure relative to the Canadian rate.

32. The comparison is for the 15 to 19 age group in each country and includes part-time students: 82% in Canada, 81.5% in the United States. The Canadian rate is from Statistics Canada (1997), while the U.S. rate is calculated from Census Bureau, CPS October 1995 *School Enrollment-Social and Economic Characteristics of Students*, Table 3.

33. The rest of the decline has been analysed by Jennings (1998). He estimates that during the school year, students accounted for about 70 per cent of the decline and non-students, who are a small proportion, for the remaining 9 per cent. In 1997 the participation rate for non-students was 78 per cent, while for students it was 35 per cent.

34. See Statistics Canada (1997, 18, 21).

35. A Statistics Canada review of youths and the labour market notes that school to work transition has become more difficult for this group in the 1990s. The employment rate for non-student youths (15 to 24) has fallen from 73.2 per cent in 1992 to 69.2 per cent in 1996. Statistics Canada (1997, 28)

recovery has been delayed and weak. With little more than high school education and limited experience, they have probably found it harder to compete for jobs that now require more than a basic level of literacy.<sup>36</sup> In addition, the increases in payroll taxes and in the minimum wage relative to the average wage in the 1990s may have priced these teens out of many jobs. In contrast, minimum wages fell relative to average hourly earnings from the mid-1970s until the mid-1980s.

The recent flattening out of the attendance/enrolment rates in both Canada and the United States, may be an indication that they are near a saturation point. Most of the future direction in the participation rate for those aged 15 to 19 would, therefore, be determined by the participation rates of the student/non-student sub-groups. As in the past, the business cycle and labour costs will heavily influence the demand side of the teen labour market. On the other hand, the structural changes that have taken place in some sectors in Canada, such as retail, the extension of Employment Insurance premium levies to all hours worked and ongoing increases in other payroll taxes, such as Canada/Quebec Pension Plan premiums, may permanently depress both the employment and participation rate for teens. With continued expansion, a recapture of two thirds of the drop in the teen participation rate over the next decade could well be an upper bound. The BLS, on the other hand, is projecting a decline of over 3 percentage points for the 16 to 19 age group by 2006 in the United States.<sup>37</sup>

### *3.2.2 Young adults: ages 20 to 24*

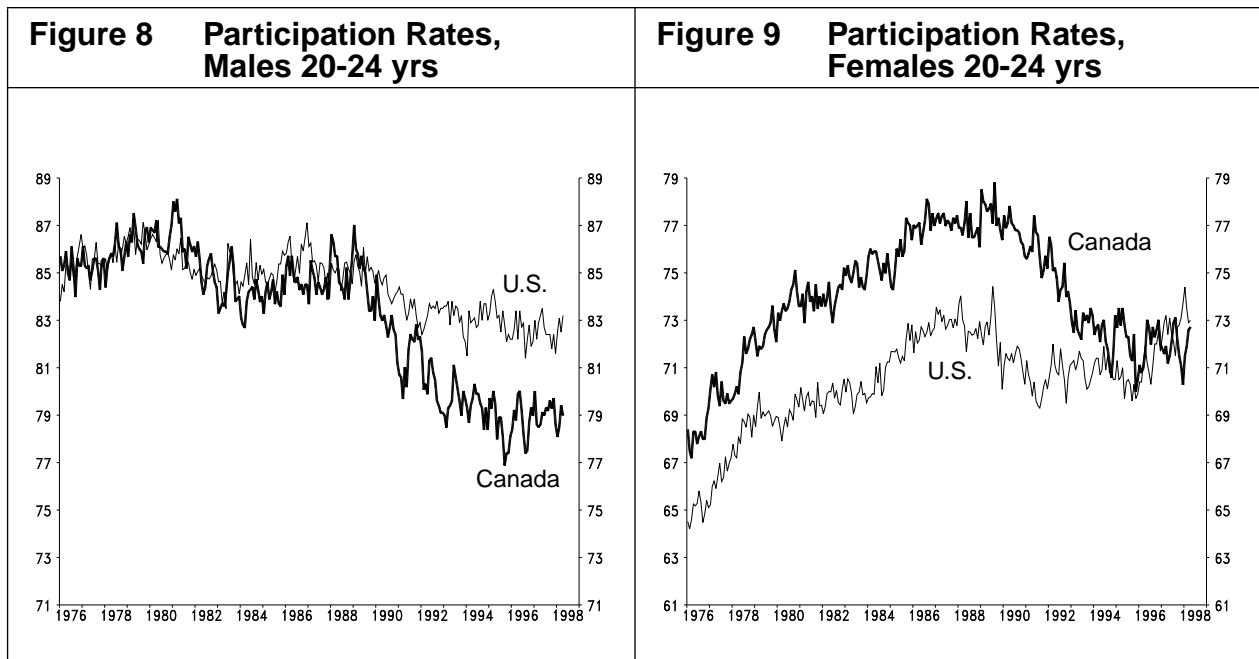
Although employment rates have been very cyclical for young male and female adults in both countries, participation rates were much less so, particularly before the 1990s (Appendix Figure 21). This looser relationship between employment and participation rates distinguishes young adults from teenagers and is due to the much larger proportion of non-students in the young adult group. Non-students have a greater attachment to the labour force than do students.

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36. An international literacy survey done in 1994, and in which Canada participated, found that Canadians in the labour force who were at the lowest level of literacy had a significantly higher level of unemployment than of those who were at the highest level of literacy. The differences were similar on three scales - prose, document and quantitative. Statistics Canada, Human Resources Development Canada and National Literacy Secretariat, *Reading the Future: A Portrait of Literacy in Canada*, (Ottawa: 1996, 47).

37. Fullerton (1997), Table 4

The trends of participation rates for young adults have been broadly similar in the two countries since the mid-1970s (Figures 8 and 9). Until the late 1980s, male participation rates showed little trend, while female rates were rising strongly. Male employment rates, on the other hand, were sufficiently weaker in Canada than in the United States after the early 1980s to raise questions about the sustainability of the similar movement in participation rates. Female participation rates were significantly higher in Canada than in the United States until the 1990s, consistent with a higher employment rate.



Employment rates fell far more dramatically in Canada than in the United States during the recession of 1990-91. (For example, the decline for males was four times larger in Canada.) The absolute decline in the participation rate in Canada was also significantly larger than in the United States, resulting in the first divergence in male rates in over ten years and a convergence in female rates. (As the U.S. female employment and participation rates have recovered since 1994, they have moved above the Canadian rates for the first time since the mid-1970s.) The weaker performance of the participation rate for both men and women in Canada than in the United States in the 1990s, is likely due to a combination of cyclical and structural factors such as the difference in full-time attendance in education. The magnitude and persistence of the decline in the

Canadian participation rate in the 1990s also suggest that structural factors are likely to ensure that it will remain permanently lower than the 1989 level for some time.

A key structural change for the 20 to 24 age group has been the rising school attendance rate since the early 1980s, particularly for women (Appendix Figure 17). The rate of school attendance appears to have risen more, and to be higher, in Canada than in the United States.<sup>38</sup> (Although the U.S. male enrolment rate has not exhibited a long-term (over 30 years) rising trend, female rates have risen strongly over this period from less than half the male rate to above it.) The increase in the attendance rate in Canada in the 1990s (more than 9 percentage points) accounted for about 90 per cent of the decline in the total participation rate for young adults. The balance of the drop reflects movements in the participation rate for students and non students (Jennings 1998). The difference between the two countries and the strong long-term performance of American female rates lends support to the view that Canadian employment rates and participation rates may not return to their pre-recession relationship with U.S. rates nor to their pre-recession peaks for many years.

The job-seeking experience of Canadian students aged 20 to 24 was relatively good in the 1990s. The employment rate for this group remained close to its 1990 peak level, which may explain the small rise in their participation rate. Nevertheless, that rise in the student participation rate in the 1990s pales in comparison with what took place in the 1980s, when their participation rate rose along with their attendance rate. The rise in the participation rate for students in the 1980s can be attributed to the upward trend of tuition fees and the downward trend in government support for students. (On the demand side, the declining minimum wage relative to the average wage could have been a factor.) The persistence of these trends in the 1990s should have spelled further increases in the participation rate for students. Its flattening is indicative of a deterioration of job opportunities for older students in the 1990s compared to and slightly better than that of the core labour force. The contrasting performance of the summer participation rate in the 1980s and 1990s for young adults is further evidence of that deterioration (Appendix Figure 20).

In contrast with the experience of Canadian students, the participation rate for young adults who are not in school declined in the 1990s. The fact that part-time employment has

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38. Although data are not strictly comparable, rates appear to have been roughly equal in 1989 but to have been about 5 percentage points higher in Canada by 1995. For further information contact the authors.

become more common among these non-students suggests that the decline was due to a deterioration in labour market conditions for this group (Statistics Canada 1997).<sup>39</sup> Although the participation rate has begun to recover recently, in 1997 it was still 1.6 percentage points below its 1989 peak.

The response of the participation rates to the reduction in the employment rates was somewhat stronger after the 1990-91 than after the 1980-81 recession, for both genders in both countries and the pattern of participation rates since about 1994 also reflects the employment rate performances. This development may be due to the higher percentage of students, with weaker attachment to the labour force than non-students, in the population. The Canadian participation rate may, therefore, be more employment driven in the future.

A number of factors suggest that the participation rate for the 20 to 24 age group in Canada is not likely to increase by more than one percentage point over the next decade, even if the employment rate rises further. In fact, the BLS is projecting a decline of 2.6 percentage points for this group by 2006 in the United States.<sup>40</sup> The maintenance of the current higher attendance rate would, by itself, preclude a return of the participation rate to the peak level reached in 1989. Indeed, the attendance rate has shown no sign of levelling off, and it may rise further, as it has in the United States, even though it appears to be higher in Canada. In addition, the participation rate for Canadian students did not fall in the 1990s and that of non-students was only slightly lower in 1997 than in 1989; as well, the gap between the participation rate and the employment rate in Canada is larger than it was in the 1970s and than it is in the United States.

### ***3.3 Older workers: 55 and over***

The most striking characteristics of the participation rates for this age group, are their low level, particularly in the case of females, relative to younger age groups, and the dramatic decline in the male rate since the mid-1970s (Figures 10 and 11). Furthermore, as participation rates have closely followed employment rates, attachment to the labour force appears to be weak (Appendix Figure 22).

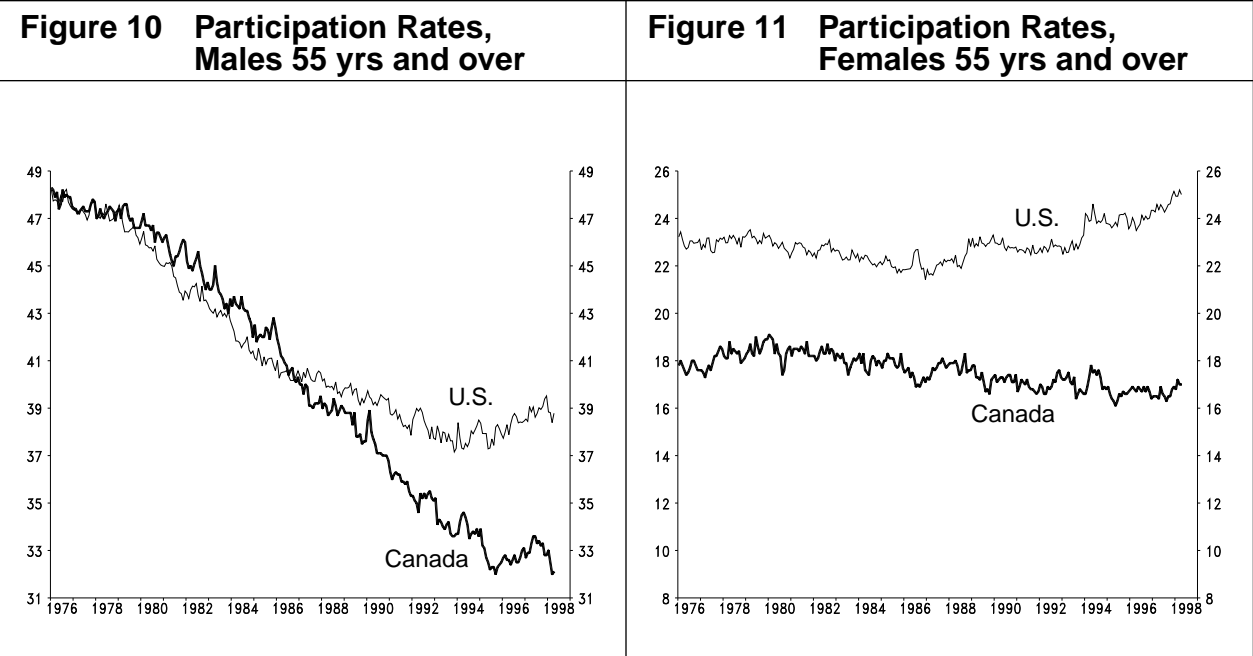
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39. In addition, the percentage of youth (15 to 24) who worked part-time because that was all they could find rose dramatically from 1990 to 1995. Gordon Betcherman and Norm Leckie, *Youth Employment and Education Trends in the 1980s and 1990s* (Ottawa: Canadian Policy Research Networks, 1997), Working Paper No. W/03

40. Fullerton (1997), Table 4.



Both the employment and participation rates for men in the two countries began to turn around in the 1990s, sooner and more solidly in the United States. Participation rates for women, which are much lower in Canada than in the United States, exhibited a very weak downward trend until 1986. Since then, these rates have diverged even more as the U.S. rate ratcheted upwards. Historical developments suggest that cyclical forces have little impact on the labour market decisions of this group and the recent uptick in the male rates does not appear to be driven by the cycle. Structural factors appear to be dominating this age group.



The rate of permanent departure from the labour force picks up after age 55 and accelerates rapidly after age 65. Currently in Canada, the percentage of men in the labour force falls from 73 per cent in the 55 to 59 age group to only 16 per cent for ages 65 to 69. A similar pattern is observed for women, whose rates are considerably lower.

The rate for the sub-group of women aged 55 to 59 rose decisively in the 1980s. Since the same group has been exhibiting comparable behaviour in the United States, it appears that the ratcheting-up phenomenon of women’s participation rates may be affecting this age group and, will, eventually, affect the 60 to 64 age group.

In the United States, a new development appears to be taking place that may be a harbinger for Canada. Until 1986, the participation rates for men aged 55 and over had been following similar downward paths in both countries. Subsequently, the U.S. decline moderated and, in 1995, reversed. The Canadian rate, on the other hand, continued to decline until 1995, at which point it appeared to be following the United States pattern but it has recently fallen off. (Similar developments occurred in the employment rates (Appendix Figure 22).) The change in direction in the United States was caused by an increase of over 2 percentage points from 1986 to 1996 in the rate for men aged 65 to 75.<sup>41</sup> Since the rise continued throughout the recession, when in most other U.S. male groups it declined, it appears to be structural. In Canada, the participation rate for males aged 65 to 69 stopped declining in the 1990s, suggesting that it may be following the new trend for older men in the United States.

To determine whether a change in direction of the male participation rate is likely to take hold permanent or if the declining trend has merely been interrupted, it would be necessary to know what have been the dominating influences on the timing of permanent withdrawal from the work force. These factors would include the state of workers' health and sources of retirement income (from personal wealth, employer retirement plans and social security).

While the improvements in various measures of social security aimed at the elderly have no doubt enabled a growing proportion of older people to drop out of the labour force, the provision of public pensions does not always have that effect. People may "retire" but still opt to work, perhaps at reduced hours, if there is no earnings penalty. Unlike in the case of social security in the United States, there is no restriction or tax on work in order to receive the Canada or Quebec Pension Plans (CPP/QPP).<sup>42</sup> Changes, such as the introduction of cost-of-living indexation and an early retirement option, have made early retirement more attractive since the 1970s<sup>43</sup> but there is little evidence of any substantial effect on labour supply choices from early retirement options in public pension plans in Canada (Baker and Benjamin 1997, 16). It needs to be borne in mind that a large percentage of CPP/QPP beneficiaries do not qualify for the

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41. Fullerton (1997, 29) observes that the participation rate for this group had been trending down continuously since 1890.

42. In order to qualify for either the QPP or CPP between the ages of 60 and 65, the applicant must have "substantially" stopped working but there is no subsequent restriction on earnings or hours of work for pension recipients. There has been no restriction on applicants between 65 and 70 since 1975.

43. The option was introduced to the QPP in 1984 and to the CPP in 1987. In the United States, an early retirement option (ages 62 to 65) was introduced in 1956 for women and in 1961 for men.

maximum pension when they become eligible to claim benefits. Many people have not accumulated the maximum number of years and may, therefore, increase their average pension by working longer. Others may be able to replace years when earnings were low with years at, or close to, the maximum. While disincentives to remaining in the labour force are built into the CPP/QPP, they may affect only those persons whose incomes would be marginally higher than the penalty level. Higher income individuals (who likely also have post-secondary education) may have greater motivation to remain in the work force because their opportunity cost of retiring is very large. One study of the relationship between social security and retirement in the United States found that the influence of social security provisions on retirement planning varied according to such factors as marital status and earnings. For example, there was a disincentive for workers with low earnings to continue work after age 61 but a large incentive for high earnings workers to continue to work from age 62 to age 64 (Diamond and Gruber 1997, 24-25).

Rather than social security availability being a major incentive to withdraw from the labour force, especially before age 65, a combination of factors such as economic conditions, industrial restructuring and the availability of employer-provided pension plans, may be more influential. For example, for U.S. workers who were covered by both private sector pension plans and social security, decisions to withdraw from the labour force were found to be influenced more by the employer plans (Wise 1996, 3). Results of a Canadian survey of persons not in the labour force provide evidence that older workers, victims of downsizing, may choose to leave the labour force rather than start a new career. The number of workers that left the labour force because of layoffs, plant closures or voluntary early retirement options during the 1990-92 recession was about two thirds larger than the number that had done so in the 1987-89 period (Siroonian 1993 and Gower 1997, 11).

There is mixed evidence about the role of education in the retirement decision. An analysis of Canadian LFS data for 1991 to 1995 found that those with a postsecondary diploma or degree retired earlier than those with eight years of schooling or less (Gower 1997). Evidence for the United States, however, suggests that people with more schooling are more likely to continue working past age 55. In fact, in the United States the participation rate for those who have completed four years or more of college has begun to rise in recent years (Besl and Kale 1996). It is possible that the Canadian findings are a temporary phenomenon, reflecting the generous early

retirement options that, in the 1990s, have been a feature of many restructuring efforts in sectors where employees' levels of education tend to be high, e.g. education and public administration. Later retirement among those with the least schooling may be due to inadequate pension entitlements or personal wealth. Many of these people would not even be eligible for the maximum CPP/QPP pension. Canada may, therefore, see a similar turnaround in the participation rate for higher educated persons aged 55 and older as Besl and Kale predict for the United States.

Government policy and social and economic developments appear to be causing the change of direction in the participation rate of the 55-and-over group in the United States and may have a similar impact in Canada in the future. These include less generous retirement support by private and public sectors and the need for a higher rate of financial independence among older women, following three decades of increased incidence of marriage breakdown (Besl and Kale 1996). Other likely influences on the decision by Americans about when to leave the workforce that are mentioned by Besl and Kale are legislation eliminating mandatory retirement and outlawing age discrimination, fiscal constraints on the growth in Social Security benefits and the operation of medicare, which is projected to run out of funds before 2002, and regulations implemented over time to raise the normal retirement age for full Social Security benefits from 65 to 67. All these considerations lead Besl and Kale to expect higher labour force participation rates among older adults in the next century. Labour force projections that assume that participation rates for persons aged 55 and older will remain at the current low levels, may be overly pessimistic and may underestimate the size of the future labour force.

Immigration may also influence the direction of participation rates for the 55 and over age group. Immigrants aged 65 and over, who came to Canada between 1971 and 1990, have lower participation rates<sup>44</sup> than the average for all immigrants and Canadian-born of this age (Table 2), which may have had a dampening effect on the Canadian participation rate. However, the most recent cohort of immigrants, those who came to Canada between 1991 and 1996, have higher participation rates than the previous cohort. It may be that recent older immigrants have found that they cannot afford to stay out of the labour force. (Recall that most of them probably do not qualify for a pension and that many will not even qualify for Old Age Security.) This increase in the participation rate is particularly significant in the case of females over 65 in the 1981-1990

44. Statistics Canada, unpublished tabulations.

and 1991-1996 cohorts. This could put a small upward pressure on the participation rate for this age group in coming years.

Finally, the rising trend in the ratio of the self-employed to total employment may have a significantly positive effect on the participation rate, since these people tend to retire later than salaried employees (Gower 1997).<sup>45</sup> The acceleration in the growth of this ratio in the mid-1990s may, however, be temporary to the extent that self-employment was a second-best solution for some of those who took early retirement as part of the massive reduction in employment in the public sector.

The most likely outcome in Canada of these various developments is a relatively strong increase - as much as 4 percentage points - in the participation rate for the age 55 and over group over the next decade. This compares with the BLS projection for the United States of a rise of 6.5 percentage points by 2006 for this age group.<sup>46</sup>

#### **4. Conclusion**

Despite many similarities in labour force activity in Canada and the United States, a number of factors seem to keep the two countries apart in the 1990s. For example, immigration has probably been a more important factor in labour market outcomes in Canada than in the United States. In addition, relatively more youths seem to stay or go back to school in Canada than in the United States, thereby putting additional downward pressure on the overall Canadian participation rate during the 1990s.

In the next couple of years, the overall Canadian participation rate may not rise much in the wake of a cyclical increase in the employment rate. There is room for the gap between the participation and employment rates of core age workers, which is larger than it was in the 1970s and what it is in the United States, to narrow as the employment rate rises further. The participation rate for teens could begin to recover in the face of continued economic expansion, but the weighting of this group is relatively small. In the case of young adults, a further rise in the

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45. The large proportion of self-employed in Japan helps to explain the high participation rate for older Japanese. Takashi Oshio and Naohiro Yashiro, *Social Security in Japan*, (NBER: 1997, 6), WP 6156.

46. Fullerton (1997), Table 4.

school attendance rate is likely, which would be a dampening factor. Finally, any cyclical response in the rate for older workers is likely to be small.

Over the next five to ten years, structural and demographic factors will likely prevent the aggregate participation rate from returning to its 1989 peak, but the factors exerting upward pressure on the participation rate are likely to outweigh those that are pulling it down. In particular, the participation rate for the largest group - core age workers - appears to have room to increase moderately. As workers enter the core age group with higher levels of education than those leaving it, there is likely to be a better match with the skill requirements of employers. This development may bring the decline in the rates for men to an end and may help to further narrow the gap between the rates for men and women, albeit at a slower pace than in the 1970s and 1980s. As well, the rate for the youth group is likely to remain well below the 1989 peak, as the saturation point for the attendance rate does not appear to have been reached among 20 to 24 year olds. At the same time, the participation rate for older workers could very well increase further. However, over the next decade and beyond, Canada, as in the United States and many other OECD countries, will experience a rising population share of older persons, who have on average the lowest participation rates of the major groups. This change in composition would result in a decline in the aggregate participation rate unless it was offset by sizeable increases in the rates of age specific groups, particularly those aged 25 to 54 and younger seniors (Appendix Figure 23).

Another feature of the aggregate participation rate that appears to be emerging is a greater propensity for the participation rate to react to a change in the employment rate, closer to the U.S. experience (Appendix, Figure 24). This results partly from the rising weight in the population of groups whose participation rates tend to vary closely with the corresponding employment rate, e.g. students and those aged 55 and over. In addition, the decline in the proportion of job losers who qualify for EI may produce a reduction in the labour force attachment of some groups, such as seasonal workers, and an increased responsiveness to changes in the employment rate.

Taking into account all of the developments and factors that seem to be influencing the outcome for each group examined, it appears that an increase of one to two percentage points in the aggregate participation rate is achievable over the next decade. Considerable uncertainty, however, surrounds many of the assumptions underlying this projection. However, taking into

account the weaker economic expansion in Canada than in the United States in the 1990s, this projection is not unreasonable when compared with the BLS projection of 0.8 percentage points by 2006.<sup>47</sup>

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47. Fullerton (1997), Table 4

## 5. Appendix

### 5.1 Data Sources for Table 1

Foreign-born as a proportion of total population: Figures for 1961, 1971 and 1981 are from Beaujot R., K. G. Basavarajappa and R. B. P. Verma, 1988, "Income of Immigrants in Canada: A Census Data Analysis", Current Demographic Analysis, Catalogue 91-527E Occasional, Statistics Canada, Table 2, p. 3. The figure for 1986 is from OECD, "Trends in International Migration", Annual Report 1996, Table C1, p. 257. The figure for 1991 is from Badets, J. and T. W. L. Chui, 1994, "Canada's Changing Immigrant Population", Focus on Canada, Catalogue 96-311E, Statistics Canada, Chart 1.2, p. 8. The Figure for 1996 is from Statistics Canada Daily, November 4, 1997, "1996 Census: Immigration and Citizenship".

Foreign-born as a proportion of total labour force: The figures for 1971 and 1981 are from Beaujot R., K. G. Basavarajappa and R. B. P. Verma, 1988, "In come of Immigrants in Canada: A Census Data Analysis", Current Demographic Analysis, Catalogue 91-527E Occasional, Statistics Canada, p. 3. The figure for 1986 is calculated from immigrant labour force by cohort numbers in Statistics Canada, "Profile of the Immigrant Population", 1986 Census, Catalogue number 93-155, Table 1. The figure for 1991 is from OECD, "Trends in International Migration", Annual Report 1996, Table 1.2 p.29.

Participation rate of Canadians: Statistics Canada, 1981, 1986, 1991, and 1996 Censuses.

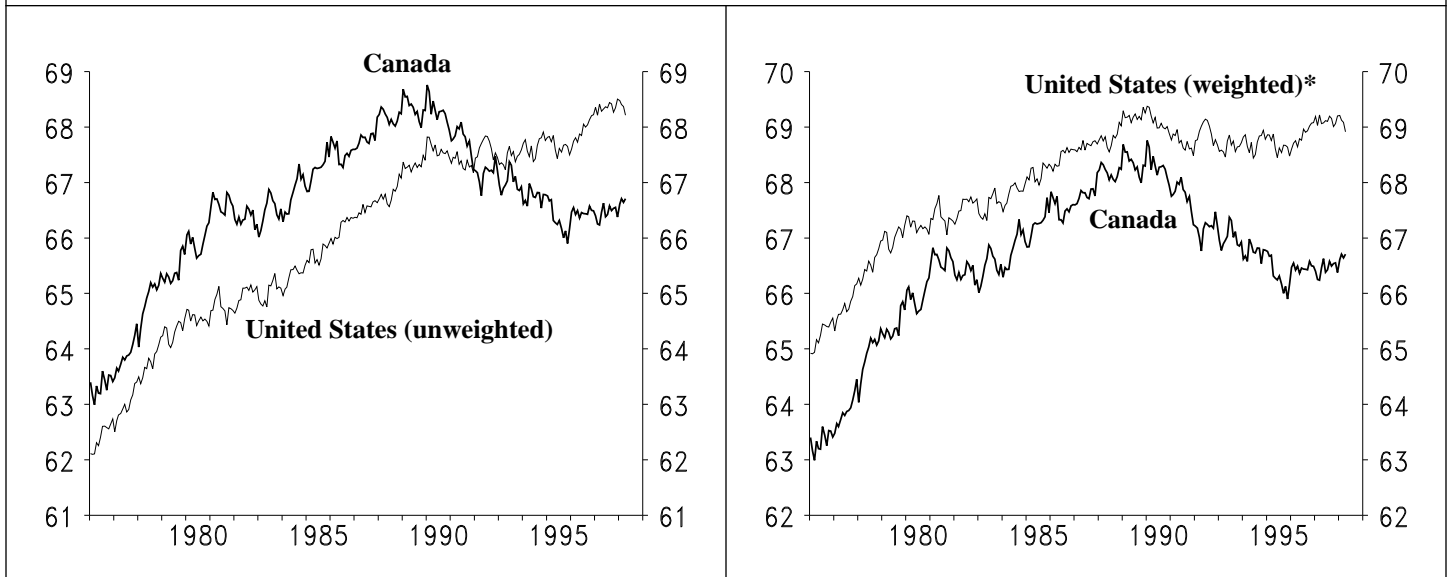
Participation rate of immigrants: The figure for 1981 is from Statistics Canada, 1984, Labour Force Activity, 1981 Census, Catalogue number 92-915, Table 2, p. 2-1. The figure for 1991 is from Badets, J. and T.W.L. Chui, 1994, "Canada's Changing Immigrant Population", Focus on Canada, Catalogue number 96-311E, Statistics Canada, Table 5.1, p. 48. The figure for 1986 is from Statistics Canada, Profile of the Immigrant Population, 1986 Census, Catalogue number 93-155, Table 1, p. 1-10.

Proportion of immigrants from Europe: Figures for 1981 to 1991 are from Badets, J. and T. W. L. Chui, 1994, "Canada's Changing Immigrant Population", Focus on Canada, Catalogue 96-311E, Statistics Canada, p. 11. The Figure for 1996 is from Statistics Canada Daily, November 4, 1997, "1996 Census: Immigration and Citizenship".



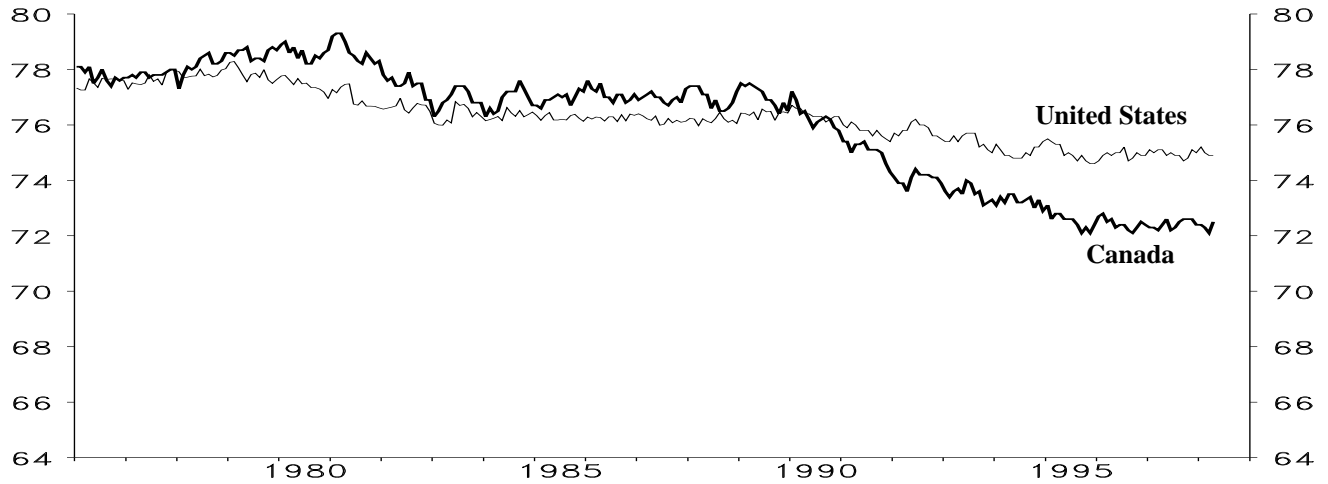
5.2 Tables and Graphs

**Figure 12 Participation rates: Total both sexes (20 and over)**

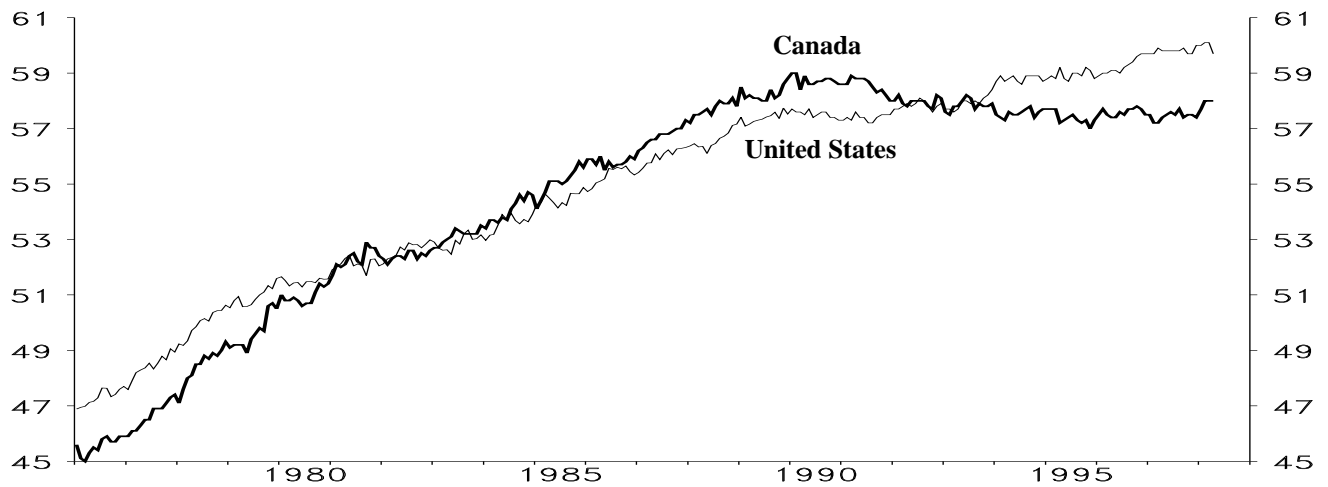


\*Note: U.S. participation rates are weighted by Canadian population weights.

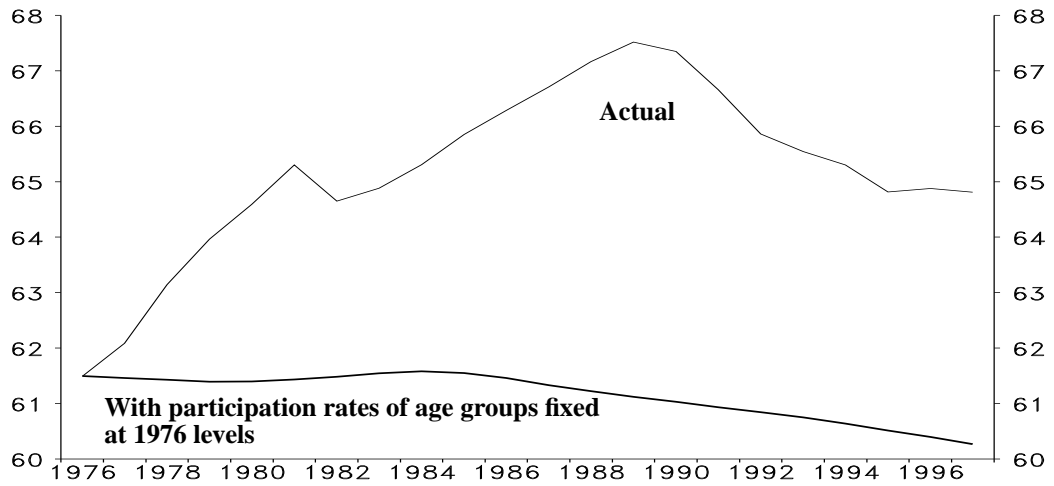
**Figure 13 Male Participation Rates**



**Figure 14 Female Participation Rates**



**Figure 15 Participation Rates and the effect of changes in the age composition of the Canadian population**



**TABLE 2. Participation Rate of Immigrants by Age Group and Period of Immigration, 1996<sup>48</sup>**

	Period of Immigration						
	Canadian-born	All Immigrants	Before 1961	1961-1970	1971-1980	1981-1990	1991-1996
<b>Total</b>	66.9	60.7	37.3	67.0	74.6	67.7	59.1
<b>Male</b>	73.8	68.7	45.3	75.6	82.2	75.4	67.7
<b>Female</b>	60.3	53.2	29.7	58.6	67.6	60.6	51.6
<b>15-24</b>	63.0	52.2	n.a.	n.a.	74.3	51.6	42.0
<b>Male</b>	64.5	53.1	n.a.	n.a.	74.6	52.1	43.2
<b>Female</b>	61.4	51.2	n.a.	n.a.	74.0	51.1	40.9
<b>25-44</b>	86.0	81.1	88.7	87.0	85.7	81.5	72.7
<b>Male</b>	92.3	89.1	93.6	92.8	91.6	89.8	83.4
<b>Female</b>	79.9	73.8	84.0	81.1	80.3	73.7	63.4
<b>45-64</b>	68.8	70.1	65.2	72.9	79.0	70.3	53.1
<b>Male</b>	77.7	79.9	75.1	82.5	87.1	81.2	65.3
<b>Female</b>	60.1	60.3	54.9	63.5	70.6	60.0	42.3
<b>65+</b>	8.2	8.4	8.3	9.7	7.3	8.1	9.1
<b>Male</b>	13.1	12.7	12.4	14.8	12.7	12.2	12.4
<b>Female</b>	4.6	4.9	4.7	5.5	3.9	5.2	6.5

48. Statistics Canada, 1996 Census, unpublished tabulations

**TABLE 3. Population Weights of Immigrants**

		<b>1981<sup>a</sup></b>	<b>1986<sup>b</sup></b>	<b>1991<sup>c</sup></b>	<b>1996<sup>d</sup></b>
<b>Total (level)</b>		3,867,160	3,908,150	4,342,885	4,971,070
	<b>Male</b>	49.4	49.0	49.0	
	<b>Female</b>	50.6	51.0	51.0	
<b>less than 15</b>		7.0	4.8	4.7	5.8
	<b>Male</b>	3.6	2.5	2.7	
	<b>Female</b>	3.4	2.3	2.6	
<b>15-24</b>		11.1	10.6	9.3	8.7
	<b>Male</b>	5.6	5.4	4.7	4.4
	<b>Female</b>	5.5	5.3	4.5	4.3
<b>25-44</b>		36.8	36.4	36.6	34.9
	<b>Male</b>	18.4	18.0	17.9	16.7
	<b>Female</b>	18.3	18.5	18.7	18.2
<b>45-64</b>		27.6	31.1	31.1	32.5
	<b>Male</b>	14.3	15.8	15.9	16.2
	<b>Female</b>	14.0	15.4	15.3	16.2
<b>65+</b>		16.9	17.0	17.7	18.1
	<b>Male</b>	7.5	7.4	7.8	8.1
	<b>Female</b>	9.3	9.6	9.9	10.0

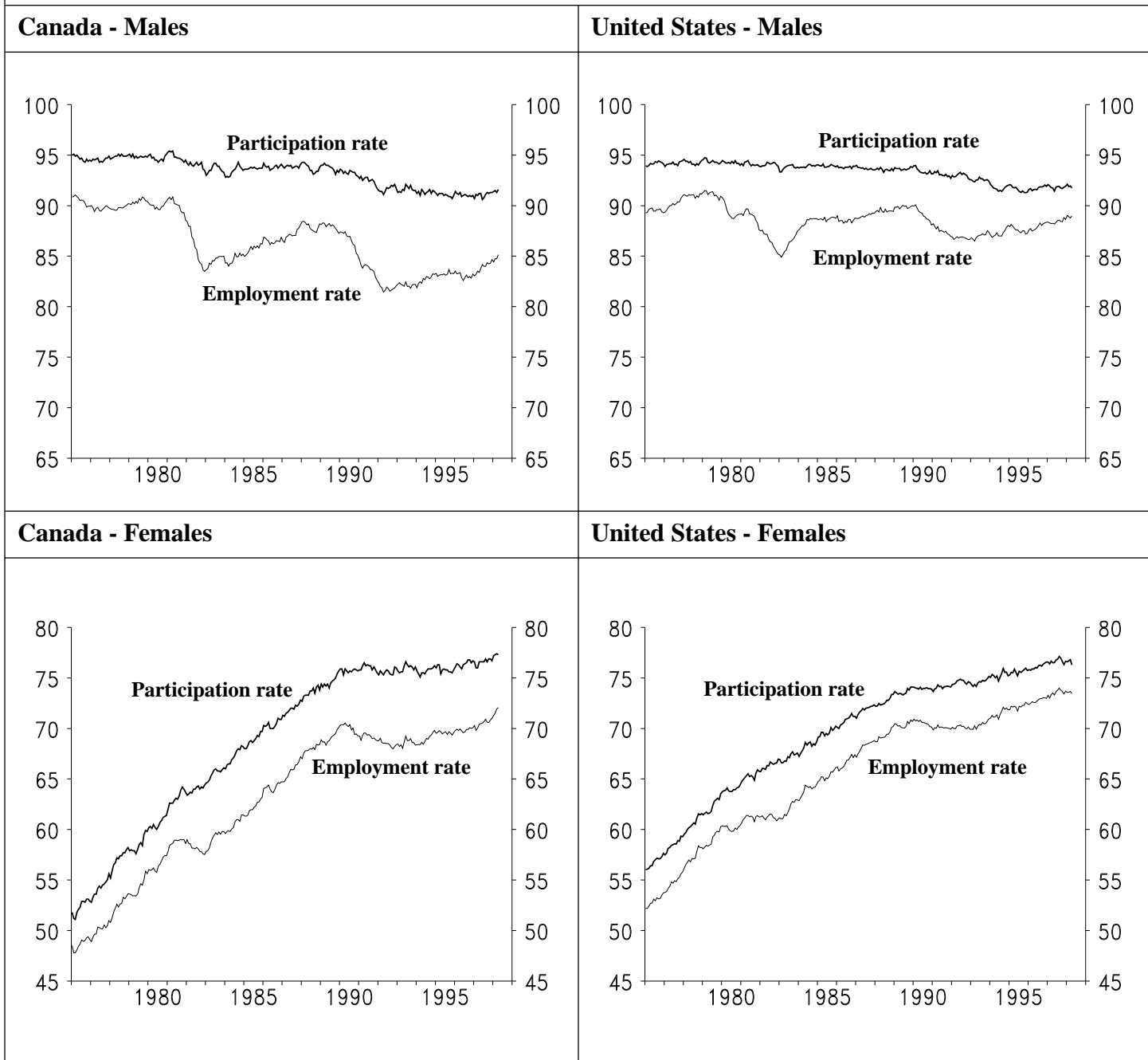
a. Weights are calculated with data from Statistics Canada, 1984, Place of Birth, Citizenship, Period of Immigration, 1981 Census, Catalogue number 92-913, Table 7B, p. 7B-1.

b. Weights are calculated with data from Statistics Canada, 1989, The Nation: Ethnicity, Immigration and Citizenship, 1986 Census, Catalogue 93-109, Table 6B, p. 6B-1.

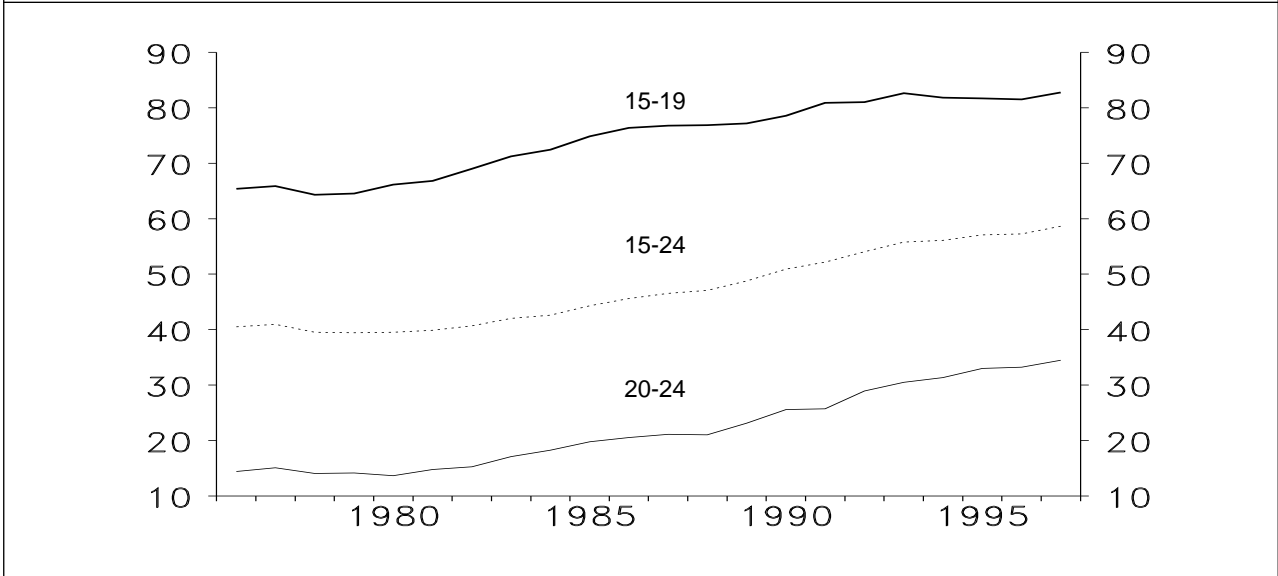
c. Weights are calculated with data from Statistics Canada, 1992, Immigration and Citizenship, Ottawa: Supply and Services Canada, 1991 Census of Canada, Catalogue number 93-316, Table 4, p.66.

d. Statistics Canada, 1996 Census, unpublished tabulations.

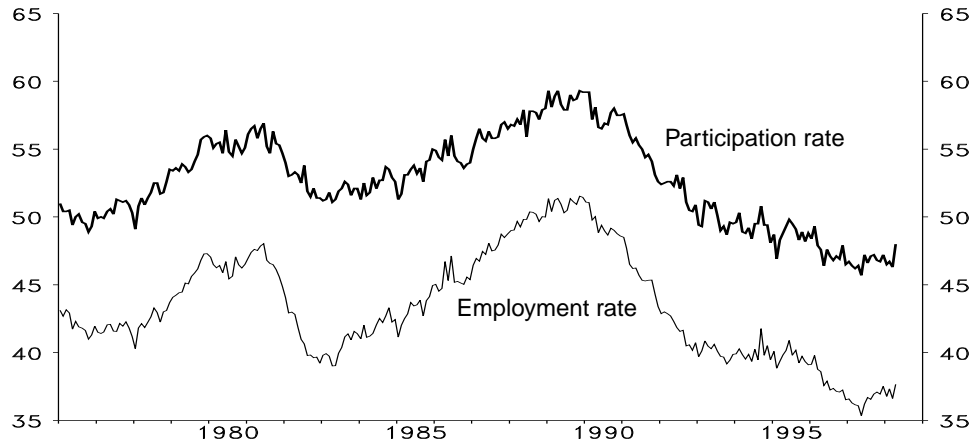
**Figure 16 Participation and Employment Rates 25-54**



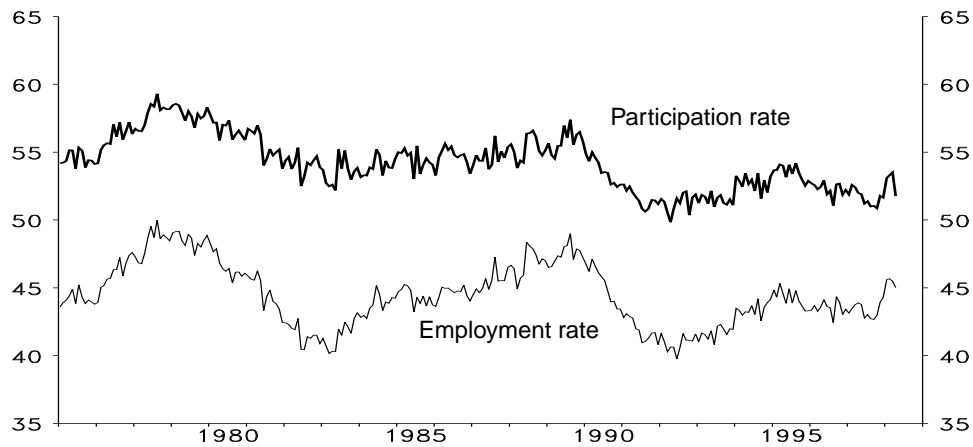
**Figure 17 Full-time students as a proportion of population of same age - Canada**



**Figure 18 Participation and Employment rates - Canada - Both Sexes - 15-19**

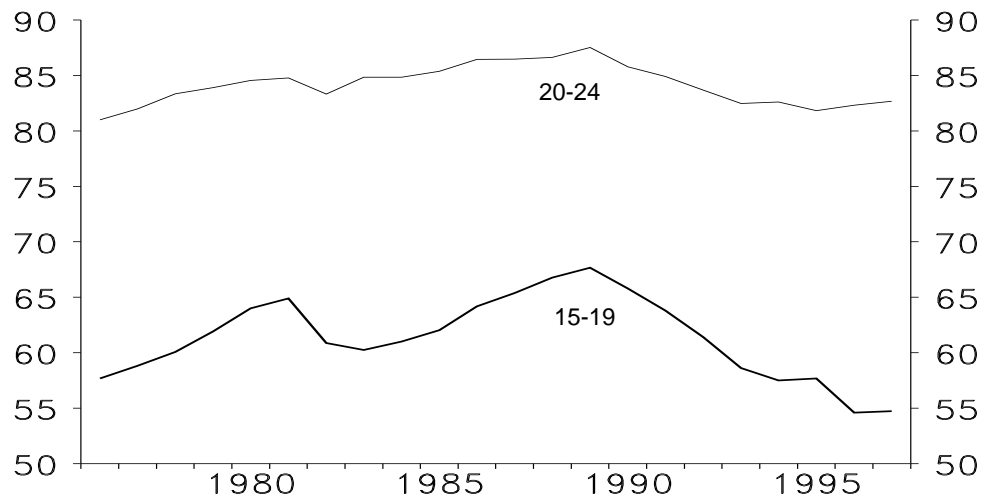


**Figure 19 Participation and Employment rates - United States - Both Sexes - 16-19**





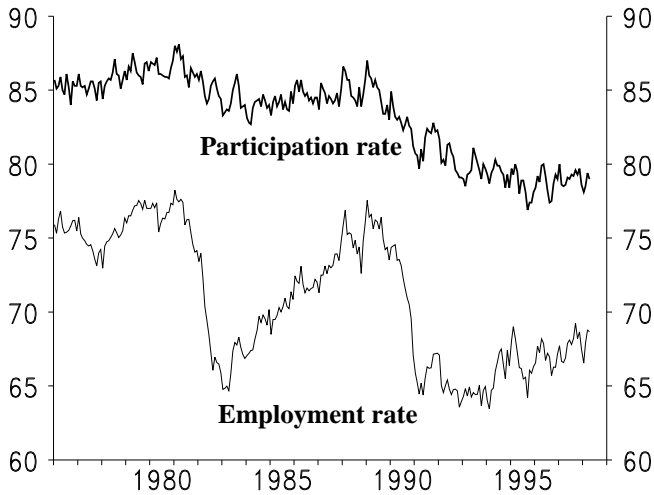
**Figure 20 Summer Participation Rates - Canada (nsa)**



**Figure 21 Participation and Employment Rates - 20-24**

**Canada - Males**

**United States - Males**



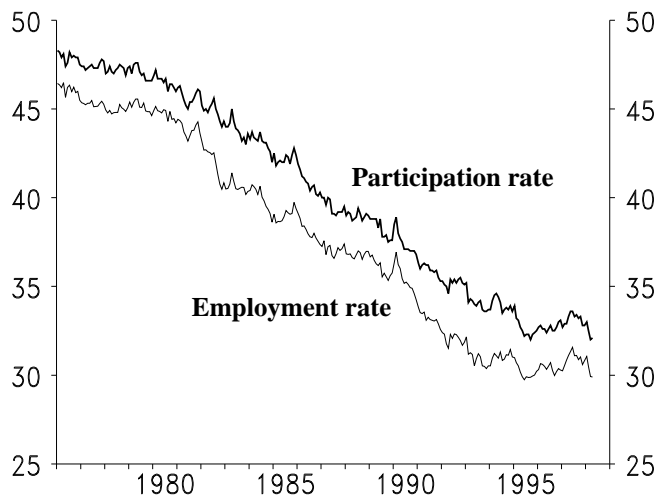
**Canada - Females**

**United States - Females**

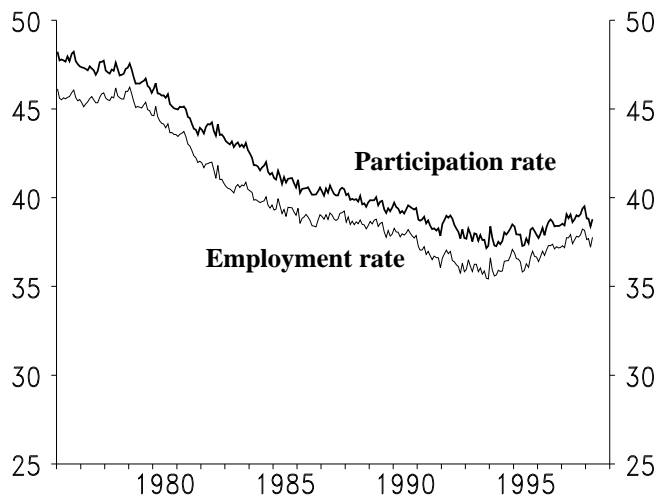


**Figure 22 Participation and Employment Rates - 55 and over**

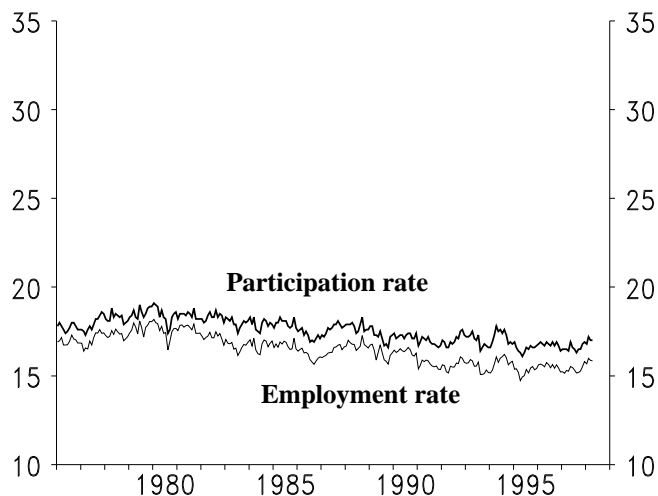
**Canada - Males**



**United States - Males**



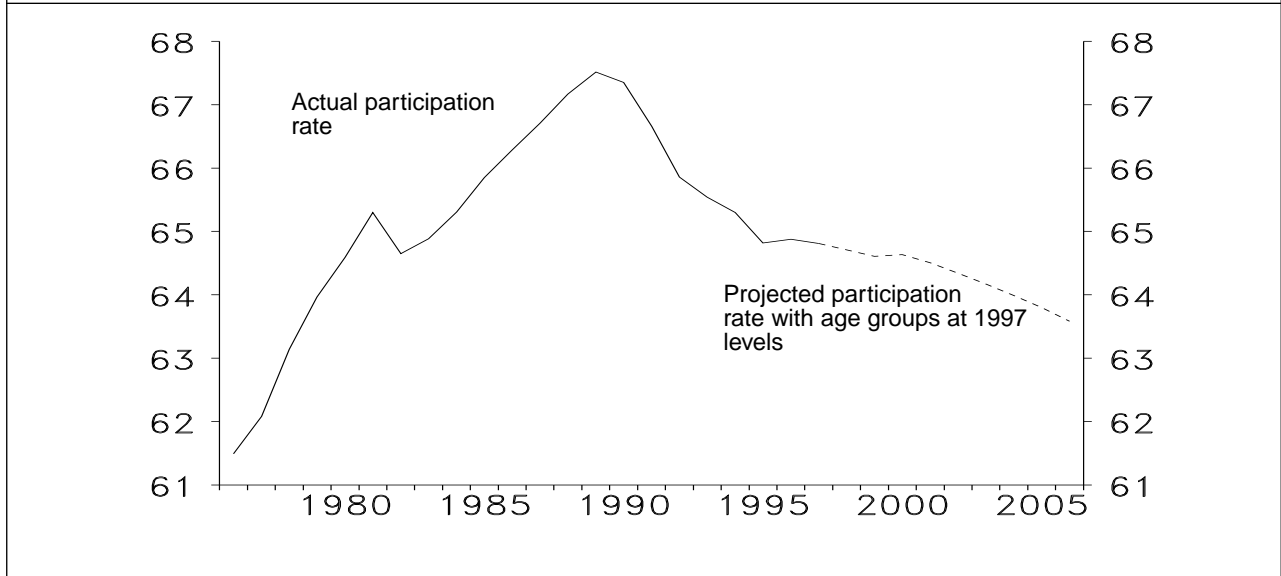
**Canada - Females**



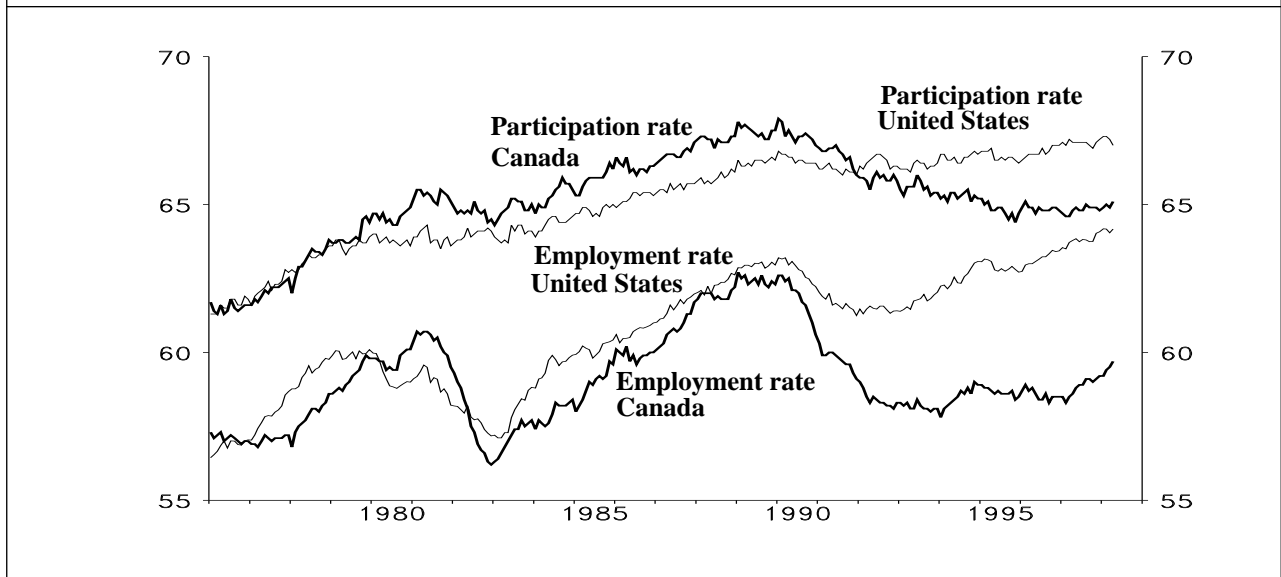
**United States - Females**



**Figure 23 Projected Canadian Participation Rate**



**Figure 24 Participation Rates<sup>a</sup> and Employment Rates - Canada and United States**



a. The levels are not directly comparable because of different weights of major cohorts. When Canadian weights are applied to the U.S. participation rate, the Canadian rate is lower than the U.S. rate throughout the period.

### *5.3 Definitions of attending school for comparison between Canada and the United States*

For the United States, school enrolment statistics are based on replies to the Current Population Survey interviewer's inquiry whether the person was enrolled in regular school. Such schools include elementary and high schools, colleges, universities, and professional schools but exclude those that are not in the regular school system, such as trade schools, business colleges and schools for the mentally handicapped, which do not advance students to regular school degrees. Attendance may be on a full-time or part-time basis.<sup>49</sup>

For Canada, school attendance statistics are based on replies to the Labour Force Survey interviewer's inquiry about whether the person was attending any educational establishment (primary, secondary, community college, junior college, CEGEP, university or others) either full-time or part-time and taking credit courses towards a degree, diploma or certificate.<sup>50</sup>

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49. Source: U.S. Department of commerce, Census Bureau CPS October 1995 Current Population Reports - School Enrolment - Social and Economic Characteristics of Students.

50. Source: Statistics Canada

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