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## ABSTRACT

We explore recent trends in the labour force participation rates of men aged 55-69 in Canada. Following steady declines in participation until the mid-1990s, the participation rates of older men have increased substantially and have reached historically high rates among those aged 65-69. We consider various factors that may influence the participation rates of older men and suggest that improvements in health, higher education, and increased attachment of older wives to the labour market are likely important factors driving recent trends in older men's participation in Canada.



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## INTRODUCTION

With few exceptions, the labour force participation rates of older men in OECD countries have followed a common trend—after declining steadily for decades, the participation rates of older men started to increase after the mid-1990s (Coile et al, this volume). In Canada, the participation rates of older men reached record lows in 1995 and have increased steadily since. The purpose of this study is to document these trends for older men in Canada and review various factors that might underlie these trends.

In what follows, we begin by documenting recent trends in older men's labour force participation rates, as well as the participation rates of older women. We then investigate various factors that we might expect to affect the participation and retirement decisions of older men. We consider Canada's public and employer-sponsored pensions, the Canadian business cycle, improvements in Canadian health and mortality, the rising educational attainment of Canadian men, and finally the importance of joint retirement decisions of married couples and the greater labour force attachment of recent cohorts of older women.

Each of these factors will play an important role in individuals' retirement and labour force participation decisions. However, there have been relatively few substantial changes to the setting in which older men are making these decisions. Most key parameters in Canada's public pensions have not changed over the time period we focus on here, and employer-sponsored pension coverage among older cohorts seems to have improved despite declining coverage for younger cohorts. Recovery from the recession after early 1990s may have played a small role in increasing participation rates, however the more recent recession did not result in greater departures from the labour force.

Other factors appear more important. Improvements in health and mortality at older ages, as well as higher educational attainment have likely improved the opportunities to remain employed when older. We also suggest that greater labour market attachment among more recent cohorts of older women has driven some of the recent increase in older men's participation as they delay retirement until such time as their wives will join them.

## 1. Trends in participation rates

As in many OECD countries, the participation rates of older men and women followed very different trends before the 1990s and have since increased. In figures 1 and 2 we present the labour force participation rates of older men and women aged 55-64 in Canada since 1976. From 1976 into the early 1990s, the participation rates of older men steadily declined. The decline is most substantial for men aged 60-64, whose participation rate declined from 67 percent in 1976 to only 43 percent in 1995. Thereafter, participation rates have steadily increased, reaching 60 percent in 2015 among 60-64 year old men. The increase in men's participation after the 1990s is most remarkable for those aged 65-69, whose participation rates were only 16 percent in 1993 and reached record levels at 32 percent in 2014 and 2015.

In figure 2 we see that trends are quite different for older women, in that their participation rates did not decline before the 1990s as men's did. Participation rates of women aged 55-59 have steadily increased after the early 1980s. Those of older women were stable and then increased substantially after the mid-1990s. In 1996 the participation rate of women aged 60-64 was 23 percent; this rises to 48 percent by 2015.

In figure 3 we highlight the fact that trends for older women's participation rates appear related to marital status. Among married women (which includes women in common-law relationships) aged 60-64, we see the general increase in participation rates over time, with a sharp increase after the mid-1990s. For unmarried women (which includes never-married, divorced, separated, and widowed women) we see the U-shaped trend similar to that for men. However, the decline in participation rates before the 1990s is not as steep for women as it was for men. The later increase in participation is much steeper for women than men.

In the next section we consider various factors that might have driven the observed increase in men's participation rates since the mid-1990s. We first consider the roles of public and private pensions. We then consider the importance of the business cycle. We then consider changes in individuals' health and education as these may influence the opportunities one has to participate in the labour force. Finally, we further consider the joint retirement decisions of couples in light of the differential trends presented for married women.

## 2. Factors potentially driving men's LFP

### a. Canada's public pensions

The importance of public pension incentives for retirement in Canada has been studied in past literature. For example, Baker, Gruber and Milligan (2003) have shown the financial incentives for retirement embedded in the Canadian public pension system affect individual's decisions to retire. Schirle (2010) further examines these incentives and finds corroborating evidence. Baker (2002) examined the introduction of an early income tested benefit (the spouse's allowance) available to those age 60-64 whose spouses are aged 65 or over and found a reduction in labour force participation in response. Baker and Benjamin (1999), however, examined the introduction of early retirement provisions to

Canada's contributory public pensions and found little immediate effect on labour market behavior despite an immediate effect on pension receipt. Compton (2001) also finds that the parameters of Canada's contributory pensions did not have a significant effect on retirement decisions. Overall, the available evidence suggests we should expect the parameters of the public pension system to affect the timing of retirement among those over age 55.

In Figure 4 we plot the age of eligibility for Canada's main public pension programs. The eligibility age for Old Age Security (OAS, a near-universal benefit) has remained at age 65 since 1967.[1] The Guaranteed Income Supplement (an income-tested benefit) has the same eligibility age as the OAS at age 65 and this has not changed over time. A spousal income-tested benefit (the Allowance) was introduced for individuals aged 60-64 (if their spouse is aged 65 or older) in 1975. The Canada and Quebec pension plans (CPP and QPP) are contributory pensions intended to replace 25% of covered earnings (referred to as the Year's Maximum Pensionable Earnings, or YMPE). Both the CPP and QPP set a normal retirement age at 65 (since 1967), and allow for early benefit take-up at age 60 (since 1985 in Quebec and 1987 in the rest of Canada). What is very clear from Figure 4 is that one of the most important parameters of Canada's public pensions – the age of eligibility – has not changed in the past 3 decades.

There have been a few small changes to the public pension programs. First, in 1997 the CPP benefit formulas were altered slightly. Prior to 1997, CPP formulas were such that the maximum benefit amount for CPP had represented 25 percent of a 3-year moving average of the YMPE. Changes were phased in so that after 1999, this the maximum benefit would represent 25 percent of a 5-year average of the YMPE. This reduced only slightly the pension wealth accumulated in the plan and did not significantly alter incentives to retire at each age. Second, eligibility requirements

[1] In 2012 the federal government announced plans to raise the OAS eligibility age to 67, phased in after 2023. In 2016 the government reversed this decision. OAS is clawed back at a rate of 15% for relatively high incomes.

became much more stringent for disability benefits associated with the Canada Pension Plan in 1995. As discussed in Milligan and Schirle (2016), the disability insurance program does not itself have a large effect on retirement decisions in Canada. Third, in 2012 changes to OAS were made so that individuals could choose to defer OAS benefits for up to 5 years in exchange for a higher monthly benefit. The adjustment is considered actuarially fair. Finally, the income-tested GIS has been made slightly more generous over time, allowing for a larger earnings exemption after 2008 and offering a small top-up benefit (with a higher clawback rate) to the lowest income seniors since July 2011. Overall, we expect that each of these changes may have altered the labour market choices of a small number of individuals, however policy changes and the expected effects on labour supply would not be large enough to account for the large increases in older men's participation rates.

### b. Employer-sponsored pensions

Canada's employer-sponsored pensions are administered independently of the public pension programs and employers are not required to offer coverage. Among men, the number covered by a registered pension plan (RPP), relative to the number of men aged 15 and over in the labour force, has declined substantially over time. As presented in Figure 5, the portion of men covered by an RPP declined from 44 percent in 1982 to only 31 percent in 2014. There has also been a shift away from employer-sponsored defined benefit pension plans toward defined contribution plans.

It is not clear, however, that this lower coverage among all men reflects the experience of older men over the later 1990s. In fact, among older men there appears to be greater coverage after the mid-1990s: using data from Canadian tax records we see that in 1996, 46 percent of men aged 65-69 received "other pensions

and superannuation" (CRA, 1998).[2] In 2013, 52 percent of men aged 65-69 were receiving pensions (CRA, 2015). Despite the increase in pension income receipt, the participation rates of men aged 65-69 increased steadily over this period. We are left with the impression that declining RPP coverage in the general population of men is not a major factor driving increases in older men's participation after the 1990s.

**c. Business cycle considerations**

The initial increase in older men's participation rates coincides with Canada's slow recovery from the recession of the early 1990s. In Figure 6, we see the unemployment rates of all men aged 15 and over declined from the early 1990s until 2008. While the unemployment rates of older men (aged 55-64) are generally lower than younger men, the trends follow the same pattern. To the extent this reflects an improvement in men's labour market prospects, we might expect this to be an important factor driving increases in older men's participation after the mid-1990s.

However, when we consider the recession in 2008-2009, we see substantial increases in all men's unemployment rates. We do not see a corresponding decline in the participation rates of older men. To the contrary, in Figure 1 we see the participation rates of older men – particularly those aged 65-69 – continue to increase through the recession and up to 2015.

Overall then, we might expect the improved labour market opportunities of the later 1990s supported the increase in men's labour force participation rates. However, it is clear factors independent of the business cycle are also at play.

[2] This refers to pension income reported on line 115 of the Canadian federal income tax form and generally represents employer-provided pension income. It will also represent some private savings converted to annuities, which is required for some tax-sheltered savings by age 71.

**d. Health and mortality**

Following the work done in Milligan and Schirle (Forthcoming), we explore the relationship between improvements in health over time and increases in employment. In Figure 7 we see that the life expectancy of older men and women at age 60 has risen dramatically since the 1970s. Between 1970 and 2011, men's life expectancy at age 60 increased by 6 years. Similarly, in Figure 8 we see the mortality rates of men and women at age 60 have declined steadily over time.

While we expect improvements in mortality to reflect improvements in health, it is not entirely clear the extent to which this is true. Recent estimates of healthy life expectancy appear to increase at approximately the same rate as life expectancy (Statistics Canada 2012). If we look at self-reports of health among older men (Figure 9) we see the portion of men reporting fair or poor health did not change over the 1995-2011 period. It is not clear, however, that these self-reports are comparable over time. The survey question underlying the self-reports asks respondents to describe their "state of health" (Statistics Canada, 2011) and respondents' reference point is not clear. If the average health of older men is improving over time, and older men are reporting health relative to that average, it would make sense to see no change in this measure.

Clearly, improvements in life expectancy are not going to be the only important factor determining older men's participation rates. If it were, we would have seen increases in participation alongside improvements in mortality over the 1970s, 80s and early 90s. Since the mid-1990s, increases in participation have aligned fairly closely. Milligan and Schirle (Forthcoming) have suggested that employment has not quite kept pace with mortality improvements. If they had, older men would be working longer than observed in the data. Specifically, Milligan and Schirle

(forthcoming) suggest if older men in 2011 had remained employed as long as men in 1995 with the same mortality rates, they would be working 1.44 years longer.

Overall we suggest improvements in health and mortality have facilitated increases in employment among older men since the mid-1990s.

**e. Education**

In Figures 10 and 11 we describe how the educational attainment of older men and women has increased over time, specifically the likelihood of having attended high school or completed a university degree (which in Canada is typically a 3 or 4 year degree, and considered separately from 1-2 year college programs). Older men's likelihood of completing a university degree increased substantially, from 7 percent in 1976 to 13 percent in 1995 and 23 percent in 2015. Women's likelihood of completing university increased at a higher rate, from 3.5 percent in 1976 to 22 percent in 2015.

On one hand, an increase in education should result in higher lifetime incomes among more recent cohorts of older men and women. We'd expect that to result in earlier retirements as individuals use their wealth to enjoy more leisure time in retirement. On the other hand, improvements in educational attainment may result in a change in the types of occupations available to older workers – possibly less physically demanding occupations more accommodating to worsening health at older ages. In figure 13 we present the portion of men working in blue collar occupations.[3] This steadily declined over time, from 50 percent of all working men in 1976 to 39 percent in 2015.

[3] Our definition of blue collar includes contractors and supervisors in trades and transportation, construction trades, other trades occupations, transport and equipment operators, trades helpers, construction and transportation labourers and related occupations, occupations unique to primary industry, machine operator and assemblers in manufacturing including supervisors, and labourers in processing manufacturing and utilities.

Schirle (2008) considered the role of education in her examination of older (age 55-64) married men's participation rates since the mid 1990s. However, the role of education was not accounted for separately from other characteristics of men including age and the number of children in the family. The changes in men's characteristic accounted for 15 percent of the total change in men's participation from 1995-2005.

**f. Joint retirement decisions and recent cohorts of women**

Among the factors affecting the labour force participation decisions of men, we should expect the participation decisions of women, their wives, to be an important factor in the decision making process. As described in Schirle (2008), there are two routes through which a wife's participation decision might affect a husband's. First, there is an income effect whereby a wife's employment income would reduce a husband's likelihood of participating in the labour force. Second, husbands and wives may have a preference for shared leisure time, especially at older ages. As such, husbands may be more likely to participate in the labour force when their wives are participating in the labour force. Schirle (2008) provides evidence suggesting the preference for shared leisure time dominates in the retirement decision, in that a husband's participation is positively and significantly influenced by a wife's participation in the labour force. Moreover, a substantial portion (42-46 percent) of the increase in older men's participation since the mid-1990s was driven by the response of older men to their wives' increased participation in the labour force.

In Figure 13, we present the participation rates of men and women at ages 55-64 aligned with the participation rates of the same birth cohort of women 20 years earlier (when they were 35-44 years old). Women's participation rates at ages 35-44 had been rising steadily, with each new cohort of women being more likely participate in the labour force. For women aged 55-64 in the mid-1990s, rising participation at younger ages (35-44 in the mid 1970s) had accelerated, reflecting

greater career attachment that coincided with easier access to birth control and resulting increases in education (see Bailey 2006 and Goldin and Katz 2002). This acceleration in women's participation from the 1970s corresponds to the same cohort's increase in participation in the mid-1990s.

With greater career attachment among the cohorts of older women appearing in the mid-1990s, we'd expect their husbands (whose wives are typically a bit younger) to have a higher likelihood of participating in the labour force than earlier cohorts of men as they postpone retirement in the interests of sharing the leisure time with their wives. To characterize the extent to which this matters, we construct estimates using the methods similar to that presented in Schirle (2008).[4] We present a counterfactual time series for married men's (age 55-64) labour force participation rates – specifically a counterfactual in which the participation rates of wives did not increase after 1995. We also consider the effects of age structure and education in our procedures. The results are presented in Figure 14.

Among married men aged 55-64, participation rates increased by 14 percentage points over the 1995-2015 period. Increasing levels of education and changes in the age structure (as the baby boomers moved from being aged 55-59 toward 60-64) explain a small portion of the increase in participation over the 1995-2015 period (only 8 percent of the total increase, or one percentage point). The increase in wives' labour force participation appears to be an important factor. If the participation rates of wives had not increased over this period, we might expect the participation rates of older married men to be nearly 5 percentage points lower. In other words, the estimates here suggest the increase in wives participation rates over time can explain one third of the total increase in married men's participation rates since 1995. Despite using the relatively unrefined methods used here, the results align well with those found in Schirle (2008).

[4] Our measures, including age groups, are defined a bit more coarsely given the availability of public use data files and we do not account for the number of children.

## Conclusion

In this study we have reviewed recent trends in older men's labour force participation rates and various factors that may have driven these trends. While public and employer-sponsored pensions are an important determinant of the retirement decision, these pensions have not changed substantially for older men over the past two decades. We expect the recovery of the Canadian economy over the mid-later 1990s contributed to the increase in older men's participation rates but was not a not a central element driving trends.

Improvements in health and education may have played a larger role in recent trends in older men's participation rates. As education levels increase, there has been a shift away from blue-collar jobs, which tend to be more physically demanding. Combined with improvements in health, older men may now face better opportunities to continue with employment at older ages.

Finally, we expect that continued increases in the labour force participation rates of older wives have played an important role. The observed increase in participation of older wives reflects long-run trends in women's attachment to the labour market that intensified for younger women in the 1970s. As husbands reveal preferences for sharing leisure time with their (typically) younger wives, and their wives are increasingly likely to work at older ages, the labour force attachment of older husbands has increased as well.

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## Figures

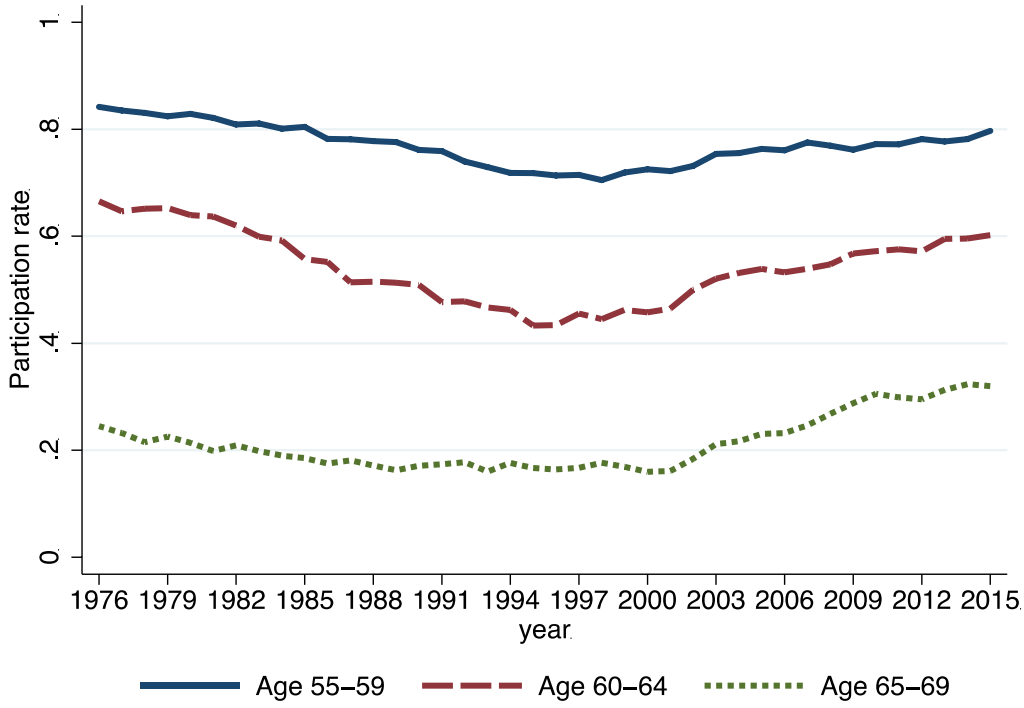


FIGURE 1. Men's Labour Force Participation Rates

Source: Authors' tabulations from the Labour Force Survey.

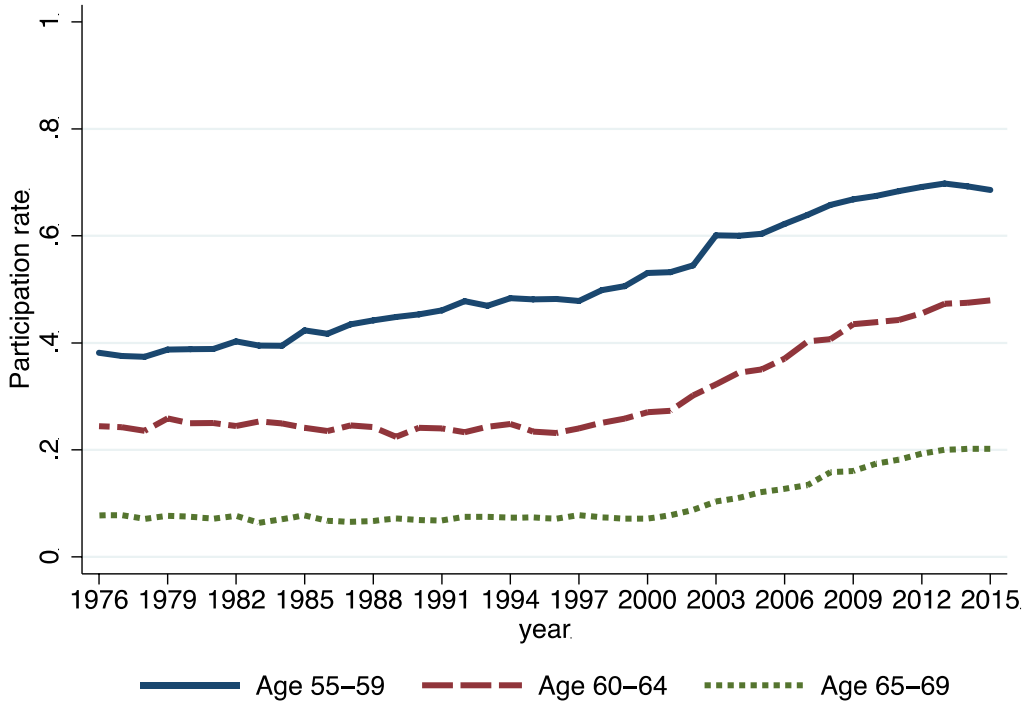


FIGURE 2. Women's Labour Force Participation Rates

Source: Authors' tabulations using the Labour Force Survey.

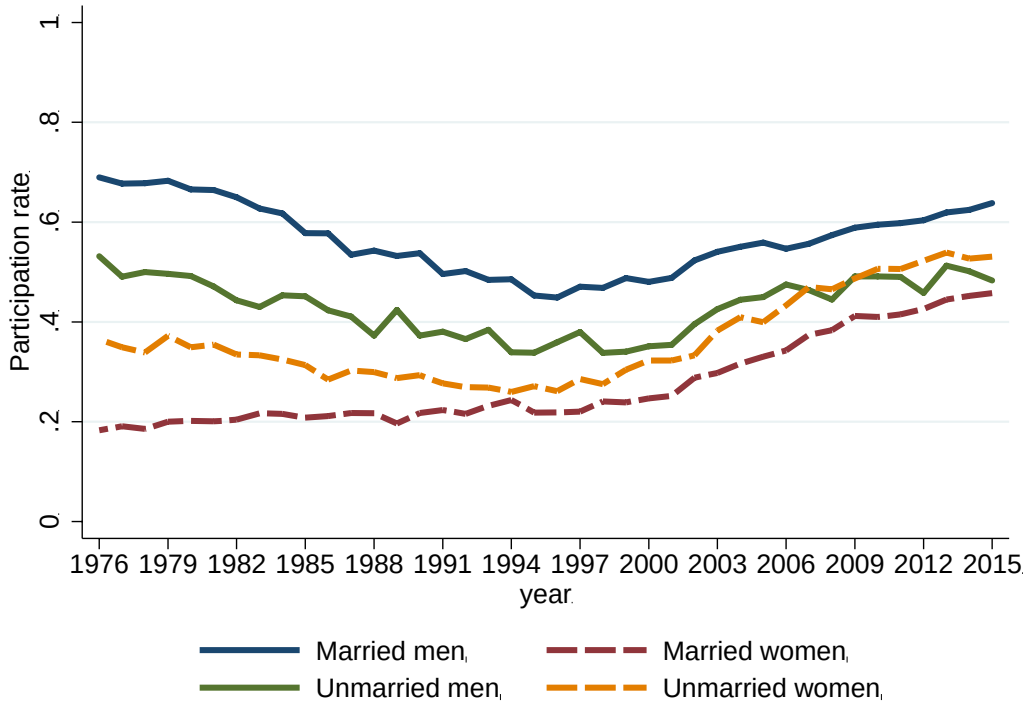


FIGURE 3. Men's and women's participation rates at ages 60-64, by marital status

Source: Authors' tabulations using the Labour Force Survey.

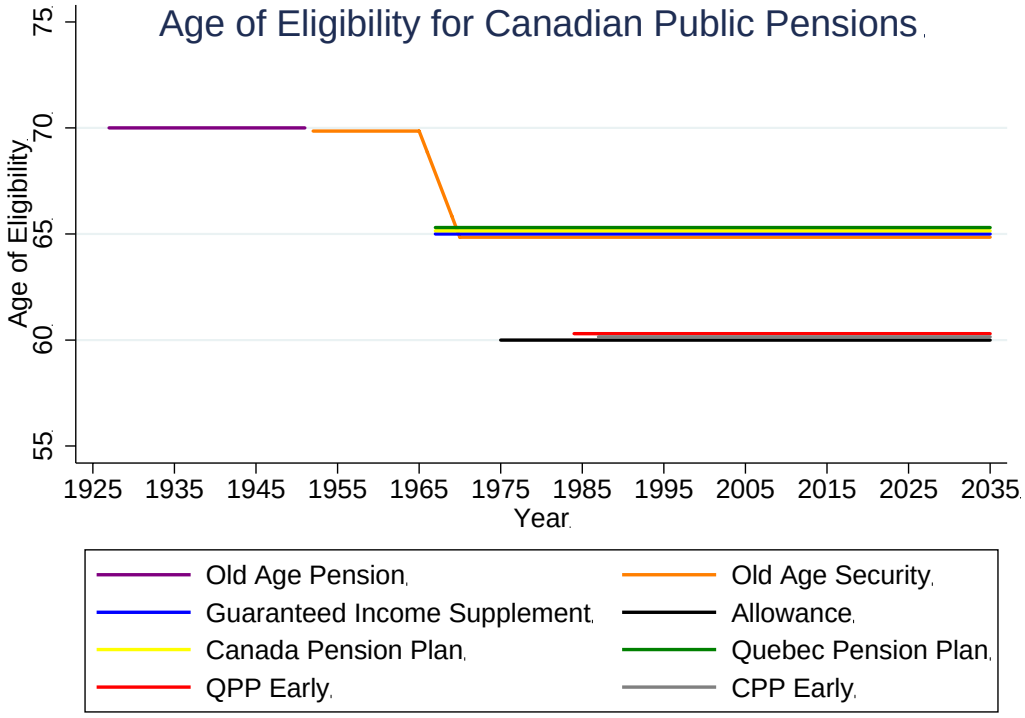


FIGURE 4. Age of eligibility for public pensions in Canada

Source: Author's tabulations

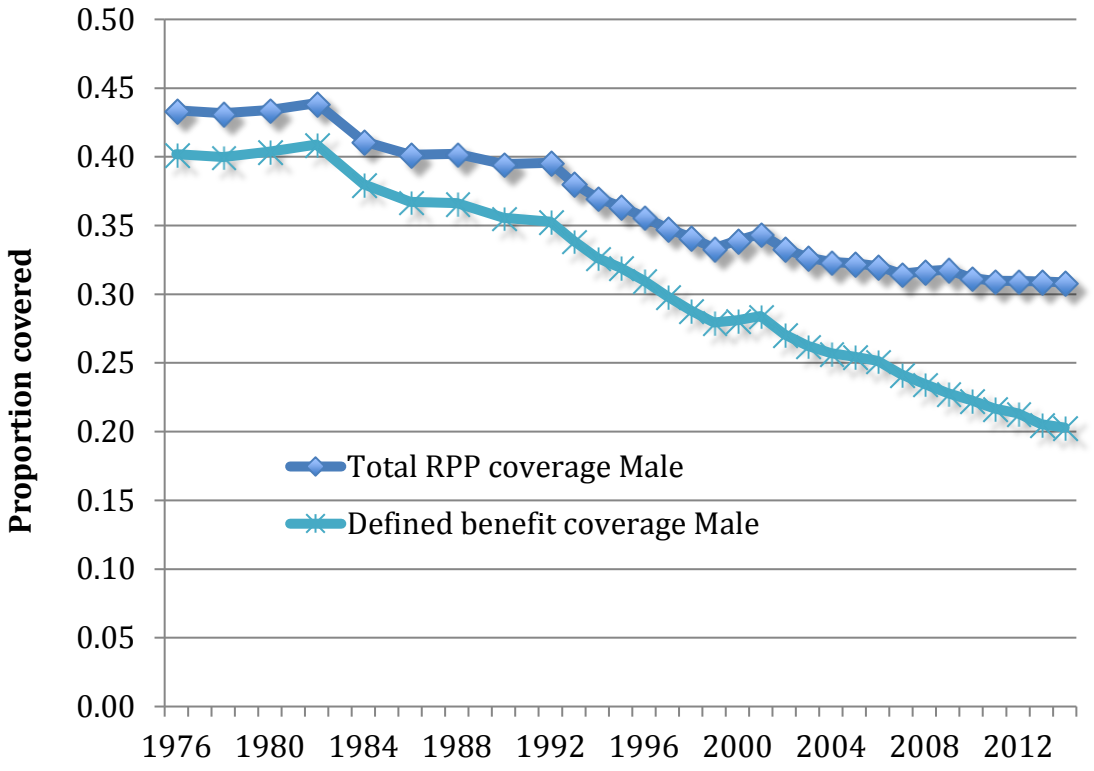


FIGURE 5. Portion of male labour force participants aged 15 and over that are members of registered pension plans.

Source: Authors' tabulations based on CANSIM tables 282-0002 and 280-0008

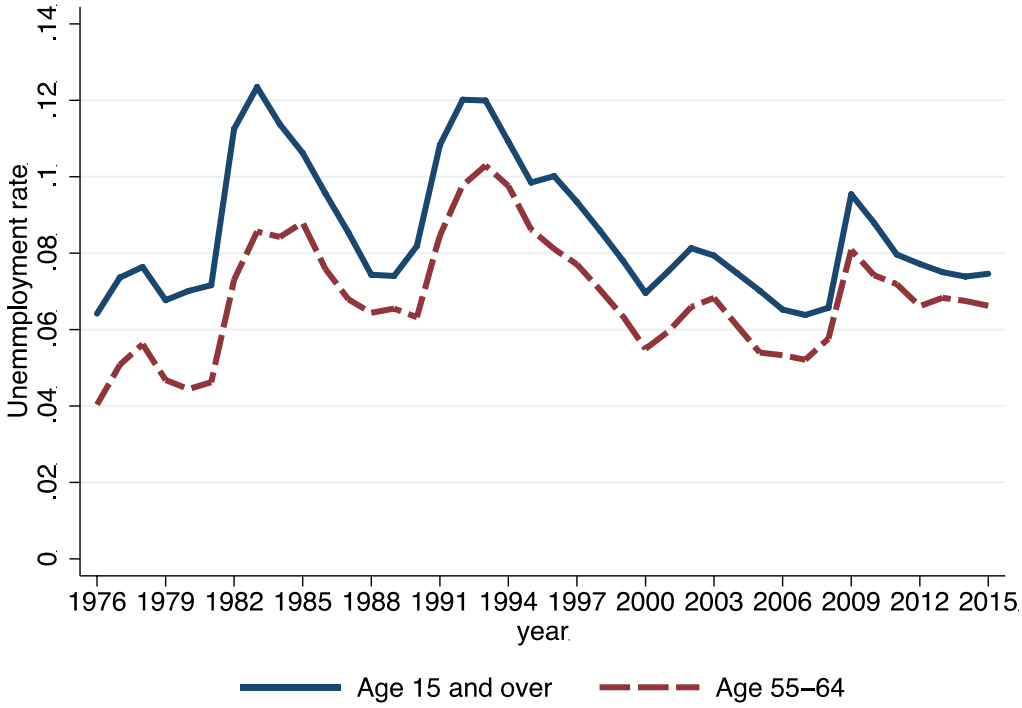


FIGURE 6. Unemployment rates of men

Source: Authors' tabulations using the Labour Force Survey

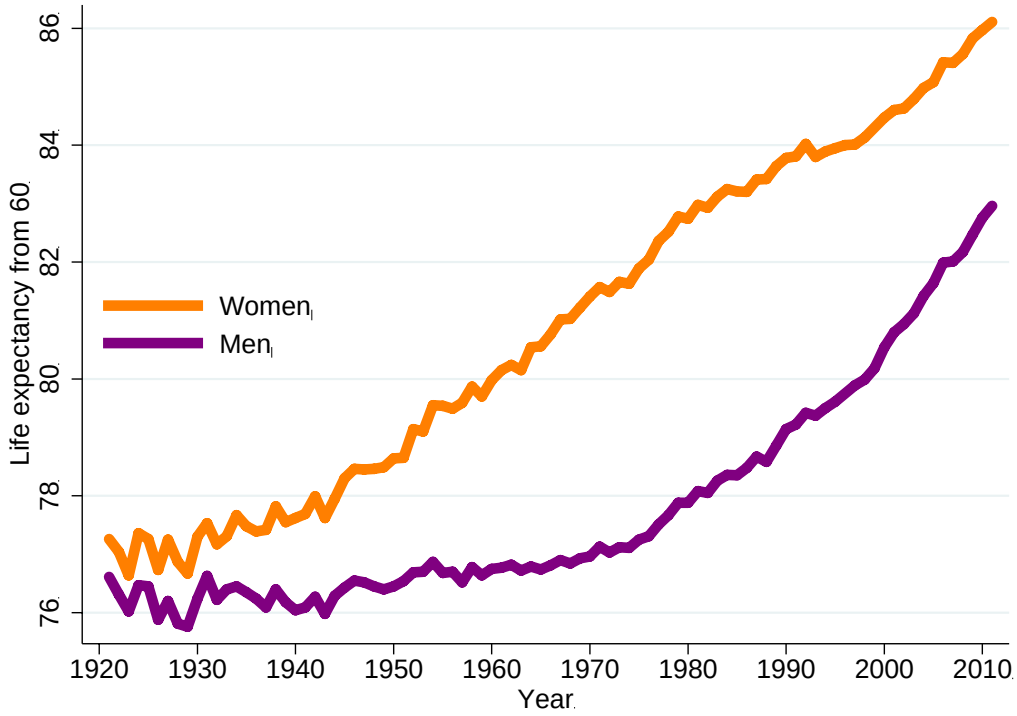


FIGURE 7. Life expectancy at age 60

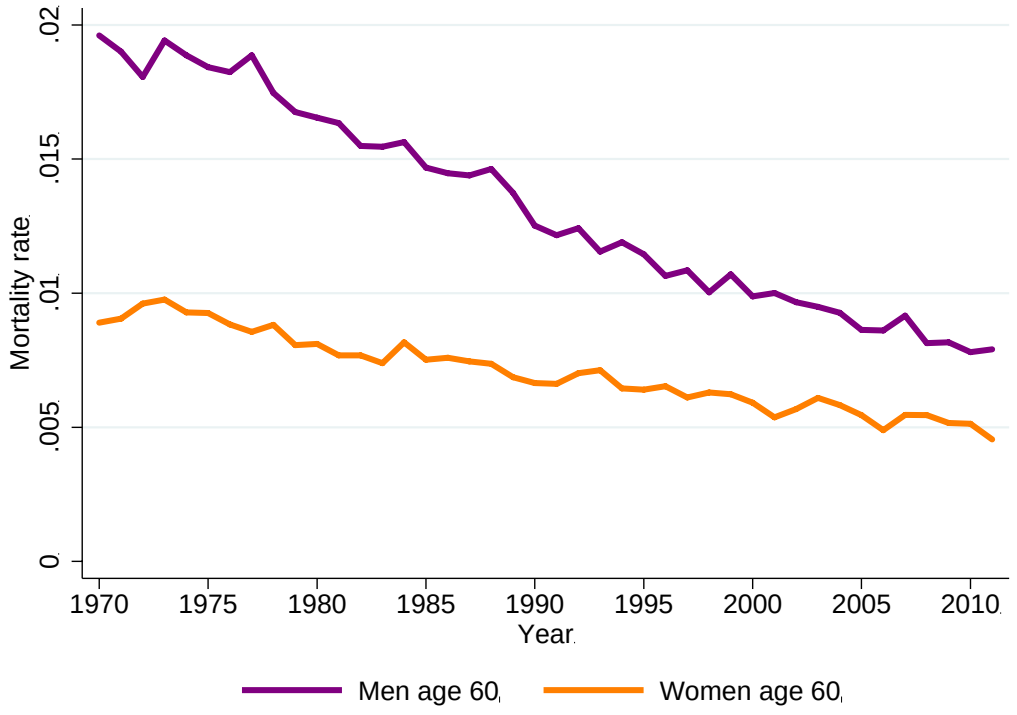


FIGURE 8. Mortality rates at age 60

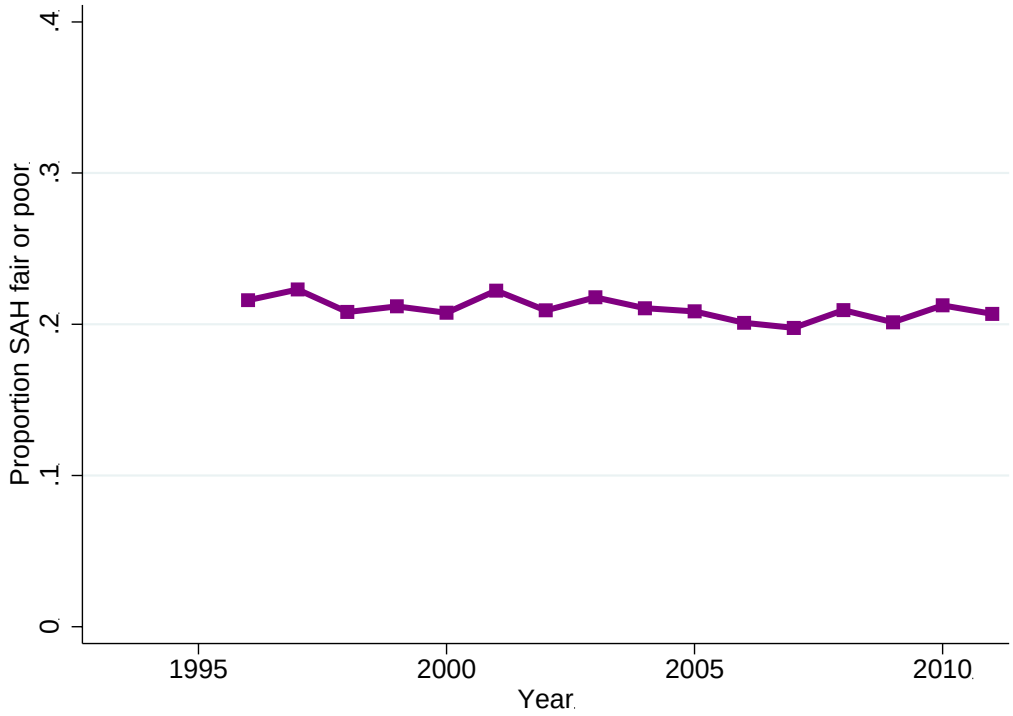


FIGURE 9. Men 55-64 reporting fair/poor health

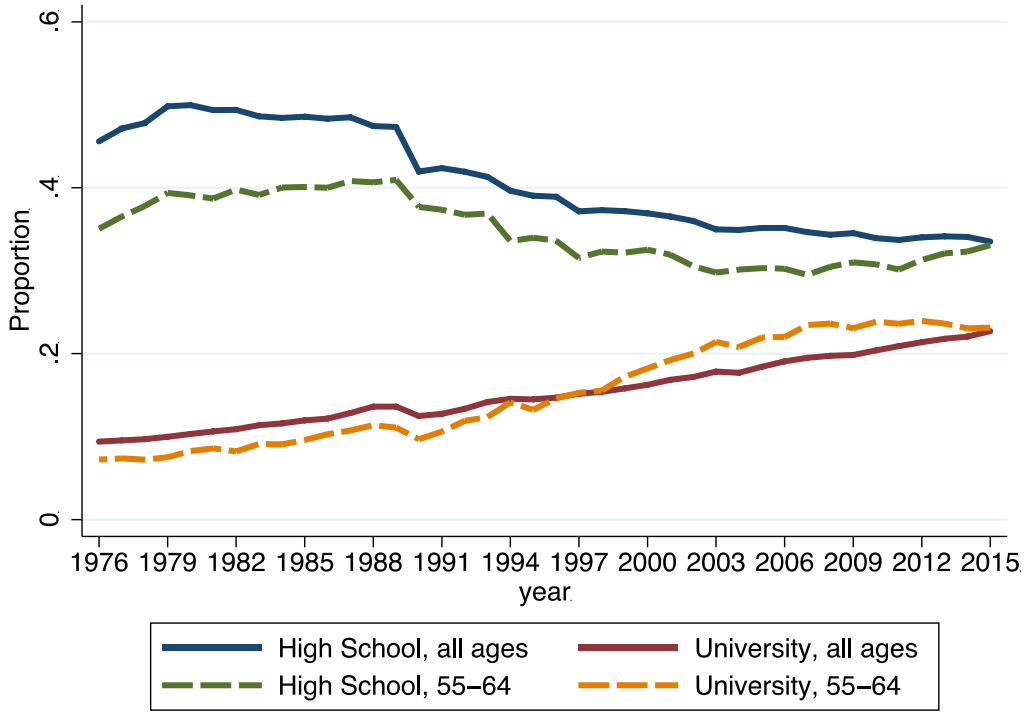


FIGURE 10. Educational attainment of men

Source: Authors' tabulations using the Labour Force Survey

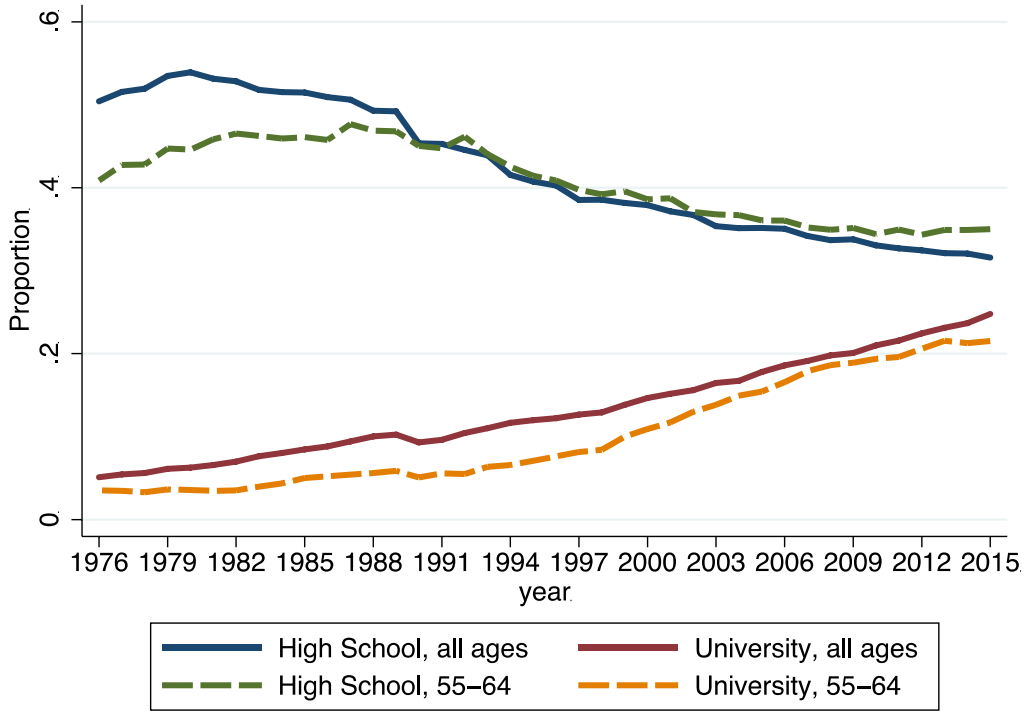


FIGURE 11. Educational attainment of women

Source: Authors' tabulations using the Labour Force Survey

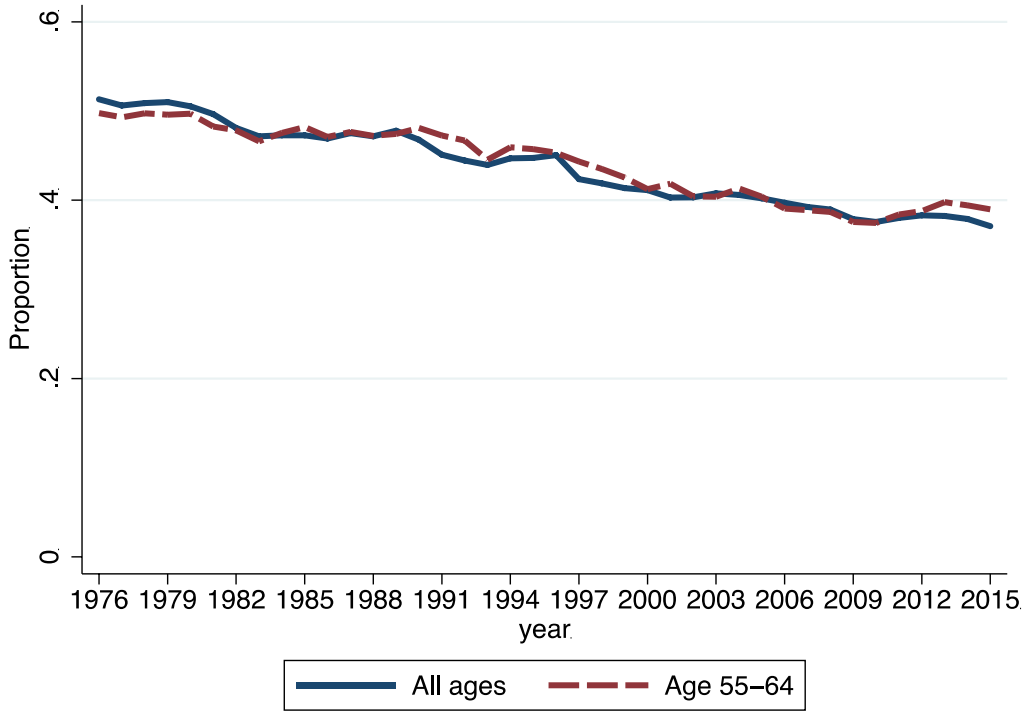


FIGURE 12. Portion of men employed in blue collar jobs

Source: Authors tabulations using the Labour Force Survey.

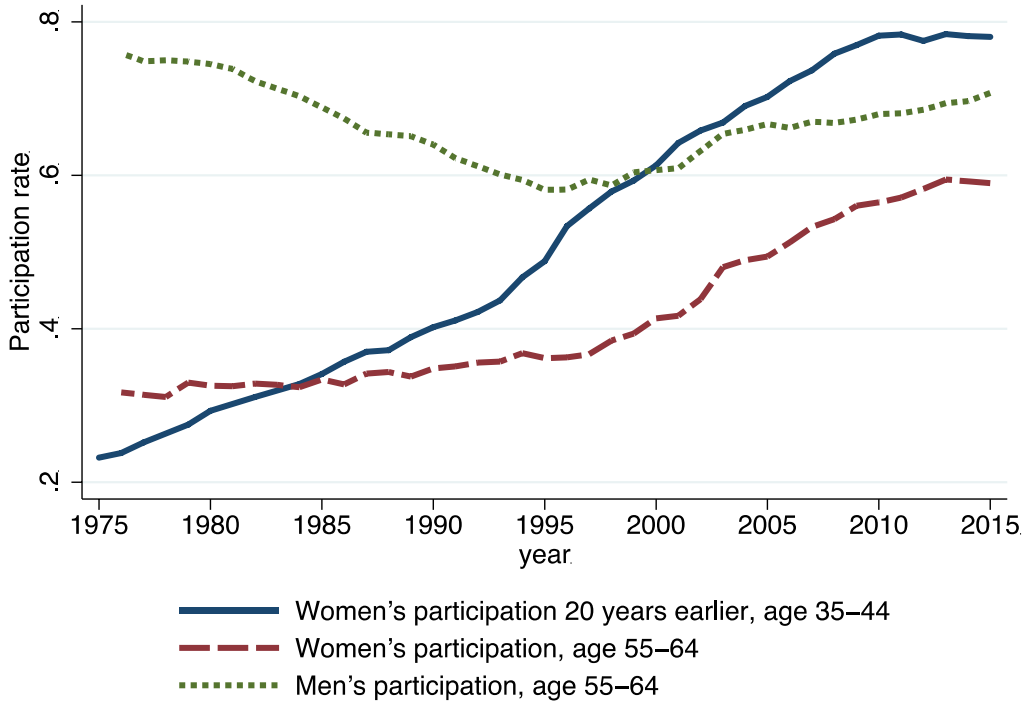


FIGURE 13. Participation rates of men and women by age.

Note: Women's participation 20 years earlier at ages 35-44 depicts for year in the graph what the participation rates of women aged 35-44 was 20 years prior.

Source: Authors tabulations using the Labour Force Survey (19765-2015) and historical documents from Canada's Women's Bureau.

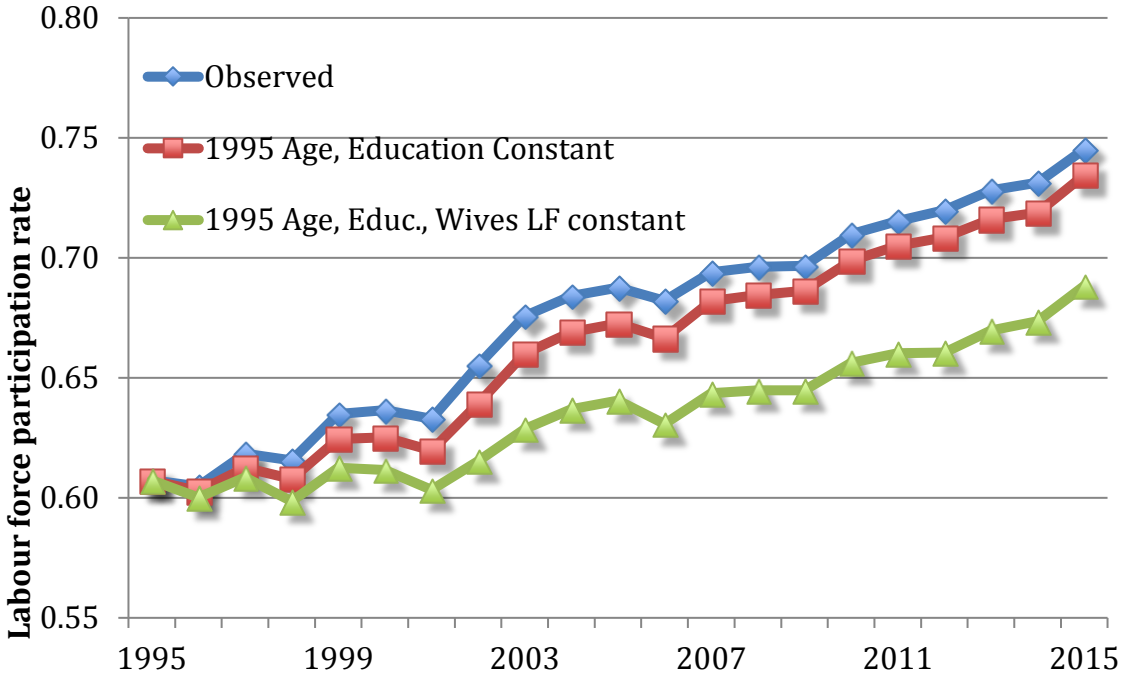


FIGURE 14. Counterfactual participation rates of men

Note: Authors' calculations base on Labour Force Survey.