Is Canada's Labour Force Participation Rate at its Lowest Level in Over a Decade, and Should We Worry About it?

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Recent reporting has noted that Canada's labour force participation rate (LFPR) is at its lowest level for 13 years. Some have suggested this is evidence of a weaker labour market than indicated by the unemployment rate. But it is important to distinguish between a short-run analysis of the LFPR and a long-run analysis. The reporting conflates the two.

Although the current demand for labour is certainly not strong, with all indicators suggesting a stagnation or slight weakening over the past year, comparisons with a decade ago are complicated by population ageing. On an age adjusted basis, the LFPR and employment rate are close to all-time peaks, as a result of increasing labour market participation among women and people over the age of 50. The surprising thing is not that the LFPR is so low, but that it is as high as it is.

What can the LFPR tell us?

In essence, the LFPR is measures the percentage of the Canadian population that is available to engage in paid employment (see the Appendix for more detail). It can help us understand the potential for long run economic activity and growth. Consider two different economies: one with a high LFPR and another with a low LFPR. The country with the higher LFPR has a large labour force relative to the population, meaning that there are more people contributing to overall economic activity. Typically such a country will have a higher income per capita than a country with a smaller percentage of the population contributing to economic activity. High LFPRs, then, are associated with higher per capita incomes. The concerns over ageing populations in many OECD countries are in large part because older people are less likely to want to work than younger people, so that as a population ages, a declining percentage of the population will be in the labour force and income per capita is likely to fall.

There are also some short-term factors that the LFPR helps us to understand. The most typical measure of how much slackness there is in the demand for labour relative to supply is the unemployment rate – the percentage of all people who would like to work (ie the labour force) who are not in paid work. But there times when the unemployment rate is not a good measure of the slackness in the labour market. A particular concern is when people give up looking for a job because they become discouraged by a long period of fruitless job search. Such people do not meet the definition of unemployed because they are not looking for a job, but they would take a job if one were offered. If a weak labour market increases the number of discouraged workers, this could lead to a decline in the unemployment rate, making it falsely appear that the demand for labour is rising. Looking at the LFPR along with the unemployment rate helps us see whether any particular decline in the unemployment rate is likely to be caused by discouraged workers.

These two worries about a low LFPR are somewhat contradictory. The concerns of a low LFPR in the longer run are that there will be a shortage of people willing and able to work, which could lead to lower income per capita. But the concerns of a low LFPR in the short run are that it indicates that some people who would like to work can't find it and are dropping out of the labour force – that we have more people who want a job but can't find one than indicated by the unemployment rate. These are opposing concerns. One is a concern of a long run shortage of workers, the other a concern of a short run glut of workers. If we believe that the LFPR is falling in the short run due to discouraged workers, then if economic activity picked up in the longer run, the LFPR would rise, alleviating concerns over a longer run shortage of workers.

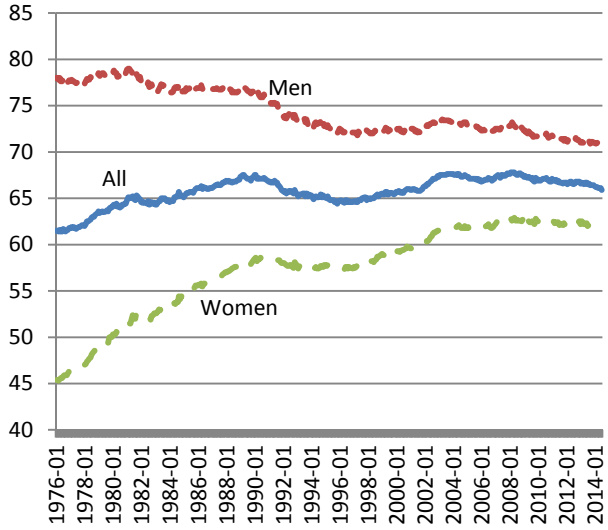
This means that it is important to make a distinction between a short-term analysis of the LFPR and a long-run analysis. But media reports have been conflating the two.

So what is going on with the LFPR?

After several decades in which Canada's LFPR mostly increased (with a decline and some stagnation in the early to mid 1990s), there has been a decline since the 2008-09 recession (Figure 1). It is less recognized that the LFPR had been anticipated to start declining around the turn of the century.

All the growth in the LFPR up until the 1990s was due to increasing labour force participation of women. Across the board, the LFPR of men declined over the period from the late 1970s to the early 2000s, with only a few upticks during labour market peaks.

Figure 1. LFPR for Men, Women and All, Monthly, Seasonally Adjusted, Jan 1976 to Jul 2014



Source: CANSIM Table 2820087, seasonally adjusted

One reason economists expected that growth in the LFPR would cease around the early 2000s was that women's LFPR would start to stagnate, since the rapid gains in their LFPR couldn't continue indefinitely. But more predictably, as the baby boomers neared retirement age, we would see a decline in the overall LFPR. The LFPR of people aged over 55 is much lower than the LFPR of 25 to 54 year olds, so when an increasing proportion of the population is aged over 55, the average LFPR will decline. The first baby boomers reached age 55 at the turn of the century, and 65 in 2011.

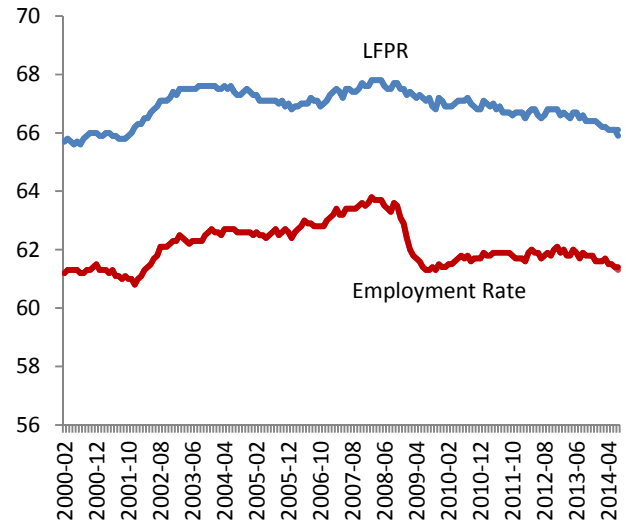
From this perspective, the surprising thing about the current LFPR is that it is so high.

A number of analysts have recognized this, and begun to focus on ways to adjust the statistics for the changing age structure. One option is to calculate what the overall LFPR would be assuming that there were no change in the age structure of the population, but allowing each age group's LFPR to vary. Figure A1 shows these age adjusted LFPRs for the entire population aged over 15, assuming that the age structure of the population was the same as in 2001 (the year the first baby boomers turned 55).

On an age adjusted basis, men's labour force participation rate in 2013 was at its highest level since 1992, and for women at its highest levels ever. In fact, women's higher LFPR is one cause of the increase in men's: men often delay retirement until their wives also leave the labour force, and with more women working, this has led to men staying at work longer too. Higher education levels of older men also matter, since they are associated with later retirement. A change in the occupational composition of the workforce towards services, and better health and life expectancy may also have had some effect, as may have a decline in wealth with the stock market drop in the recession. The removal of mandatory retirement is likely to have contributed little, and changes to OAS/GIS eligibility ages only affect those who are currently aged under 55.

Figure A2 shows the raw and age adjusted LFPR for the prime working age population, those aged 25 to 54 years old. While the overall LFPR for this group is at record highs, this is entirely due to women's participation. The decline in prime age men's LFPR that occurred over the 1980s and and 1990s has been arrested, but their LFPR remains at close to historic lows. The changing age structure hasn't much affected the labour market statistics for this group. This is because the LFPR is fairly similar for all workers between the ages of 25 and 54. This suggests that for the most part using the LFPR for 25-54 year olds is a convenient alternative to a full age adjustment when analyzing the short run strength of the labour market.

Figure 2. LFPR and Employment Rate, all individuals aged 15 and over, Monthly, Seasonally Adjusted, Jan 2000 to Jul 2014



Source: CANSIM Table 2820087, seasonally adjusted

Although recent reporting has focused on the LFPR, the employment rate (Figure 2) also matters for understanding the strength of the demand for labour. The 2008-2009 recession led to a steep drop in the percentage of the population over age 15 who were working. It has recovered somewhat since then, but remains well below the level of 2007-08. There is also

a consistent, albeit small, decline over the past year. But again, much of this weakness is related to retirements. Age adjusted employment rates (Figure A3) show the overall age adjusted employment rate at an all-time peak, 8% points higher than in the late 1970s. Women's employment rate has increased by 20% points since the late 1970s, while for men an employment rate that is nearing but not quite at its peaks before the 2008-09 and early 1990s recessions.

Other issues

Adjusting for the student population

Another factor that should be taken into account when looking at the population aged 15 and over for a long time period is that there has been a decline in the LFPR of 15 to 25 year olds as youth are undertaking more education. Statistics Canada considers students to be part of the labour force only if they are employed, or if they are actively searching for a part-time job. Although students are more likely to work now than they were in the 1970s, this trend has contributed to a decline in the LFPR of 15-24 year olds. Adjusting for this effect, the 'true' LFPR would be even higher today relative to earlier years.

Labour market indicators can be quite volatile in the short term

Monthly job market figures are volatile – the Labour Force Survey samples around 56,000 households, roughly 0.5% of all Canadian households. It measures the true levels of employment and unemployment with error. Statistics Canada publishes estimates of the sampling error. These show, for instance, that we shouldn't be very confident that employment has risen from the last month unless it is up by around 57,000. Since reports of consensus estimates before the release of the July 2014 LFS were for an increase in employment of around 20,000, this means analysts were essentially expecting the report to show little significant employment change. Both the initial release and the corrected release were within one standard error of the consensus estimate – there was really no reason that either release should have changed the minds of analysts about the strength of the Canadian labour market.

Statistics Canada's error in the July labour force estimates was unusual, but it should remind us not to put too much weight on any one month's estimates. Although the revisions suggest that many fewer full-time jobs were lost than had initially been estimated, this had barely any effect on the trends. Figure 2 includes both the initial and corrected LFPR and employment – the final data point shows up as a barely visible thickening of the line. Analysts who bet on month to month changes in the estimates should understand the sampling errors, or they are likely to get burned. It is better to focus not on the change compared with the previous month, but on trends over several months, is a better option.

The bottom line

The labour force participation rate is interesting for two different reasons:

- because it tells us about how much slack there is in the labour market at the moment; and
- because it tells us something about how much labour is available.

But these work in opposite directions: if we are concerned that the currently low LFPR reflects discouraged workers, then we should expect that it if the demand for labour picks up and finding a job becomes easier, then those discouraged workers are likely to be lured back into the labour force. We should therefore be less worried that a low LFPR currently is indicative of a low long-run supply of labour.

Taken together with the stagnating unemployment and employment rates, and the weakness in full-time employment, the recent downward slide in the LFPR indicates the demand for labour continues to be anemic. For those who don't have a job but would like to work, finding work is not getting easier, and may be a bit harder compared with this time last year.

The longer term implications are more interesting. We have known for some time that the Canadian economy is ageing, and this combined with an expected stagnation in the growth of women entering the labour force was expected to cause the LFPR to begin declining starting around 2000. Combined with the cyclically weak labour market, and we might have expected the LFPR to be well below its level in 2001. But the LFPR for prime aged workers is close to historic highs, and our overall LFPR is not much lower than it was 15 years ago. This is because (a) women's labour market attachment has continued to increase; and (b) after declining through the 1980s and 1990s, the LFPR of older men has increased since 2000.

The LFPR will likely continue to fall as the population ages. The youngest baby boomers are now approaching 50 years old, the age where LFPRs begin to decline. But an increase in the LFPR of groups that have historically had lower participation rates may offset the effects of population ageing, particularly if the demand for labour picks up.

Adjusting for the changing age structure each time there is a new release of labour market data is time consuming. Although the LFPR and employment rate for the entire population over 15 is very substantially affected by the changing age structure of the population, the figures for the prime age population are not. For analyses of short-run slack in the labour market, it makes sense to focus on this group rather than the headline numbers.

Finally, Statistics Canada's error in the July 2014 LFS release should remind us of something we already knew – the LFS provides estimates of labour market indicators, not definitive numbers. The figures need to be read with this in mind. Placing too much emphasis on one month's numbers is not warranted, error or no error.

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Statistics Canada, CANSIM Tables 2820087 and 2820002

Appendix: What is the labour force participation rate?

The labour force is simply the number of people over the age of 15 who are either employed or unemployed. The LFPR takes that number and divides by the total number of people over the age of 15.

Measuring this would seem straightforward, but it is made more difficult by the difficulty of defining who is unemployed.

It is easy enough to tell if someone is employed – Statistics Canada just asks whether you worked for pay at some point in the last week. Anyone who responds yes is considered employed. Some people who say 'no' are considered to be employed, but only if the reason they responded no was that they were temporarily absent from their job (on holidays, on sick leave, etc).

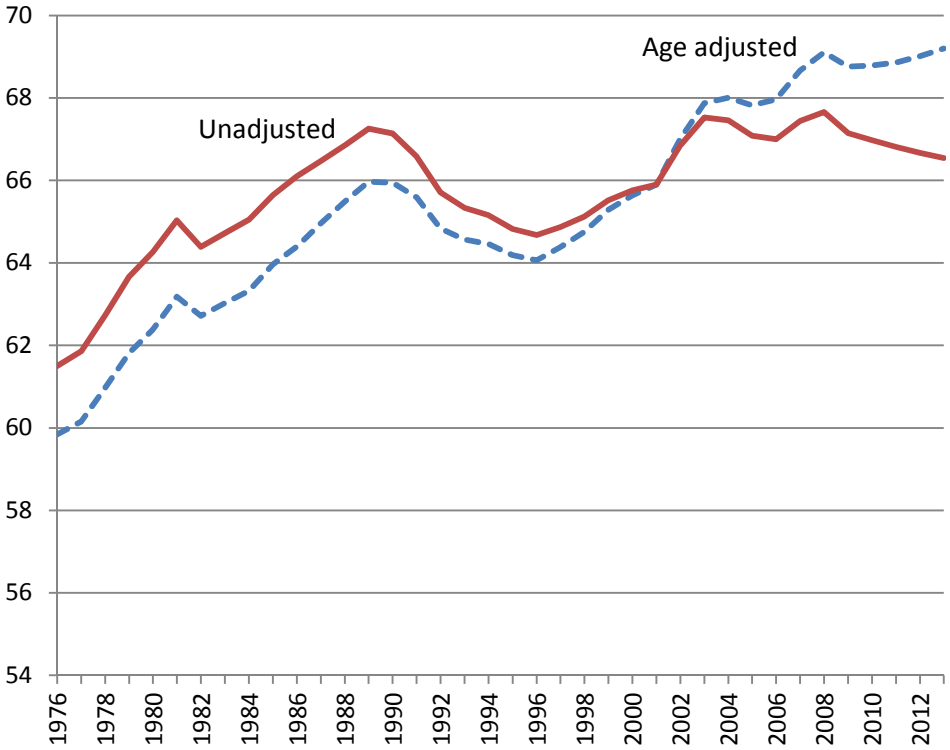
Defining unemployment is more difficult. Ideally, we want to be able to count as unemployed anyone who is not working but is available to work, and wants to work. So, for instance, the following people should count as unemployed.

- Someone who was a full-time student last week, and so couldn't have taken a full-time job then, is not considered unemployed.
- Someone who did not have a paid job but did not want one, for instance because they wanted to spend their time looking after their family.

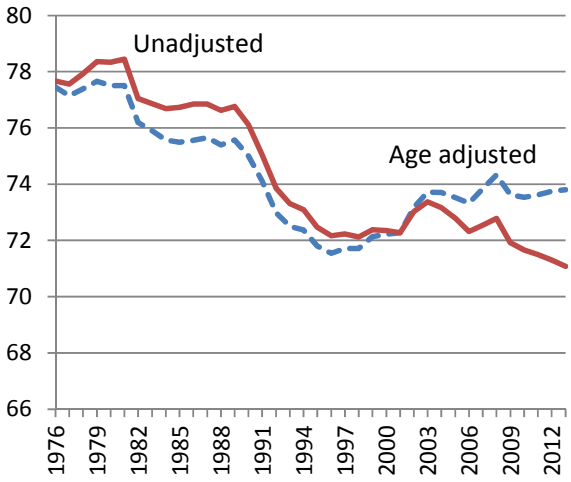
But figuring out who wants a job can be a little tricky. Generally, we don't really want to count someone as unemployed if they say they want a job, but want it so little that they are not interested in making any efforts to find a job. So we generally define someone as wanting a job if they have taken some action over the past 4 weeks to find a job.[1]

[1] In Canada, this can be as little as searching the job postings in a newspaper or online. The standard US definition of unemployment requires a job searcher to contact an employer about a position. As a result, Canada's reported unemployment rate and labour force participation rate would be higher than those reported in the US under the same labour market conditions.

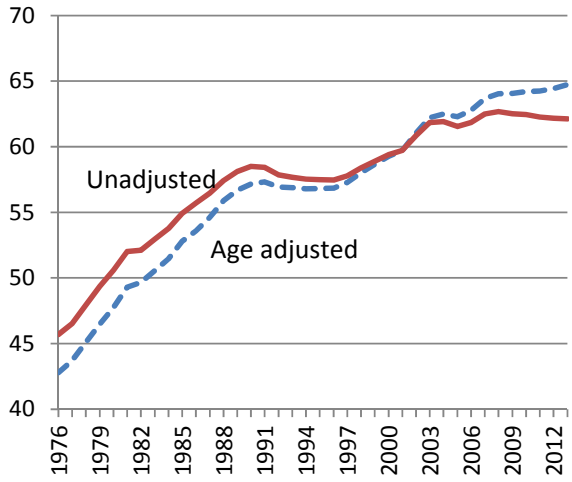
Figure A1. Annual labour force participation rate, ages 15 and over, unadjusted and age adjusted



A. Men

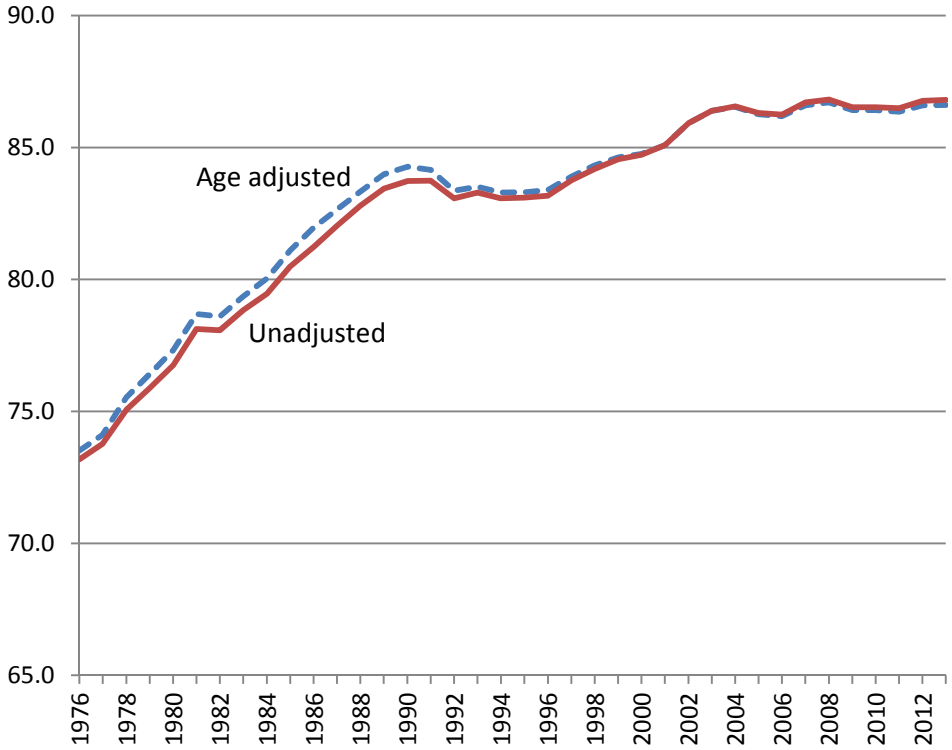


B. Women

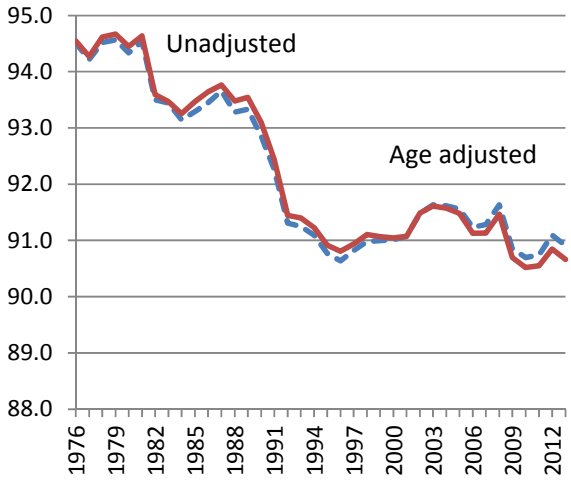


Source: Calculations using CANSIM Table 2820002

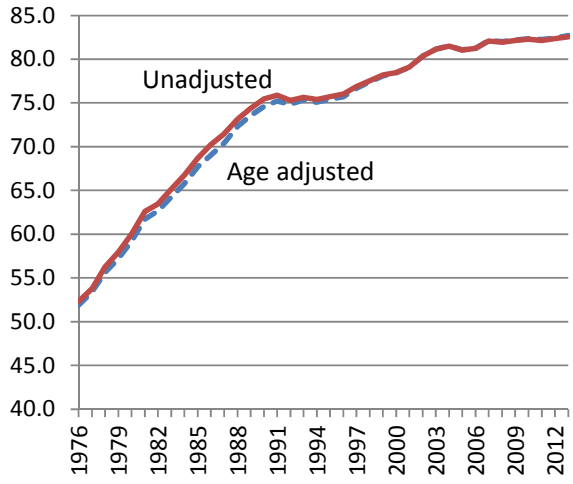
Figure A2. Annual labour force participation rate, ages 25 to 54, unadjusted and age adjusted



A. Men

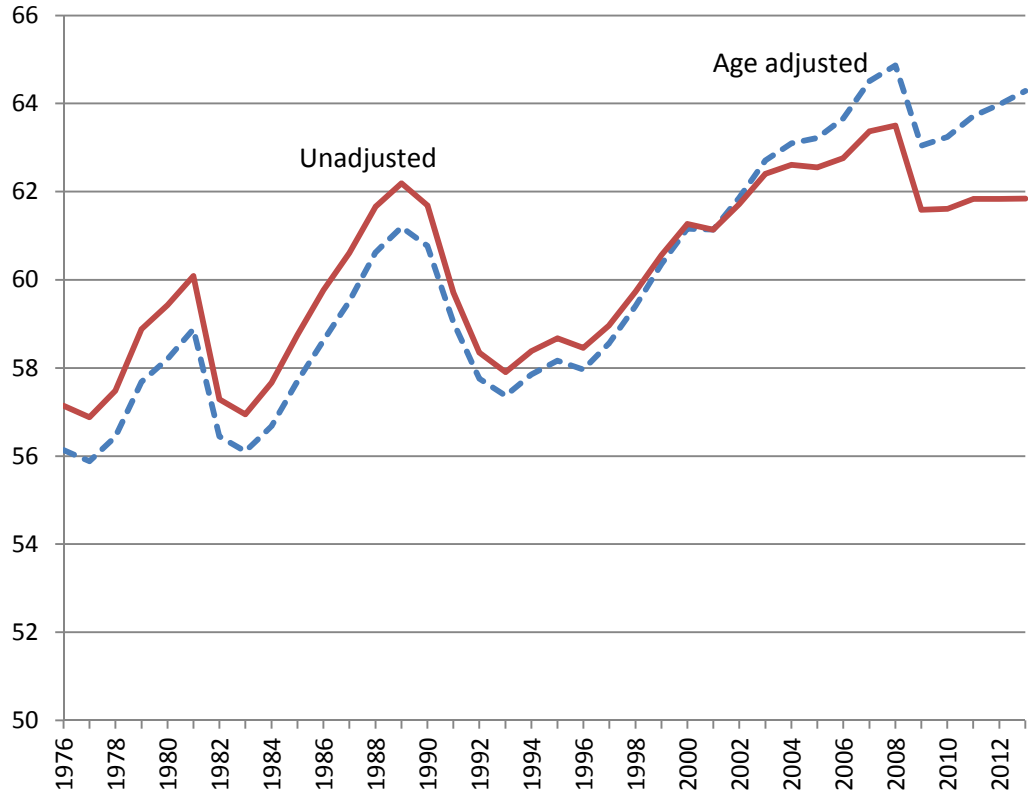


B. Women

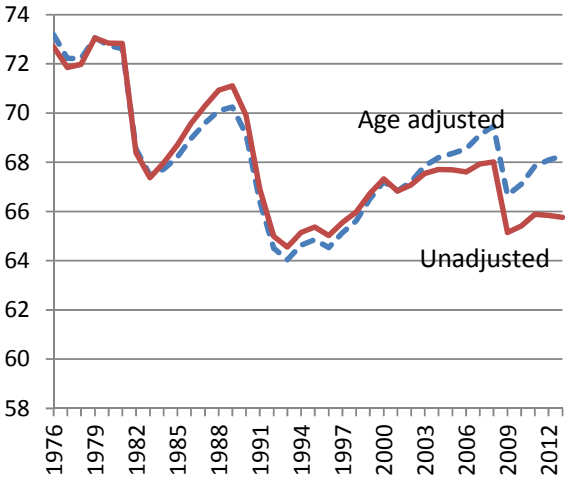


Source: Calculations using CANSIM Table 2820002

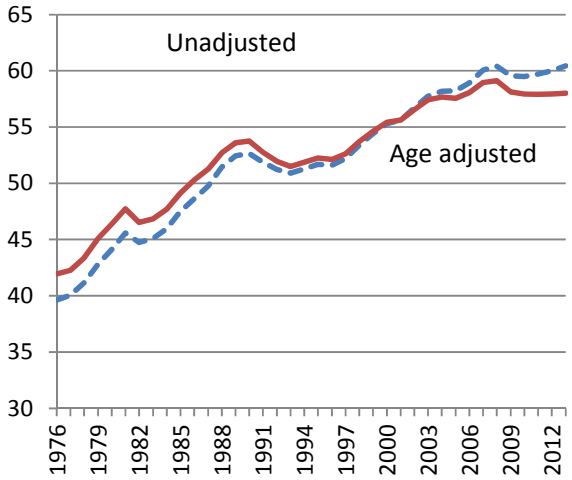
Figure A3. Annual employment rate, ages 15 and over, unadjusted and age adjusted



A. Men



B. Women



Source: Calculations using CANSIM Table 2820002