

Age of Pension Eligibility, Life Expectancy, and Social Policy

Summary

As the baby-boom generation retires over the next two decades, there will be a sharp increase in the fraction of the population eligible to receive public pension benefits. This increase would happen even without ongoing reductions in mortality rates and the resultant increases in life expectancy. However, reductions in mortality mean that the impact will be even greater, especially if no offsetting adjustment is made to the age at which people are eligible to receive pension benefits.

Continued gains in life expectancy, when not accompanied by an extension of working life, result in increasingly large fractions of the human lifespan being spent in retirement. That, in turn, gives rise to concerns about prospective increases in public pension costs and the level of support expected from the post-baby-boom generation. At the same time, the age at which benefits are payable affects the age of retirement.

We illustrate how a gradual and modest increase in the age of eligibility for public pension benefits (defined here to include those available under the Canada and Quebec Pension Plans, CPP/QPP, and Old Age Security, OAS) would (1) moderate the inevitable decline in the size of the labour force relative to the size of the population eligible to receive retirement pensions and (2) reduce the contribution rate needed to maintain the retirement income system.

Key Findings

- The typical age of retirement is much younger now than it was when the CPP/QPP were introduced in 1966.
- Since then average life expectancy has increased by 10 years for men and 8 for women; Canadians are living longer and in apparent better health, and the fraction of an average adult's life that occurs after age 65 has increased by about one-fifth.
- Future gains in life expectancy are important: by 2035 the population 65 and older is projected to be one-twelfth larger with than it would be if there were no further gains.
- The size of the labour force relative to the size of the population eligible to receive pension benefits is projected to be only half as large in 2035 as it is today; that suggests a doubling of the pension burden -- unless the age of pension eligibility and/or labour force participation rates were to increase.
- Put differently, without such changes, if the CPP/QPP and OAS were financed on a strictly pay-as-you-go basis, the contribution rate would have to increase from about 6.5 percent in 2010 to 12.2 percent by 2035.
- If instead the age of eligibility were to increase gradually from 65 to 70 over the next two decades the contribution rate would have to increase only about half as much.
- The effect would be even greater if, as would be expected, the labour force participation rates of older workers were to increase.





Age of Pension Eligibility

Canadians are living longer and, at least until a recent reversal of the trend, retiring younger. With the aging of the baby boom generation, the "inactive" portion of the population is increasing, giving rise to concerns about possibly large increases in the burden of support that will fall on those who are younger.

We model the impact of continued future gains in life expectancy on the size of the population that is age-eligible to receive public pension benefits.

We pay particular attention to possible increases in the age of eligibility, and the associated impact on the contribution rate needed to maintain the publicly financed component of the retirement income security system.

Life expectancy has increased by 10 years for males and 8 for females since the Canada and Quebec Pension Plans (CPP/QPP) were introduced four and one-half decades ago, and further increases are expected (see Table 1).

Table 1. Average Life Expectancy and Measures Related to Retirement

	1966	2010	2035	2035
	AE=65	AE=65	AE=65	AE=70
Life expectancy, males	68.8	78.6	82.5	82.5
females	75.2	83.4	86.7	86.7
Adult life in retirement (%), males	23.2	28.5	30.9	24.2
females	27.1	32.2	34.5	28.0
Years at work / years retired, males	3.3	2.5	2.2	3.1
females	2.7	2.1	1.9	2.6

AE -- age of pension eligibility

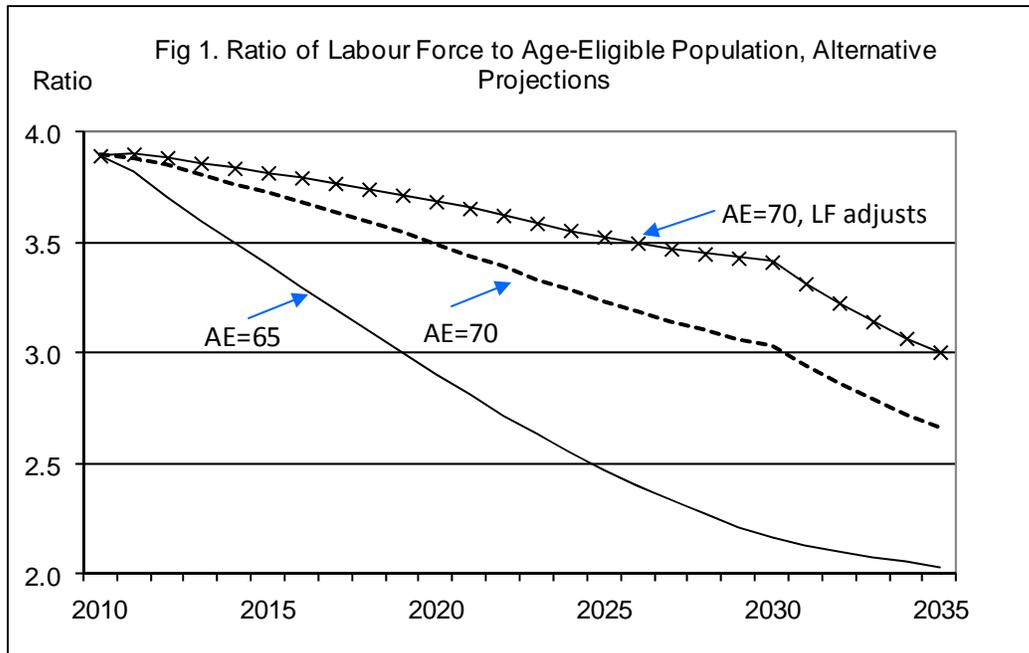
In 1966, men who retired at 65 after 45 years of work could have expected to spend about 23 percent of their adult life in retirement; by 2010 that had increased to more than 28 percent and, if the age of eligibility for CPP/QPP and OAS (Old Age Security) benefits remains at 65, it is projected to increase to about 31 percent by 2035. The female proportions are somewhat higher.

Put differently, the number of years worked for each expected year of retirement declined sharply between 1966 and 2010, from 3.3 to 2.5 years for men, and is projected to fall to 2.2 years worked for each year of retirement by 2035 if age 65 remains the standard. An increase in the age of eligibility would reverse the decline but the ratio would remain lower (3.1) than it was when the CPP/QPP were introduced.

With population aging we expect the number old to increase relative to the size of the labour force. That means fewer people will be available "to provide support" for those in old age. In 1966, with the population age structure of that year, this support ratio was 4.9. Figure 1 shows that the ratio had declined to 3.9 by 2010.

If the age of eligibility remains at 65, the support ratio is projected to fall by half, to 2.0, by 2035. The decline is reduced when the age of eligibility adjusts (in the projection shown it is assumed to increase gradually from 65 in 2010 to 70 in 2030, and to remain at 70 thereafter).

If this increase in the age of eligibility were to induce higher rates of labour force participation among older workers, as seems likely, the support ratio would not decline as much -- to about 3.5 by 2030 and 3.0 by 2035.



AE -- age of eligibility for retirement pension benefits.
LF -- labour force

What does this imply for contribution rates? OAS benefit payments are paid entirely from general revenues. The CPP/QPP contribution rates have been adjusted over time so as to generate an inflow of contributions in excess of the outflow of benefits and, in consequence, the plans have accumulated assets; however, neither plan comes close to being "fully funded".

As an exercise, we calculate the overall contribution rates that would be needed each year to pay the combined total of OAS and CPP/QPP benefits claimed in that year. That is equivalent to financing the public pension system on a strictly pay-as-you-go basis and this gives an indication of the economic burden of the costs and the effects of changes in demographic structure.

Some results are shown in Figure 2, based on the assumption that the ratio of the average pension benefits to the average wage remains at 0.25. It is evident that changing the age of eligibility would have a significant impact on the contribution rate, under pay-as-you-go financing.

If the age were to remain at 65, the rate would almost double, from 6.4 percent in 2010 to 12.3 by 2035. The increase would be about 2.9 percentage points less if the age of eligibility were increased gradually to 70.

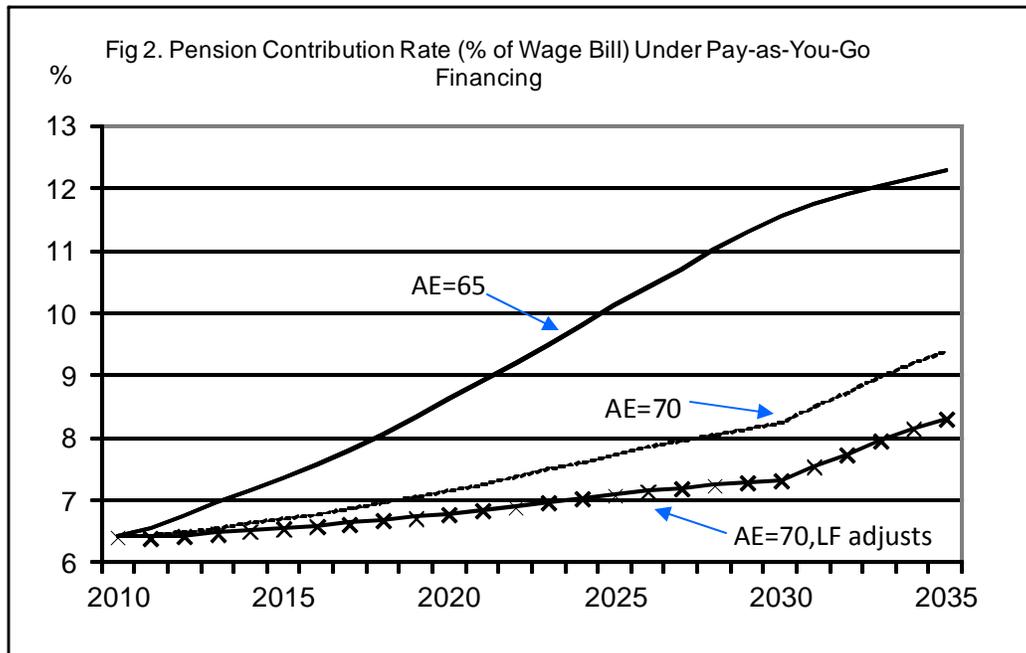
If, in addition, retirement were delayed slightly to reflect policy changes in the age of pension eligibility, the contribution rate needed by 2035 would be reduced by a further one percentage point.

Put differently, if the age of eligibility were to be increased by three months each year until it reached age 70 in 2030, and participation rates of older workers were to increase slightly, the contribution rate needed to sustain the pension system would rise from 6.4 percent in 2010 to only 7.3 percent in 2030.

By comparison, with no change in the age of eligibility, the pay-as-you-go contribution rate would be 11.6 percent in that year.



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Such differences are substantial, and suggestive of the trade-offs that face policy makers and society at large. If the age of pension eligibility were to remain at 65 and benefits were to increase in line with wages, the cost of the public pension system would double by 2035.

The cost increases would be much lower if the age of eligibility for pension benefits were to increase gradually, and lower still if even a slightly longer period of labour force attachment resulted from (or coincided with) that increase.

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