

The Future Age of Retirement

Canada's population is aging rapidly – what does this mean for the retirement system?

BY ROBERT L. BROWN

A lot has been written about the impact of the Baby Boom-Bust cycle of demographics. Some papers (Schieber and Shoven 1994) worry about what might happen when the Baby Boom generation exits the labour market. Certainly we know that as early as 2007 we should expect more retirements than entrants to the labour force, creating a level of labour shortages. And this will accelerate after 2015 when Baby Boomers hit retirement age. When this happens, what will the results be? Will the economy stagnate? Will stock markets melt down? Will housing values plummet?

This paper replies to these questions with a resounding “No.”

All natural systems seek equilibrium, and the economy is no different. The retirement of the Baby Boom generation will create pressures—downward pressure on home and stock values, upward pressure on goods and services demanded by retirees. This paper argues that the result

of these forces will be a shift in the retirement age for Canadians. That is because Canadian workers can and do retire at the earliest possible age once the total societal demand for consumption is satisfied.

Boom and Bust

The Canadian Baby Boom-Baby Bust demographic profile has been well documented. The rise in birth rates during the 1950s and early 1960s coupled with the dramatic decline in these rates in the 1970s will shift the population age structure in the coming years. Exacerbating the rise in the number of seniors in

YEAR	AT BIRTH		AT AGE 65		AT AGE 75	
	MALE	FEMALE	MALE	FEMALE	MALE	FEMALE
1931	60.0	62.1	13.0	13.7	7.6	8.0
1971	69.3	76.4	13.7	17.5	8.5	10.70
1994	75.1	81.1	16.1	20.1	9.9	12.70

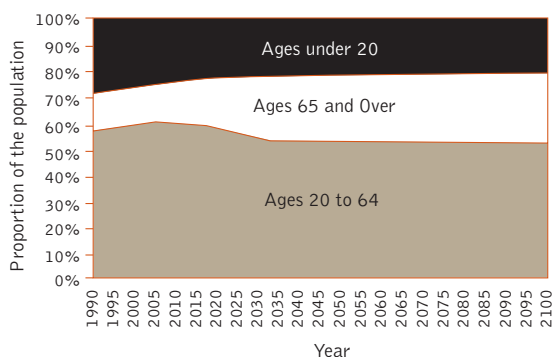
Source: Statistics Canada

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Canada is the fact that life expectancy is also increasing (see Table I).

Figure I outlines the historical and projected distribution of youth, adult and aged in Canada up to 2100. Clearly, this “aging” of the population will create a heavy demand for wealth transfer from the workers to the elderly, which could create pressure for an

FIGURE 1
DISTRIBUTION OF HISTORICAL AND PROJECTED POPULATION BY AGE GROUP



increase in taxes and other contributions from workers’ earnings, all else being equal.

This shift means that, most likely, Baby Boomers will simply not be able to retire at the ages currently accepted as the norm.

Today, the average age at retirement today is 61.8 years. If the massive Baby Boom contingent attempted to retire at this age, their attempts to liquidate their assets in order to buy goods and services would soften the value of those assets. Furthermore, the much smaller “Baby Bust” generation would then become the source of labour. Because of this, production in the economy could slump while demand for consumption of goods and services would remain level. The expected result would be price inflation.

To the extent that one’s decision to retire is dependent on the real value of assets accumulated versus the current cost of goods and services, some Boomers will clearly be forced to postpone their retirement (see also Schieber and Shoven 1994). Employers, as well as gov-

ernments, are expected to provide incentives for later retirement due to a decline in the supply of labour (Statistics Canada, 1996, p. 39). In other words, the Baby Boomers might be forced to adjust to new ages of retirement that would allow a constant wealth transfer from a stable workforce to all Canadians.

The Wealth Transfer Index and the Future Age of Retirement

A statistical measure that can be used to project the expected retirement age is the Wealth Transfer Index (WTI). Expressed as the ratio of consumption demand to labour productivity, the WTI is a barometer for the demand for wealth placed on active workers.

The WTI is defined as:

$$WTI = \frac{[(1.866 \times Y) + (1 \times U) + (4.636 \times A)]}{LF}$$

where Y = Youth, 0-19

U = Unemployed adults

A = Aged, 65 and over

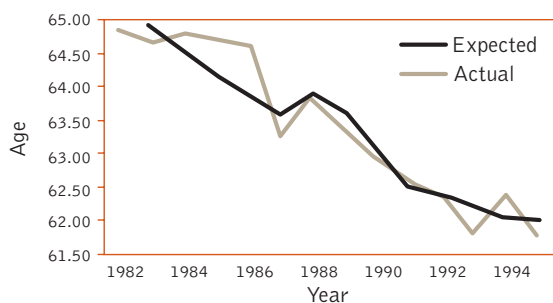
LF = The Employed Labour Force aged 20-64

The weights of 1.866, 1, and 4.636 depict relative wealth transfers for young, unemployed adults, and the elderly. The weights have no intrinsic meaning—they are only weights relative to “1” for unemployed adults. It is important to note that the transfers to the aged are almost exactly 2.5 times transfers to youth. These weights are based on total payments for health care, education, unemployment transfers, and retirement income security made by any government (federal, provincial or municipal). While this does not represent the totality of dependency costs, it does capture the key macro-economic indicators. It should be noted that a factor for productivity improvement should be included in the denominator for comparisons of wealth transfers over a period of years. For example, even if the demand for goods and services by dependents were to grow, this increased demand could be met if the work force became more productive.

To state this in other terms, workers can retire at the earliest age possible once society's total demand for goods and services (i.e., wealth) is met. This is measured directly by the Wealth Transfer Index.

To test the validity of this hypothesis, a linear regression model of the average actual retirement ages from 1982 to 1995 (Statistics Canada, 1999) was fit to the WTI, adjusted for annual labour productivity improvements (Figure 2).

FIGURE 2
OVERLAY PLOTS OF ACTUAL VERSUS PREDICTED AVERAGE RETIREMENT AGE FOR CANADA WITH LAGGED WTI (1982-1995)



The regression results show the existence of a strong positive correlation between the WTI and Median Retirement Age. That is, the WTI quantifies the economic force that “decides” the average age at retirement as a ratio of consumption demand to production supply. Workers can, in fact, retire at the earliest age possible once society’s total demand for consumption is met.

Projections of the Future Retirement Age in Canada

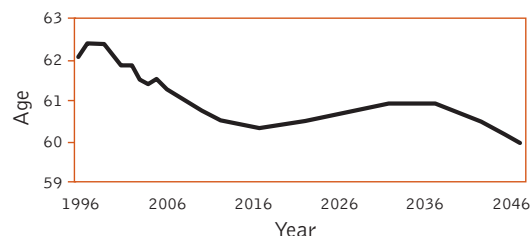
This model can now be used to project the retirement age in the future using a projected WTI.

The model assumes an increase in productivity consistent with historical rates from 1976 to 1998 averaging 0.9 per cent per annum. The WTI up to 2041 is then found using projected population and employment data, with the labour force component adjusted to reflect productivity improvements. The model projects the following median future retirement ages.

From Figure 3, we see that the median retirement age is projected to decrease until 2017, where it reaches a local minimum of 60.3 years. Thereafter, the increase in the number of elderly and the decrease in employed adults results in a higher median retirement age as workers must stay in the work force longer to achieve a stable WTI. The increase is projected to last until 2034 when the median retirement age is 60.9 years. After that, the retirement age is again projected to decrease—to 60.6 in 2041 and 60.0 in 2047.

It can also be shown that if the annual rate of productivity growth is 1.29 per cent per annum, then the retirement age need never rise.

FIGURE 3
MEDIAN RETIREMENT AGE IN CANADA WITH PRODUCTIVITY IMPROVEMENT OF 0.9% (1996-2047)



Market Response

After 2016, there will be more pressure for later retirement than for early retirement. What will that mean for the design and administration of employer-sponsored pension plans?

One would expect that, once older workers determine they are scarce and highly valued, they will bargain for more acceptable work arrangements. This might mean higher compensation, but it will more likely mean pension benefits more attuned to their needs. For example, a worker might ask to work Tuesday through Thursday, and contribute to the pension plan, but then take every Friday and Monday off and draw pension benefits. Or, a worker might request a work year covering the months April to October in which they would be employed full-time and contribute to the pension plan, but from November to March, the worker would be considered

“retired” and draw from the pension plan. Neither of these arrangements exist today within a normal pension plan (in fact, they would not be allowed under the regulations for registered plans), but there is nothing to stop them from being created actuarially.

The fact is retirement is not a one-time, one-day event. Workers today do not go from 40 hours a week to full-time leisure. It is estimated that between 30 and 50 per cent of people move into their “final” retirement partially at first, using “bridge jobs” to move from their “career” jobs into retirement. This process can take up to five years. Further, the most educated workers who have been forced to retire early are more likely to return to a bridge job (see McDonald, 1996, Burkhauser, 1996 and Quinn, 1997/99).

Ultimately, we don't need costlier retirement benefits. What we need are more flexible benefits that can be tailored to the individual. The days of “one size fits all” are over. There is a need for employers, pension plans and regulations that allow for a longer-term transition from full-time work to full-time retirement. Workers should not have to leave their primary or career employer to find “bridge jobs.” They should be able to find “bridge jobs” where their skills are most valuable. To do otherwise is to deny and waste a huge asset, the older worker.

Finally, defined benefit plans that are integrated with social security (i.e., the Canada Pension Plan) must be cognisant of any shift in the age of eligibility in government systems. This is because reductions in government benefits would be matched automatically by increases in employer-sponsored benefits in all integrated plans (representing 82 per cent of pension plan members).

Conclusion

There is a very strong positive correlation between the WTI and retirement age based on Canadian data for the years 1976 to 1995.

The WTI model was used to project future retirement ages. It indicates that the median retirement age in Canada will generally decrease from 61.75 in 1995 to 60.3 years in 2017, increase slightly to a local maximum

of 60.9 years in 2034, and then decrease once again to 60.0 years at the end of the projection period, 2047.

This projection of the expected retirement age is consistent with a philosophical view that workers can retire at the earliest possible age once society's total consumption demands are met. This will continue to be true, with or without government action. The retirement age is just another variable in a macro economy that must operate in balance: that is, “retirement age” will be decided by the economy's need to find equilibrium. ■

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