Retirement and Retirement Ages in Canada Revisited

Brian L. Burnell, FCIA, FIA, FSA

Presented at the Living to 100 and Beyond Symposium

Orlando, Fla.

January 7-9, 2008

Copyright 2008 by the Society of Actuaries.
All rights reserved by the Society of Actuaries. Permission is granted to make brief excerpts for a published review. Permission is also granted to make limited numbers of copies of items in this monograph for personal, internal, classroom or other instructional use, on condition that the foregoing copyright notice is used so as to give reasonable notice of the Society's copyright. This consent for free limited copying without prior consent of the Society does not extend to making copies for general distribution, for advertising or promotional purposes, for inclusion in new collective works or for resale.

Abstract

This paper addresses some of the issues arising from the combination of lower birth rates and increasing life expectancy, which have become more pronounced over the past 40 years in Canada (and many other countries, too). The expected result of these changing demographics, if current trends continue, is for the “senior dependency ratio” to almost double from its current 20 percent level over the next 20 years, and to continue increasing (albeit at a slightly lower rate) after that. In this connection, the term “senior dependency ratio” refers to the proportion of the population at or above the customary retirement age (currently 65) to the number of people in the “working age group” (currently deemed to be 18-64).

The paper examines the effect of a gradual increase in retirement ages in order to attempt to maintain the “senior dependency ratio” at or close to its current level. It concludes that even after allowing for continuing immigration at relatively high levels, the customary retirement age would need to increase to 70 by 2025 in order for this ratio to remain close to its current level. However, further increases would be required after that unless there are significant changes in the demographics. A “customary retirement age” as high as 74 may be necessary by 2050 to maintain a 20 percent ratio.

It is concluded that there need to be some major changes to the concept of retirement in the coming years. In particular, the encouragement of phased retirement programs is felt to be a high priority, as also is the need for a much greater degree of flexibility in retirement arrangements in general. For such processes to succeed, there will need to be some major changes in outlook and attitude by employers and employees. However, even then, the possibility for change will be limited unless government is prepared to make changes to certain of the rules and regulations that govern the operation of pension plans in Canada.

1. Introduction

Over the past 150 years, the concept of retiring at some fixed age has become more and more widely accepted.

The purpose of this paper is to comment briefly on the history of how we got to where we are today in Canada, some of the problems this is causing at the present time and some possible solutions. There is also a discussion of some of the demographic issues involved.

My comments are, for the most part, based on the situation in Canada since that is where I have lived (and worked) for the past 49 years, and that is the country I know most about. However, it is my understanding that similar issues and problems exist in most of the developed world and in many developing countries too.

2. Popular Concepts of Retirement

The Oxford dictionary[1] definition of retirement is "condition of having retired from work." One of the definitions there of the verb "retire" is "cease from or giving up an office or profession or employment or business, especially after having made a competence or earned a pension."

The popular concept of retirement is that of complete withdrawal from the workforce and being in receipt of a pension which provides sufficient income for the pensioner to be able to maintain his or her "pre-retirement" lifestyle or better.

In recent years it has almost become a status symbol in Canada to see who can retire at a younger age than other people. There is also an implication that those who do not retire

[1] Oxford Dictionary.

early have not managed their finances well, and that is why they still have to work. Only in recent years have we begun to see newspaper and magazine articles that suggest differently. In particular, I have seen numerous articles about employers implementing programs to encourage their older employees to continue working to a later age (or to return to work after retirement).

3. Some History of Developments in Canada in Recent Years

When the Old Age Security (OAS) benefit was introduced in Canada in 1952 as a universal flat benefit retirement program, it was payable at age 70.[2] At that time, the life expectancy for a 70-year-old male was 10.41 years and for a 70- year-old female 11.65 years.

When our universal earnings-related pension program, the Canada Pension Plan (CPP) and the companion plan in Quebec (the Quebec Pension Plan (QPP)) were introduced in 1966, they initially retained the same pension commencement age of 70. However they also included provision for the commencement age to be gradually reduced to 65 over a five-year period. Commencement age for the OAS was similarly reduced over the same period.

Over the years, many public and private sector employers had developed occupational pension plans for their employees (with particular emphasis on long-term employees), and in many cases the normal retirement age adopted was 65 for men and 60 for women. In the days when OAS didn't start until age 70, it was quite common to offer a "notched" pension option under which a slightly higher pension was paid until age 70; the pension then reducing by the expected amount the employee would receive under OAS. This option, of course, was offered on an actuarially equivalent basis.

In practical terms, many aspects of pension plan design are strongly influenced by government policy. Two relatively recent examples of this in Canada are:

---

[2] Life Insurance, Annuities & Pensions—A Canadian Text by Arthur Pedoe, FIA, FSA, FCIA and Colin Jack, FCIA, FSA. Third Edition published by the University of Toronto Press in 1978.

(1) Most pension plans have, historically, provided a postponed retirement option under which an employee could continue working after the normal retirement age, and wait until later to start drawing his or her pension. In some cases, they were permitted to continue making contributions to increase the amount of pension they would receive. In addition, some pension plans provided for the deferred pension to be actuarially increased to reflect the expected shorter life expectancy when the pension actually started. Starting in the early 1970s, the Canadian federal government (through changes to certain administrative procedures under the Income Tax Act under which a pension plan has to be registered to receive favorable tax treatment) introduced a requirement that retirement not be postponed beyond age 71. Then, in the early 1990s, as a part of a major package of tax changes affecting pension plans, this maximum postponed retirement age was reduced to 69. In the March 2007 Federal Budget, the limit was moved back to 71 again.[3]

(2) For many years, Canadian Income Tax regulations have prohibited employers from making contributions at any time when the pension plan surplus exceeds 10 percent of the plan's liabilities. During the 1990s when most pension plans were recording very favorable investment returns, many pension plan sponsors found themselves in this position. As a result, many of them introduced temporary employee "premium holidays" and generous subsidized early retirement programs to use up this so called "excess surplus." The end result of this was highly predictable. When investment markets subsequently took an unfavorable turn, many of these pension plans found themselves with a serious funding deficiency, and steps have been taken, as far as possible, to limit the scope of these subsidized early retirement programs. It is of interest to note that the Governor of the Bank of Canada (who has since retired) made a public statement in November 2005

[3] Federal Government budget March 2007

critical of the current limitations upon the retention of "surplus funds" by pension plans.[4]

4. Current Problems

Canada is no different to most of the developed countries even if the problem has not become quite as serious yet. We have an aging workforce—the "baby boomers" (a name tag typically applied to those born between 1946 and 1965) are starting to retire, and already there are signs of labor shortages because there are not enough young people in the population to replace all of the older people who are retiring. This latter problem, of course, is a result of the decline in birth rates since 1965. I see no easy solution to these problems without some major changes in our attitude to retirement and retirement ages.

It has been suggested that these problems could be "solved" by increasing the number of immigrants who are admitted to Canada each year, but it isn't as simple as that. Aside from the difficulties involved in assimilating large numbers of "new Canadians" over a short period, many of the countries from which such immigrants might be drawn are starting to experience similar aging population problems. There is also the question of the moral implications involved in attracting some of the more highly educated and skilled people from other countries where their need for such people is much greater than ours.

It should also be kept in mind that not all immigrants join the labor force. Parents and grandparents of the primary immigrant may be too old to participate while children will not participate for some years.

Due in part to the circumstances described above, many pension plans have been in financial difficulties in recent years. This problem will become worse when new

[4] Remarks by David Dodge, Governor of the Bank of Canada to AMBAQ, Montreal, Quebec, Nov. 9, 2005.

accounting requirements come into force that place the major emphasis on short-term solvency considerations rather than the longer term factors that actuaries have traditionally taken into account in the funding of pension plan liabilities.

The result is predictable. Very few new defined benefit (DB) pension plans have been established in Canada in recent years. However, there has been a rash of pension plan closures and freezing of pension plan benefits. Also, there have been a number of conversions from DB plans to defined contribution (DC) plans.

Apart from the issues mentioned above, the trend towards increased life expectancy has added to the burdens that pension plans in general have to live with at this time.

To sum up, we have a combination of:

(a) Many employees expecting to retire earlier rather than later
(b) The prospect of less pension money being available to these people when they retire
(c) The prospect of continuing labour shortages as more of the “baby boomers” retire, and
(d) Many of these “early retirees” finding that their pension money is not sufficient to support the kind of retirement they were expecting; especially bearing in mind their longer than “expected” survival after they retire. This is especially significant in the case of people receiving occupational pensions that are not indexed to increases in the cost of living.

5. Recent Retirement Trends

If all of the trends of recent years were to continue unchanged, it is clear that the situation would go from bad to worse. Fortunately, there are some indications that we may have turned a corner.

The average retirement age in Canada dropped to an all-time low of 60.9 in 1998. Since then it has increased to 61.5.[5] Recent reports from Statistics Canada show that over the past few years, there has been a gradual increase in the proportion of older workers staying in the workforce.[6]

This has been particularly significant in the 55-64 age group. In 1976, the proportion of people in this age group who were working was 53 percent. It has now increased to 60 percent.[7]

Table 1 shows percentages employed within various age groups over 64:

TABLE 1
Employment at Ages 65 and Over

Age group	Number in this age group (000)	Number employed in this age group (000)	Percentage of age group employed
65-69	1,134	174	15.35%
70-74	1,009	78	7.73%
75-79	814	35	4.30%
80 and over	932	19	2.04%

It is of interest to note that many of the people who continue working to a later age do not necessarily continue to follow the same work pattern. For example, there is a much higher incidence of self-employment amongst men at the higher ages rising from 40 percent in the 65-69 age group to about 55 percent over age 75. The proportion of self-employed women in these age groups is relatively small (about 5 percent). All of these figures are based on the 2001 census.[8]

---

[5] Participation of older workers by Katherine Marshall and Vincent Ferrao. Published by Statistics Canada in *Perspectives on Labour and Income* in August 2007
[6] More Seniors at Work by Doreen Duchesne. Published by Statistics Canada in *Perspectives on Labour and Income* in February 2004.
[7] Ibid.
[8] More Seniors at Work by Doreen Duchesne. Published by Statistics Canada in *Perspectives on Labour and Income* in February 2004.

Although the range of occupations in which seniors work is similar to that for the population as a whole, there is a significant difference in the work arrangements. For men in the 60-69 age group in 1995, 34.9 percent had flexible working schedules; 10.3 percent worked at home; 6.2 percent worked one to two days per week and 3.3 percent did on-call work.[9] All of these percentages have increased significantly over the four-year period since 1991. This suggests to me that many employers are now prepared to permit a greater degree of flexibility in order to make it possible to retain the benefit of the expertise of some of their older employees who would otherwise have been long departed.

6. Discussion of Demographic Issues and Trends Involved

The projected population figures for Canada shown in Table 2 were derived from information contained in the 21st Actuarial Report on the Canada Pension Plan.[10] All of the population figures shown are in thousands.

TABLE 2
Dependency Ratios re Projected Population Aged 65 and Over

Year	Ages 0-17	Ages 18-64	Ages 65+	Total	65+ as a % of 18-64
2007	6,863	21,416	4,410	32,689	20.59%
2010	6,712	22,003	4,767	33,482	21.67%
2020	6,857	22,690	6,655	36,202	29.33%
2030	7,239	22,476	8,894	38,609	39.57%
2040	7,209	23,242	9,766	40,217	42.02%
2050	7,372	23,681	10,314	41,367	43.55%

It should be noted that these projections include provision for continuing immigration to Canada at a relatively high level. In spite of this, the number of people age 65 and over

[9] Working Past Age 65 by Mark Walsh. Published by Statistics Canada in *Perspectives* in the summer of 1999 (Catalogue no. 75-001-XPE).
[10] Actuarial Report (21st) on the Canada Pension Plan as at 31 December 2003—Office of the Chief Actuary—Office of the Superintendent of Financial Institutions Canada.

expressed as a percentage of what is conventionally referred to as the “working population” (those between 18 and 64) more than doubles over the period 2007 to 2050.

I have prepared a similar table showing how these percentages would change if age 70 were deemed to be the “usual retirement age” with the following results:

TABLE 3
Dependency Ratios re Projected Population Aged 70 and Over

Year	Ages 0-17	Ages 18-69	Ages 70 +	Total	70+ as a % of 18-69
2007	6,863	22,692	3,134	32,689	13.81%
2010	6,712	23,458	3,313	33,483	14.12%
2020	6,857	24,831	4,514	36,202	18.18%
2030	7,239	25,030	6,339	38,608	25.33%
2040	7,209	25,480	7,528	40,217	29.54%
2050	7,372	26,204	7,791	41,367	29.73%

Even such a drastic change in retirement practice as this would still result in a rapidly growing proportion of the population to be retired from the workforce; the actual percentage more than doubling over this period.

Perhaps the practical answer would be to implement a moving retirement age. For example, in the year 2025 (not shown in Tables 2 and 3), the projected percentage of people over 70 would be 21.51 percent. That would reflect a dependency ratio not too far removed from where we are now (20.59 percent) based on an assumed retirement age of 65.

As an example of how such an arrangement might work, normal retirement ages could be increased as shown in Table 4:

TABLE 4
Impact upon Dependency Ratio of a Moving Retirement Age

Year	Assumed retirement age	Dependency ratio[11]
2007	65	20.59%
2010	66	20.16%
2014	67	20.69%
2018	68	21.29%
2022	69	21.89%
2025	70	21.51%

However, if it were the wish to maintain a dependency ratio around 20 percent, stopping there would not achieve this after 2025; especially if life expectancy continues to improve at much the same rate as we have seen in recent years. Using the same mortality improvement assumptions as those included in the 21st Actuarial Report in respect of the Canada Pension Plan,[12] it is my best estimate that the "normal" retirement age would need to increase to at least age 74 by 2050 in order to avoid any significant increase in the dependency ratio relative to the 21.51 percent shown in Table 4 in respect of 2025. (Projected dependency ratio for 2050 on this basis would be 20.80 percent.)

It is of interest to note that using the same projection tables, by 2050, the life expectancy of a 74-year-old male would be 13.19 years. The corresponding life expectancy for a 74-year-old female would be 15.51 years. These are about 30 percent higher than the life expectancies at age 70 when the Old Age Security benefit was introduced in 1952.

[11] Dependency ratios for 2007 and 2025 developed directly from information contained in the 21st Actuarial Report on the Canada Pension Plan as at Dec. 31, 2003. Those for other years developed indirectly from this source by the author.
[12] Ibid.

7. Some Possible Solutions

I do not see any one “quick fix” that will solve all of these problems. I believe that in addition to some major restructuring of the way our pension system works, there needs to be a significant change in the way we think about the concept of retirement.

I have long felt that the “cliff” approach to retirement has serious drawbacks. For example, in the part of Canada where I live (the Province of Nova Scotia), a physician who is considered competent to do surgery or administer an anesthetic one day is no longer considered competent do anything except, perhaps, to act as a consultant on the following day because he or she has attained age 65. It is no surprise that we are short of physicians in Nova Scotia.

In any case, for many people, the sudden change in their lifestyle at retirement can create serious problems because they don’t know what to do with all their spare time. For this reason, it is not surprising to find some people who retire from a lifelong career at a relatively young age becoming self-employed so that they can work at a slower pace in a similar occupation. Others may move into a completely different line of work, which they feel may be more rewarding at their stage of life.

It is my view that rather than insist on full retirement overnight, so to speak, it would be far better to give people the option, if they wish, to phase themselves out over a period of months or even years so that they have an opportunity to adjust gradually to their change in lifestyle.

For this reason, it is my belief that efforts need to be made to make “phased retirement” more readily available <u>and</u> more widely accepted as a “lifestyle.”

By phased retirement, I mean a process by which a person can gradually reduce the number of hours per day or per week that they work, and start to draw a partial pension to help compensate for the reduction in employment income they are receiving.

There are many ways of doing this, and I am sure that with the continuing ageing process of the population, new ways will be devised in the future.

Examples of two approaches developed in Canada are:

(1) What might be described as "the Quebec model,"[13] which originated in 1997, and has recently been introduced by two other Canadian provinces and
(2) A very recent approach, which I will refer to as "the Federal model,"[14] which was introduced in the Federal Budget in March 2007—long after I started writing this paper. Enabling changes were made to the Income Tax Act in December 2007.

The principle behind the Quebec model is that a pension plan member is entitled to move from a full-time basis to a part-time basis, start to draw a partial pension and continue to contribute to the pension plan on their part-time earnings. By this means, he or she can add to the ultimate pension to be received when the time comes to fully retire. Unfortunately, the process involved in doing this is somewhat cumbersome, but those details are beyond the scope of this paper.

The Federal model is more limited in scope in some ways, but provides greater flexibility for those people who qualify. In the first place, its scope is limited to employees age 55 and over <u>who are entitled to receive an unreduced pension</u> under a defined benefit (DB) pension plan. That is the restrictive part. The flexibility comes in the option the employee has to receive up to 60 percent of his or her accrued pension <u>without any set reduction in hours worked</u> while continuing to contribute to the pension plan.

Legislation was recently introduced[15] in the Federal Parliament to permit phased retirement under the "Federal model" for members of pension plans that come under federal regulation (mainly banks and transportation companies). Members of other

---

[13] Section 69.1 of the *Supplement Pension Plans Act* and regulation 15.1 under that Act *(Quebec).*
[14] Regulations 8503(16) to (25) under the *Income Tax Act(Canada).*
[15] Section 16.1 under the *Pension Benefits Standards Act (Canada)*

pension plans will have to wait until similar legislation is introduced in their respective provincial or territorial legislatures.

Before going any further, we need to think more carefully about what we are trying to achieve here, and what some of the constraints may be. As I see it:

(a) Employers need to realize the value of retaining older, more experienced employees who might be hard to replace in a market where there is going to be ever more competition to hire the newcomers to the job market. This will probably require a greater degree of flexibility in work schedules; something that may be easier to do in some industries than in others

(b) Society in general needs to try to get rid of the concept of a fixed retirement age. At the same time, members of pension plans (especially the more generous ones) will be concerned that nothing is taken away from them. This suggests the need to ensure that any new options introduced are financially attractive to those who may be considering them

(c) If we are to introduce the concept of an age range within which phased retirement would normally commence, it will be necessary to do several things:

(i) Better provision will need to be made for older workers whose health takes a turn for the worse. This should include a broader scope within which disability benefits can be provided. The time is long overdue for actuaries to do more research into rates of disability, disability recovery, etc., that apply after age 65. I find it somewhat embarrassing that I still have to rely on a table that was developed from disability experience during the years 1893 to 1897.[16]

(ii) Employees who take this route need to be able to see that their ultimate retirement pension will be higher as a result of whatever process is

[16] The Manchester Unity tables based on experience 1893 to 1897.

offered to them to continue making pension contributions after they commence their phased retirement.

(iii) In those jurisdictions that still allow employers to impose a mandatory retirement age, steps should be taken as soon as possible to prohibit this. Fortunately a number of the Canadian provinces have already done this.

(iv) The “limiting age” beyond which a person cannot defer receipt of their full pension needs to be reviewed now, and if not abolished completely, should be “indexed” as life expectancy continues to improve.

8. Some Actuarial Considerations

I have already commented on the need for research concerning the incidence of disability after age 65. There are a number of issues that need to be addressed in relation to pension plan funding. In particular, there is the question as to whether phased retirement programs can be made cost-neutral as is the case with the Quebec model. The possibility of employee abuse of the program is also a matter of concern under the Federal model.

9. Summary of Conclusions

I am convinced that the widespread adoption of a phased retirement process is essential to being able to deal with the aging workforce problem that will be experienced in Canada and elsewhere. More research is required in several areas in order to deal with some of the practical problems that phased retirement will cause. There needs to be strong co-operation from government and employers in general in order for this process to work.

There is also a need to educate people to realize that there is no stigma to working after age 65, and that to do so can lead to many advantages for the individual, the employer and society as a whole. Greater flexibility needs to be allowed in placing limits upon when a person must start to draw his or her pension.

Although it may be difficult to “sell” politically, it is my view that a “moving retirement age” has much to commend it. If there is a way such an arrangement could be made to apply to “government pensions” such as OAS, CPP and QPP, this would clearly help to get the message across that changes must be made.

Acknowledgments

After much searching, I finally found the historical information I was seeking about the Old Age Security program in the third edition of *Life Insurance, Annuities & Pensions—A Canadian Text by Arthur Pedoe, FIA, FSA, FCIA and Colin Jack, FCIA, FSA.* This edition was published in 1978 by the University of Toronto Press in Toronto.

I have made extensive use of data and articles published by Statistics Canada. All of the information I used is available on their Web site at www.statcan.ca.

I have also made extensive use of *The 21st Actuarial Report on the Canada Pension Plan as at 31 December 2003.* This report was published from the Office of the Chief Actuary, Office of the Superintendent of Financial Institutions, Canada. This report is available on the Government of Canada Web site at www.canada.gc.ca.

I must also express my thanks to my son, Paul Burnell, FSA, FCIA who has assisted me in research on a number of aspects of matters dealt with in this paper

References

Duchesne, D. 2004. “More Seniors at Work.” Perspectives on Labour and Income 5(2). Statistics Canada.

Marshall, K., and Ferrao, V. 2007. “Participation of Older Workers.” Perspectives on Labour and Income, August 2007. Statistics Canada.

Pedoe, A., and Jack, C. 1978. *Life Insurance, Annuities & Pension—A Canadian Text*. Toronto: University of Toronto Press.

Walsh, M. 1999. “Working Past Age 65.” Perspectives, Summer 1999. Statistics Canada—Catalogue no. 75-001-XPF.

Watson, A.W. *An Account of an Investigation of the Sickness & Mortality Experience of the IOOF Manchester Unity during the years 1893-1897.* Cambridge: Cambridge University Press (1953 edition)