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Policy Implications of Aging for Canadian Health Care and Retirement Programs

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Abstract

This study outlines how the costs of life insurance, medical care, disability, and retirement are impacted by increases in longevity. The author examines how the costs of these benefits are shared by employee benefit programs and publicly sponsored programs and how increases in longevity impact this cost sharing and result in greater cost increases for publicly sponsored programs. Based on this analysis, likely courses for policy action that in turn will impact on employer-sponsored programs are discussed. The author proposes future directions employers may take in designing their employee benefit programs. The paper concludes by considering the impact on the economy and Canadians' standard of living.

Introduction

As an individual grows older, generally the need for medical care and a secure source of future income (other than from employment) increases. Employee benefit plans are established by employers, associations, or sponsors to provide for these needs as they occur or to assist in preparing financially to meet the need when it occurs after the employment relationship is ended. (Hereafter, such plans are referred to as employer-sponsored programs to distinguish them from publicly sponsored programs. It is recognized that the sponsor need not be the employer.) Employee benefit plans typically provide coverage only to members of well-defined groups and for specified periods, such as to age 65.

On the other hand, in Canada publicly sponsored programs also provide assistance for similar needs, but generally on a broader, less restricted basis. The term "publicly sponsored programs" is used to describe programs that are established by a government regardless of how they are funded. These include provincial medical programs, which are funded from general tax revenues, and the Canada Pension Plan, which is funded jointly by employers and employees. Well-designed employee benefit programs and publicly sponsored programs complement each other and share the costs. However, because of the way these programs fit together, as longevity increases there is a disproportionate allocation of the changing cost structure. The Canadian population is aging for a number of reasons, including the following:

- Greater accessibility of quality medical care
- Increased focus on healthier lifestyles and fitness
- Healthier environment and better nutrition
- Broader network of social support programs
- Advancements in medical treatment and equipment and
- Lower birth rates.

The aging population's impact on the sharing of costs between employee benefit programs and publicly sponsored programs will create opportunities for organizations in designing their employee benefit programs. This paper describes some of the designs that may become popular in the future.

It should be noted that this analysis focuses on the effect on costs per individual as an individual ages. It does not consider other cost factors such as family composition. So, for example, in this analysis, the drug costs under an employer-sponsored medical care plan increase as the employee ages; however, the total drug costs in relation to the employee's family unit may remain stable or decrease as the composition of the family unit changes, as the employee ages. For example, the family unit may include several dependent children when the employee is 30 but no dependent children when the employee is 60.

Benefit Costs and Societal Costs

In examining the impact of aging on employee benefit costs, it is important to recognize the perspective of such an examination. From the microperspective of an individual plan sponsor, if an employee group ages, that is, has a higher average age than it did in previous years, then the cost for providing coverage will be higher per person or as a percentage of payroll than it was previously. This point is discussed in detail in a paper written by James H. Murta and Frederick K. Holmes entitled "Impact of Aging on Benefit Plans: Measures Must Be Taken to Alleviate Skyrocketing Pension Costs."

In this paper, unless specifically noted, the impact is viewed from a macroperspective, that is, the viewpoint of the present cost to society of providing the coverage. To illustrate, if an individual of a certain age is expected, on average, to live two years longer than an individual of the same age was

expected to live 10 years ago, then the present value of a death benefit for such an individual is less today than it was 10 years ago. (In calculating present value it is assumed that a predefined interest rate is used at the time of determination, and not an interest rate that varies by time as the economy changes in the future.) For the majority of the paper, this macroperspective is used.

Why Is the Canadian Population Aging?

The Canadian population is aging for a variety of reasons and because of a number of factors. Because these factors may have a particular impact on specific employee benefits, it is useful to identify the factors and comment briefly on each one. (Immigration and migration of the population may also affect the average age of the population. On Canada's current policies toward immigration, the net effect has been to slow the aging of the population. These policies may change over time and are not considered in this analysis.)

Greater Accessibility of Quality Medical Care

Accessibility of quality medical care results in:

Lower death rates by age, which increases the life expectancy of the population Increased numbers of and occasionally quicker recoveries from disabilities and Greater costs for medical care per capita over an individual's lifetime.

Increased Focus on Healthier Lifestyles and Fitness

Increased focus on healthier and fitness results in:

Lower death rates by age, which increases the life expectancy of the population

Increased numbers of and occasionally quicker recoveries from disabilities and

Reduced costs for medical care per capita over an individual's lifetime.

Healthier Environment and Better Nutrition

A healthier environment and better nutrition results in:

Lower death rates by age, which increases the life expectancy of the population Increased numbers of and occasionally quicker recoveries from disabilities and Reduced costs for medical care per capita over an individual's lifetime.

Broader Network of Social Support Programs

A broader network of social support programs results in:

Lower death rates at birth, among women in child-bearing years, and at older adult ages, which increases the life expectancy of the population and Greater access to medical care.

Advancements in Medical Treatment and Equipment

Advances in medical treatment and equipment result in:

Lower death rates by age but particularly at older ages, which increases the life expectancy of the population

Increased numbers of and occasionally quicker recoveries from disabilities and

Reduced costs for medical care per capita over an individual's lifetime.

Lower Birth Rates

Lower birth rates result in the average age of the population rising.

Impact of Aging on Specific Benefits

Death Benefits

The death benefit or life insurance cost curve is shown in Figure 1. It shows that the cost of insurance for those less than age 40 is relatively low but begins to rise sharply about age 40. This cost continues to increase until death. Most life insurance coverage within an employer-sponsored benefit program ceases at age 65 or retirement or reduces significantly beyond age 65.





One of the reasons that the population is aging is that life expectancy is increasing. As such, the population of people dying at age 65 or younger decreases. In terms of the total death benefits borne by employer-sponsored benefit programs (i.e., the macroperspective), costs (per \$1,000 of coverage) should decrease with increasing life expectancy, if the savings due to increased longevity are passed along by life insurance companies.

Even when the employer continues life insurance benefits at a reduced level beyond age 65, the present value of providing this benefit is reduced as life expectancy increases. Once again, this results from the increase in the expected life span and a higher expected age of death. In other words, the cost curve tends to shift downwards and to the right.

Publicly sponsored programs provide limited amounts of benefit on death. However, the impact of an aging population is the same for publicly sponsored programs as it is for employer-sponsored programs, that is, because of the increased life expectancy, the costs to the program for benefits payable upon death are reduced.

Disability Benefits

The cost curve for long-term disability benefits is shown in the Figure 2. It should be noted that costs are relatively low and stable up to age 40 and then rise relatively steeply until age 55, after which they decrease. The reason for the decrease is not due primarily to cessation of disability, but rather to the common provision in both employer- and publicly sponsored programs to terminate payment of disability benefits at age 65 or earlier entitlement to unreduced lifetime retirement benefits, such as under an "age plus service equals 85 factor" provision.





As the population ages because of increased life expectancy, improvements in mortality are also observed among disabled lives. As such, the costs associated with providing disability benefits increases, since fewer claims are terminated by early death. This increase in costs may be partly offset by greater numbers of, and occasionally quicker, recoveries due to greater access of quality medical care, increased focus on healthier lifestyles and fitness, advancements in medical treatment and equipment, increased emphasis on rehabilitation, modified work availability, and return to work procedures. However, the net effect is an increase in the present value of disability costs. In other words, the cost curve tends to shift upward to the left but is still terminated at age 65.

For publicly sponsored programs, disability programs are normally also only provided until age 65 (but the Canada Pension Plan and Worker's Compensation also provide for other benefits after 65). The same factors affecting employer-sponsored programs are present, so publicly sponsored program costs will increase.

In addition to publicly sponsored programs, governments also provide special benefits with respect to disabled individuals through the welfare system. Accordingly, as the population ages, and because both employer- and publicly sponsored programs cease to provide benefits at age 65, there will be increasing numbers of disabled people, who will not have sufficient income from all sources

to be above the welfare level. Accordingly, it can be expected that there will be a greater cost for these disabled individuals incurred by governments and taxpayers. Moreover, there is an impact on tax revenues, not only due to reduced incomes of the disableds, but also because employee-paid disability benefits are nontaxable income in Canada.

(It should be noted that both gender and occupation have an effect on death and disability costs. As changes in the work force composition and in the mix of occupations occur, costs can be impacted. In particular, the general movement from heavy industry and natural resource extraction to service industry work, which has lowered death and disability claim costs, masks the cost increases attributable to aging.)

Medical and Health Benefits

The cost curve for medical and health benefits is shown in Figure 3. The costs are relatively stable through age 40 and then continue to rise gradually with age. The majority of the cost for the employer-sponsored programs relates to drug care.





Many employer-sponsored programs already limit the age to which benefits are provided, typically to age 65. A number of plans that in the past have provided benefits to retirees are being restructured to eliminate or significantly reduce such benefits. (This restructuring has been driven by changes in

accounting rules regarding how costs are to be recognized on companies' financial statements and the timing of cost recognition.)

The increased focus on healthier lifestyles and fitness combined with the healthier environment and better nutrition available reduces the average annual cost for medical care per capita over an individual's lifetime. On the other hand, greater accessibility of quality medical care and advancements in medical treatment and equipment increase the average annual cost for medical care per capita. Diseases or illnesses that were once fatal may now result in chronic conditions requiring regular health maintenance programs. Because employer-sponsored programs tend not to provide coverage beyond age 65, the net impact of these two factors is somewhat offsetting, and the cost impact of aging on employer-sponsored benefit plans is minimal.

The effect is quite different for publicly sponsored programs. Canadian programs provide for basic medical care to the population at all ages, as well as basic drug care for those over age 65 in some provinces. With increasing longevity, there is an extended period of time above age 65 during which benefits, especially drug benefits and hospital benefits, will be provided. This will be at a significant cost to the publicly sponsored programs, unless the conventional retirement age of 65, and the prevalence of earlier retirement (particularly from employers in the public and parapublic sectors), is similarly deferred. There has been no indication in Canada that such deferral will occur.

Moreover, new drugs, specialized equipment, and new treatments are being developed, many of which add significantly to the cost of treatment. In some cases these drugs, equipment, and treatment sustain and extend life, but it is questionable whether they enhance it. The Canadian Institute of Actuaries (2001) in its submission to the Senate Committee observed that "various sources report that between 30 and 50 percent of total lifetime health care expenditures occur in the last six months of life." With increasing life expectancy, more and more this occurs beyond age 65 and is primarily at the expense of the publicly sponsored programs.

Health care costs tend to be "stacked" near the end of an individual's lifetime. As life expectancy increases, the expected time of incurring these expenses is shifted farther into the future, producing a deferral effect. This deferral effect means that the true extent of the increase in costs is not fully evident from tabulated statistics. This is a reason for great concern regarding

those programs. In other words, the sharp spike in the cost curve is moved out to the right.

The foregoing analysis assumes that there will be no change to our social approaches to the aged. Should it be decided, for example, that care for the terminally ill should be revoked or that some policy of euthanasia should be adopted, then the cost bulge in the last six months of life might be significantly reduced. The CIA submission refers to a study that indicates that costs in the year of death are reduced significantly if the patient has been involved in advance decisions about palliative care. Such changes in social policy would mean that the cost for medical and health care might in fact decline, even though the population was still aging.

Dental Benefits

The cost curve for dental benefits is shown in Figure 4. It shows gradually increasing costs from age 40 to age 65. Most employer-sponsored programs terminate coverage at age 65. Because of the increased focus on healthier lifestyles, the healthier environment, and better nutrition, one would expect a slight shift in services toward cleaning, scaling, and root canals and away from dentures and bridges. Depending on the economic well being of the country, those adults who expect to retain their teeth for a longer time might also be more inclined to purchase orthodontic services than they did previously.

The net impact of this shifting in services is small and might lead to a slight reduction in costs for employer-sponsored programs. There have been a few publicly sponsored dental programs in certain Canadian provinces, but most of them have provided benefits only to children. Most publicly sponsored programs have been curtailed. As such, there is no material impact on either employer-sponsored or publicly sponsored programs due to aging.





(It has been argued that many dental claim costs are for elective or cosmetic services. If insurance programs were eliminated or reduced or if the favorable tax treatment of insurance were reduced or rescinded, there might be a significant reduction in demand for dental services.)

Retirement Benefits

Retirement benefits are significantly affected by the aging population. Employer-sponsored plans provide that starting at a normal retirement age, such as age 65, pension benefits will be paid and will continue until the employee dies and, in most cases as required by Canadian pension law, unless an appropriate waiver has been signed, until the employee's spouse dies. Recent experience shows that the pension plan members are choosing to receive their benefits at even earlier ages, as plan terms favoring early retirement are enhanced. As longevity increases, the period of benefit payout is greatly increased, and so the total cost is increased.

Employer-sponsored retirement programs are generally managed from the perspective that the value of the benefits to be paid during retirement should be funded during the period of work prior to retirement. With increasing longevity, the ratio of the years of one's lifetime during which one is working increases significantly. This causes an increase in the annual cost of maintaining a retirement plan. To combat such increases, new plan provisions may focus on reversing the trend to an earlier retirement age and instead reward later retirement.

Publicly sponsored programs also face increasing costs due to increasing longevity, that is, the number of payments that must be made to the retiree and the surviving spouse increases. However, unlike employer-sponsored programs, which are generally managed to prefund retirement benefits over the individual's working life, publicly sponsored programs typically pay benefits that fall due largely from contributions collected from those who are working at that time.

One of the reasons that the population as a whole is aging is due to the reduced birth rates that have occurred since the legendary baby boom birth years, that is, 1946–65. The effect of this reduction in birth rates is to produce a bulge in the demographic "triangle."

The baby boomers were starting to enter the work force in the 1960s about the time of the establishment of the Canada Pension Plan. The large size of this group compared to the size of their grandparents' generation who were retiring meant that relatively low contributions were required to pay benefits to retirees.

Because baby boomers have not maintained the birth rates enjoyed by their parents, it is now apparent that the ratio of retirees to workers contributing will increase significantly over the next 35 years as the boomers retire. See the ratios in Table 1, which are taken from the projection shown in the Canada Pension Plan Seventeenth Actuarial Report as at 31 December 1997 made by the actuary to the Canada Pension Plan. For publicly sponsored programs, this demographic factor exacerbates the increases in costs due to increases in longevity.

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Year	Seniors**
1996	19.9
2000	20.3
2025	33.6
2050	40.7
2075	41.9
2100	44.0

Table 1 Projected Dependency Ratios* Canada Excluding Quebec

*As shown on p. 83 of the Canada Pension Plan Seventeenth Statutory Actuarial Report as at December 31, 1997.

**Population aged 65 years and over as a percentage of population aged 20 to 64 years.

In fact, recognition of the implications of this demographic bulge in funding publicly sponsored programs has renewed interest in the idea of increasing the amount of advanced funding of CPP benefits, and doing it before the boomers retire. The Canada Pension Plan has increased sharply its contribution rates to exceed the pay-go cost of pensions and other benefits, leading to the development of a fund that may be expected to provide for approximately one-sixth of future costs. The scheduled 9.9% contribution rate for 2003 and later is more than three times the initial rate of 3.2% applicable during the 1960s and 1970s.

The concern is that as the population ages because of both greater life expectancy and especially the demographic bulge, the system will break down. Contributors in the early stages of the system, the boomers, have had to pay only for the cost of the current retirees' benefits (a relatively small group) and not to prefund the cost of their benefits. A point will be reached at which the cost to a future generation of contributors will be well in excess of the cost to prefund their own benefits. When that point is reached, current contributors may resist making contributions at the level required to fund retiree benefits and either overturn the system or modify it significantly.

While the theoretical answer to the impact of aging on publicly sponsored retirement programs is that there will be a sharp increase in cost, this assumes that the programs remain unchanged. The social reality may be that such sharp increases will not be borne by taxpayers/contributors, and modifications to the programs will take place. In fact, the recent reforms to the Canada Pension Plan not only significantly increased the contribution rate, but also reduced the

average benefits by lengthening the final averaging period to five years from three years.

However, there are interesting political dynamics in such modifications. As the population ages, there is a greater proportion of retirees in relation to the contributors. These retirees continue to be voters even though they are not contributors, and it will be difficult for governments to make changes to retiree benefits in view of this large proportion of the population. In this respect, governments will be much better placed to make changes now before there is such a large percentage of retirees.

Summary

Table 2 summarizes the impacts described above, by benefit, showing the employer-sponsored benefit program separately from the publicly sponsored program. As can be seen from the table, the direction of the cost impact is the same by benefit for both the employer- and publicly sponsored programs, ignoring dental. However, what is not shown is the relative proportion of dollars spent on each benefit.

Table 2 Summary of Cost Impact of Aging on Employer-Sponsored Benefit Plans and Publicly Sponsored Programs by Benefit from Macroperspective¹

	Cost Impact on	
	Employer-Sponsored	Publicly Sponsored
Benefit	Benefit Plans	Programs
Death	Decrease	Decrease
Disability	Increase	Increase
Medical/Health	Slight increase	Significant increase
Dental	Negligible decrease	Not applicable
Retirement	Increase	Significant increase

*Cost impact is viewed as the change in present value on a benefit as a result of factors affecting the aging of the population.

Under an employer-sponsored program, the level of death benefits can be relatively large and the amount of medical/health benefits can be relatively modest, since each supplement publicly sponsored programs. (Medical/health benefits in employer-sponsored programs are very modest in comparison to the overall level of medical/health expenditures.) Very approximately, the death, disability, medical/health, and dental benefits in total represent approximately 50% of the employer-sponsored plan cost, and the retirement benefits would represent the other 50% of the cost. The split of the costs among the nonretirement benefits may be roughly 25%, each depending upon plan design, and individual plan designs vary widely. Using such a weighting, one can see that there is only a slight increase in the overall cost of nonretirement benefits and a larger increase in the cost of retirement benefits. Hence, the impact on the employer-sponsored benefit plans is a small increase.

However, there is a different result for publicly sponsored programs. These programs provide limited death and disability benefits. The medical/health benefits are very significant, representing approximately twothirds of the total cost, and most of the remaining cost occurs during retirement years. As shown in the preceding table, both the medical/health and the retirement programs will experience significant cost increases.

Hence, while both employer- and publicly sponsored programs will have cost increases, without policy change, the proportion of the total cost borne by publicly sponsored programs will increase significantly. One can expect continued policy actions to be taken to address this cost shifting.

Expected Directions for Social Policy

As explained earlier, because of the Canadian demographics in the 1960s about the time of the launch of publicly sponsored medical/health and retirement programs, it was appropriate to pay the benefits arising under these programs as they fell due. Because of the large number of individuals entering the work force from the baby boom generation, there was only a small ratio of benefit recipients to workers. However, with changing demographics, there may be reason to prefund some of these benefit promises, particularly retirement benefit promises.

In the 1980s Canadian governments at all levels were showing large deficits. This was true even though Canada has one of the highest rates of personal taxation within the G-7 countries. In the 1990s Canadian governments took action to reduce the rate at which the deficits continued to increase. There was little room for tax rate increases. Also, because of the lower birth rates, the personal income tax base was not growing at rates anticipated in the 1960s. It is clear that as the population ages, the current levels of medical/health and retirement benefits cannot be supported by current tax revenues. The policy choices are the following:

- Reductions in benefit levels
- Changes in conditions for eligibility for benefits
- Raising revenues through increased taxation
- Permitting government deficits to increase and
- Inducing longer participation in the labor force as a taxpayer.

A policy alternative accompanying any of these actions could be to provide greater tax assistance to those who save to prefund the future costs associated with health care and retirement.

It has been argued that better administration of publicly sponsored programs could be an answer. For the purpose of this paper, it is assumed that governments will take the necessary steps to operate the programs in an efficient manner, including "spending smarter" as advocated by the Canadian Institute of Actuaries (2001).

These are unpleasant options, and each one is discussed briefly in order to identify the most likely course of action for the future.

Reduce Benefits

The publicly sponsored Canadian medical/health system and the retirement system are excellent and provide broad-based coverage that is almost universally accessible. The medical/health system has little in direct fees and is financed primarily by indirect taxation. As such, users have little appreciation of the cost of individual services. It will be extremely painful to have benefit levels decreased, although various noncore procedures continue to be delisted. Canadians have come to expect the level of benefits that they currently enjoy.

Most provincial hospital and medical care programs provide benefits in excess of the minimum standards required by the Canada Health Act. As such, there is room to scale back benefits and still qualify for federal funding. For example, Nova Scotia is the first province to eliminate prescription drug reimbursement for retirees, which is not a required, but a widely expected and popular, benefit. In the retirement area, the Canada Pension Plan is sponsored, not funded, by the government. It is financed by contributions from employees and their employers. Accordingly, participants have a better understanding of their required contributions to the system. However, because current pension benefits are paid mainly from current contributions and future pension benefits are only beginning to be partially prefunded, Canadians do not have a full appreciation of the true cost of the system. Current contributions are sufficient to fund contributors' benefits. Unfortunately, they are not sufficient also to liquidate the unfunded liability developed by inadequate past funding.

It is better to have some sense of the cost than no sense at all. Consequently, it may be slightly easier to reduce or modify benefits under the retirement system than it will be under the medical/health system.

Change Eligibility

A basic tenant of the Canadian medical/health system is universal accessibility. However, faced with rising costs, this tenant has been under attack in various ways. There continue to be questions raised regarding the service levels that should be available, on an apparently "free" basis to individuals of all incomes regardless of their ability to pay; whether users should be able to seek second and third opinions at the expense of the system; whether care should be provided anywhere in the world; whether greater periods of residency in Canada should be required to maintain coverage; etc.

Although such changes in eligibility may be difficult theoretically, since they challenge the founding principles of the system and will raise issues of social justice, they may be slightly easier to introduce and represent a likely direction for change. (Some would argue that Canada already has a "two-tier system," and that the debate is only about the acceptable extent of variations in eligibility; however, no politician seems willing to admit the existence of a twotier system.)

With respect to the retirement system, it will also be less painful to change the terms for benefit eligibility. Likely areas for change include the following:

- Raising the normal retirement age to 67 or above, as is already scheduled in other countries such as the United States
- Reducing the years that can be dropped out and still receive full service credit

- Focusing on retirement and reducing or eliminating ancillary (death, disability) benefits and
- Reducing the Year's Basic Exemption.

Raise Tax Revenues

Canadians currently have individual personal income tax rates that are among the highest within the G-7 countries. That said, faced with significant cost increases to maintain benefit levels under the medical/health and retirement programs, it is likely that Canadians will experience even higher levels of taxation. In fact, raising taxes is an action that governments can take quickly. Of course, each government that raises taxes must eventually face the voters and may pay the political price for its actions; however, as an analysis of the impact of the aging population on publicly sponsored programs shows, other political parties may not have better alternatives.

Note that this action is clearly counter to current trends where both the federal and provincial governments have reduced income taxes, while also reducing deficits and expanding some programs, all thanks to a booming economy.

Increase Government Deficits

Easier even than raising taxes is to increase spending without a complementary increase in revenue, that is, increasing the deficit. In the short term, such measures are easiest upon the electorate; however, in the longer term, other nations in the world economy will force Canada to reduce its standard of living through measures such as depreciation of the currency, higher interest rates, and higher unemployment. This should not be a long-term course of action that Canadians would support their politicians taking, nor is it one that would have a beneficial effect on the country's international position.

Summary

So which evil will we or our politicians choose? From time to time, any of the four may be used. But the long-term course is likely to be changes in the rules regarding accessibility and eligibility, combined with reduction in benefit levels, accompanied by slight increases in taxation. In terms of publicly sponsored programs, one could expect to see changes such as the following:

Medical/Health

- Restrictions on choice of doctors, particularly for second opinions
- User fees for services and hospital visits
- Limitations on drugs that are provided through the plan
- Decrease in funding for specialized equipment
- Withdrawal of care to the terminally ill
- Limitations on out-of-Canada care
- Longer residency requirements to qualify for coverage
- Continued earlier discharge from the hospital and
- Reduced list of medical or psychological complaints that are covered by the system.

Retirement

- Later starting age for receiving benefits
- Decreased indexing of benefits once commenced
- Reduced drop-out provisions to maintain entitlement for pension
- Increased contribution base without an accompanying increase in benefit levels
- Increased contribution rates and
- Fewer ancillary benefits.

Impact on Employer-Sponsored Programs

In view of the kinds of changes anticipated for publicly sponsored programs, what action can we expect with respect to employer-sponsored programs? As discussed, it is expected that publicly sponsored programs will provide less universal coverage, with respect to both the level of benefits provided and those eligible for benefits, and that greater tax revenues will be required. In other words, if employees are to enjoy the same level of overall coverage they receive today, it will be necessary for employer-sponsored programs to increase coverage. However, if there are increases in the level of taxation, there will be less available income to be allocated for benefits.

What options are available to employers? Once again, the choices are not easy. They include the following:

- Refuse to provide coverage for items no longer covered by the publicly sponsored programs
- Increase coverage with an accompanying increase in contributions and
- Revise coverage and accessibility to that coverage but maintain the cost at approximately the same level.

Each of these options is discussed in turn.

Refuse to Cover Items No Longer Covered by the Publicly Sponsored Programs

Undoubtedly some employers will refuse to cover services that were formerly provided by publicly sponsored programs and that are no longer fully paid, but it is unlikely that all employers will choose this approach. Accordingly, plans will be redesigned to complement the redesigned publicly sponsored programs, and the issue will become: at whose cost.

Increase Benefit Levels and Increase Contributions

Because of present levels of payroll taxes and regulation, Canadian businesses are not in a position to absorb significant increases from publicly sponsored programs and still remain competitive in the world market. Moreover, employees who are already taxed at relatively high rates by world standards and who will be faced with increased levels of taxation to support publicly sponsored programs will not be able to contribute much more for these programs.

It is unlikely that the benefit levels will be increased to maintain coverage no longer covered by the publicly sponsored programs. Additional funds will not be made available to pay for such benefits.

Redesign Programs

This seems the most likely of the options. It may be accomplished in such a way that there might be some slight increase in revenues available for the overall programs but that each individual would not be covered for all benefits. Ideally, the decision as to the coverage provided for each individual would be made by the individual. Practically, in order to control the cost and to prevent significant antiselection, there would be some limitations on choice of individual coverage levels.

This increased level of choice will bring about an increased interest in flexible benefit programs and will change the way these programs operate. Some of the directions for the future are as follows:

- Unallocated spending accounts that can be used by employees to pay for costs associated with using the publicly sponsored programs
- Special insurance benefits that provide coverage during periods of absence from the country or during periods of requalification for eligibility under publicly sponsored programs
- "Lifestyle" packages of benefits that require a level contribution over the employee's working lifetime but vary the level of coverage depending upon the stage in life. For example, during an employee's early years, significant life insurance and disability benefits would be available with modest medical/health benefits; later in an individual's working career, limited death and disability benefits would be available, but there would be an increase in medical/health benefits and significant savings established for retirement benefits; on retirement there would be retirement benefits paid, and medical/health benefits would be maintained but at a reduced level.
- Unallocated, tax-assisted accounts for employees' savings to be used for death, disability, medical/health, or retirement purposes
- Insurance to cover significant or catastrophic expenses with no coverage for "budgetable" expenses; for example, disability benefits might be paid after four months of disability, but no benefits would be paid during the first four months, or medical/health expenses in excess of \$1,000 per year might be covered but not below (or if below, with a significant copayment factor)
- Retirement plans that may provide pension only on earnings in excess of that covered by the Canada Pension Plan or, as a minimum, be designed to integrate more precisely with Canada Pension Plan and possibly Old Age Security entitlements
- Programs designed so that the cost to the employer increases with a length of service of the employee

- Introduction of a greater degree of copayment and deductibles to force individuals to make cost benefit decisions that will likely reduce utilization
- Introduction of a greater component of employee funding and possibly effect a shift to "flex" plans, where employees can choose whether or not to participate and
- Replacement of programs that provide defined benefits with defined contribution arrangements. (Although this current trend is perhaps abating somewhat as more modest investment expectations become the norm. There are usually more "economies of scale" in defined benefit plans with pooled assets than with individual defined contribution accounts.)

These are all examples of directions in which programs may go. It is likely that these alternatives will be combined in different forms.

Impact on the Economy and Our Standard of Living

The following likely trends may be seen as the population ages:

- Greater numbers of older people, especially the older elderly, those over age 85
- Higher percentages of retirees to workers
- Reduced levels of coverage and changing eligibility conditions for coverage under publicly sponsored programs
- Greater choice of coverage under employer-sponsored programs
- Increased levels of taxation
- Increased levels of contributions to employer-sponsored programs
- Reversal of the trend to earlier retirement and
- Possible shifts in immigration policy.

What does this mean for the economy of Canada and Canadians' standard of living? We can expect to see increasing levels of taxation for retirees. Many of these retirees have adequate incomes and are the main consumers of medical/ health and retirement benefits. It is logical that those who can afford to will be asked to pay more.

Because of the increased taxation required to support publicly sponsored programs and because of the increase in cost of the employer-sponsored

programs, the overall rate of savings in the economy may be reduced. This would result in less capital being available for investment, resulting in a lower average level of output for the economy and slightly higher interest rates. This would have a positive impact on the investment returns that could be earned by pension funds and could help moderate the cost increases faced by funded pension plans.

Compared to today, Canadians' standard of living will be lower. Canada's baby boom demographic bulge is more pronounced than any other industrialized nation. Accordingly, Canadians can expect to see their standard of living eroded compared to that of other industrialized nations. However, productivity improvements could mitigate the negative consequences noted above.

But in restructuring employer-sponsored benefit programs, it is likely that new pools of capital will be created, producing different savings vehicles. Also, faced with a reduced standard of living and increased taxation, Canadians will seek alternative forms of investment. It is likely that rules that restrict foreign investment or that tax investment income at high rates will be relaxed in order to encourage additional investment. The recent change in the rate of taxation of capital gains is an example of a movement in this direction.

As a result of increased levels of taxation, there may be a redistribution of income away from the higher income earners to the lower income levels. Accordingly, more income would be spent and less saved, which will increase consumption. This would have a stimulative effect on the service-related and nondurable consumer goods industries. As increased amounts are spent on consumables, there will be increased opportunities for employment in smaller businesses and in service businesses.

Pressures will continue to generate "equitable" tax revenues. Thus Private Health Services Plans (private medical and dental plans) will be in danger of losing some or all of their favorable tax position.

In addition, as the pool of retirement savings capital continues to grow, there will be continued risk that such funds will be looked at by governments as a source of current tax revenue—perhaps disguised as an asset-based registration fee or a tax on foreign investments as limits are increased. Resistance will continue to raising registered retirement savings plan (RRSP) and retirement plan limits, as many still view these as tax expenditures for the benefit of the rich. Reduced levels of savings will be harmful to the insurance and mutual fund industries. There will likely be greater consolidation in those industries to create greater efficiency, and there may be more purchases of domestic firms by foreign firms.

The large infrastructure supporting the medical/health system, such as hospital and nursing facilities, will be under attack to reduce expenditures and improve efficiency; "right sizing," resulting in job loss, will continue to occur. But government efforts to "right size" may be bluntly or inappropriately implemented, resulting in shortages in certain areas.

Conclusion

The aging population, accentuated by Canada's demographic bulge, will create increased costs for both employer- and publicly sponsored programs. However, the greater proportion of cost increases will be borne by publicly sponsored programs. Action will be taken to reduce benefits and strengthen eligibility conditions required for publicly sponsored programs while raising tax levels. As a result, employer-sponsored programs will be redesigned to give employees more choice as to which benefits are covered and at which stage of their lifecycle.

Canadians can expect to see changes in social policy with respect to universal accessibility to social programs and may also expect to see changes in policy with respect to treatment of the elderly who are terminally ill.

Without productivity improvements, the economy will operate at a lower level, and there will be less savings overall, creating greater uncertainty about future security. The Canadian standard of living will decline slightly. There will be shifts in employment toward smaller businesses, particularly in the service and nondurable consumer goods industries.

Overall, the combined implications of the aging population are that publicly sponsored programs will be less able to provide benefits that are expected and that there will be a greater need for employer-sponsored programs. Employer-sponsored programs will face increased costs and will introduce designs to limit access to benefits or to provide choice to employees about benefits to be provided.

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