III

Sources of Retirement Income Security

3.1 Introduction

In *Better Pensions for Canadians* (Health and Welfare Canada 1982), the government identified three principles as the basis for improvements to the retirement income system:

- Elderly Canadians should be guaranteed a reasonable minimum level of income
- The opportunities and arrangements available to Canadians should be fair, and
- Canadians should be able to avoid serious disruption of their preretirement living standards upon retirement.

These goals are consistent with the criteria for economic security as outlined in Chapter 1.

This chapter analyzes the sources of retirement income security within a total system that has three tiers of support and sponsorship: the government, the employer, and the individual. It would be incorrect to study these systems independently as they are not independent—they are interdependent and intertwined. Any change in one part of the system has an immediate impact on all other parts. Further, they are all supported at some level by the taxpayers (for example, pension plan contributions are tax deductible).

Finally, they are part of a larger wealth transfer mechanism that includes other systems such as health care delivery and employment insurance. In later chapters, these systems will be included in the analysis of the impact of social security reform.

3.2 Government-Sponsored Retirement Income Security

3.2.1 Background and History

When provincial and federal rights were divided at the time of confederation in 1867, the provinces were given jurisdiction over matters relevant to health, education, and welfare. It was widely accepted that these provincial rights included the payment of pensions (Longhurst and Earle 1987, p. 6). This division of power kept the federal government out of the income security field for the first 60 years of confederation.

In 1927, using the "grant-in-aid" provision, the federal government entered the pension area through the Old Age Pensions Act (a similar process was later used to enter the health field; see Section 4.2). The Old Age Pensions Act offered to pay 50% (later raised to 75%) of the cost of means-tested pensions to be paid and administered by the provinces. The maximum pension would be $20 a month to persons aged 70 and over who met certain citizenship and residence requirements and who could pass a needs test. Individuals were not required to contribute. By 1951 benefits had risen to $40 a month (the 1999 equivalent is $284 a month).

The Old Age Pensions Act was replaced by the Old Age Security (OAS) Act in 1952. OAS benefits of $40 a month would be paid at age 70 regardless of need. A means-tested pension, also $40 a month, would be available to those aged 65 to 69. This plan remained in force for the next 15 years, although benefits were increased several times.

The next major reform came into effect on January 1, 1966, when the contributory, earnings-related Canada/Quebec Pension Plans (C/QPP) were introduced although full retirement income benefits were not paid until 1976. The C/QPP promised retirement benefits equal to 25% of credited earnings up to the Year's Maximum Pensionable Earnings (YMPE) or approximately the average industrial wage. Thus, the provision of economic security through government-sponsored systems was greatly expanded.

At that time several other changes were also put into effect. The universal OAS system qualification age (without need) was lowered from age 70 to age 65 over a five-year period. The Guaranteed Income Supplement (GIS) was added to OAS as a temporary measure to cover the ten-year transitional period of C/QPP implementation, providing income-tested benefits for those with no or low C/QPP benefits. However, this temporary add-on is still with us and remains an essential element of the government income security system. At the same time, several provinces also introduced supplements (such as Ontario GAINS) for their residents. These were all needs or income tested.

When the GIS was introduced it provided, in combination with the OAS pension, an income guarantee to single pensioners equal to about 25% of the average wage. A pensioner couple were guaranteed an income equal to about one-half the average wage.

In 1975 the Spouse's Allowance (SA) was added. It is payable to OAS/GIS pensioners' spouse and widows and widowers, aged 60–64, on an income-tested basis. These households are thus guaranteed a minimum income equivalent to that of a GIS pensioner couple.

Prior to the introduction of the OAS program in 1952, Canada's elderly had suffered relative economic hardship. However, as was detailed in Chapter 2, significant gains were made in the battle against poverty among the elderly, most of this because of improved pension benefits.

3.2.2 Old Age Security

All persons in Canada aged 65 or over who are citizens or legal residents may qualify for either a full or partial OAS pension. The pension normally begins in the month following a person's 65th birthday. There are two methods of meeting residency requirements for a full pension. Canadians 25 years of age or over on July 1, 1977, qualify with ten years of residence immediately prior to application. Persons not aged 25 by July 1977 qualify for a full pension only after 40 years of residence in Canada (after age 18). Those not qualified for a full pension may receive a partial pension, on a prorated basis, provided they have at least ten years' residence. The OAS pension benefit may be paid indefinitely outside of Canada if the pensioner has 20 years of residence in Canada after age 18. Otherwise, it may be paid for six months outside of Canada and resumed when the pensioner returns to the country.

Reciprocal international social security agreements exist with 27 other countries (although not the United Kingdom). A person residing in Canada may add those periods of residence in a reciprocating country to years of residence in Canada in order to qualify for the OAS pension. Also, for reciprocating countries, persons who have spent portions of their working lives in more than one country can receive partial social security benefits from each country.

OAS benefits are paid from general tax revenues and are taxable income. The OAS monthly pension as of January 1, 1999, was $410.82. This benefit is fully indexed to the cost of living as measured by the Consumer Price Index, with benefit increases taking place quarterly. In 1996 OAS was paid to 3.6 million Canadians with payments totalling $16.5 billion (Canada 1996b, p. 22). Of this, about $400 million was returned to the federal government through the OAS clawback (explained later), and $3.2 billion was recaptured by the federal and provincial governments because OAS is taxable income (Caledon Institute 1996a, p. 94).

The importance of OAS in the total income security package has declined over the last 25 years. In 1964 OAS benefits equaled 20% of the average industrial wage; by 1983 that had gone down to 14% (Treasurer of Ontario 1984, p. 28). The importance of OAS would have been expected to continue to decline without explicit amendments since, normally, wages rise faster than the cost of living. However, the recent anemic growth in wages has meant that the OAS benefit has been a fairly constant 15.7% of the average industrial wage over the past half decade.

Prior to 1989 the OAS pension was universal for those 65 years of age and over, subject only to residence requirements. No income or asset tests were applied. In 1985 the federal government debated the merits of the continued universality of OAS benefits (that is, no needs or income test) and proposed to partially de-index the OAS, adjusting only for cost-of-living increases in excess of 3% per annum. This provision was abandoned in the face of strong opposition from senior citizens' groups.

However, in 1989 the federal government introduced measures to "clawback" the OAS benefit from recipients with net income in excess of $51,765 (in 1991) a year. Seniors have to pay back their OAS benefits at a rate of 15 cents for every dollar that net income exceeds $53,215 (1999). Seniors with net incomes of $84,484 or more get no OAS pension. As stated by the National Council of Welfare, "this marks the end of universality, a fundamental and long-standing principle of Canada's system of social benefits" (1989, p. 1).

The $51,765 limit was not fully indexed (it is now $53,215) but is adjusted to the rate of inflation less 3%.

As a result, more and more Canadians face the clawback each year. This clawback of benefits from the wealthy changed OAS from a "demogrant" benefit (that is, payable to all, based on a residence test only) to a second tier of the GIS.

3.2.3 Guaranteed Income Supplement

OAS pensioners with little or no income may receive full or partial GIS benefits. If a pensioner leaves Canada, the supplement is paid for six months and is then discontinued until his or her return. The value of any assets that the household may have does not affect eligibility for GIS or the benefit received.

There are two rates for the GIS. One applies to single pensioners (never-married, widowed, divorced, or separated persons) and to married pensioners whose spouses are not in receipt of either the OAS pension or the SA. The other applies to spouses in married couples if both spouses are pensioners. For a single pensioner, the maximum monthly supplement is reduced by $1 for each $2 of income (other than OAS). For a married couple in which both spouses are in receipt of the basic OAS pension, the maximum monthly supplement of each pensioner is reduced by $1 for every $4 of their combined monthly income (other than OAS).

A special provision applies to a married couple in which only one spouse is a pensioner and the other is not eligible for either the basic OAS pension or the SA, whereby the pensioner is entitled to receive the GIS at the higher rate paid to single persons; moreover, the maximum monthly supplement is reduced by only $1 for every $4 of the couple's combined monthly income (excluding the OAS benefit).

Benefits are indexed quarterly. GIS payments are made out of general tax revenues; no contributions are required. The maximum monthly benefit on January 1, 1999, was $488.23 (single) and $318.01 each (married). Additional supplements of varying amounts are also paid by six provinces and two territories (see Chapter 2, Table 2.9). GIS benefits are nontaxable, although those eligible for GIS would probably not pay much tax anyway. In 1996 there were 1.4 million GIS beneficiaries, and benefit payments totaled $4.8 billion (Canada 1996b, p. 22). Nearly 80% of all single GIS recipients are women (National Council of Welfare 1996a, p. 7).

GIS benefit levels have been increased several times since its inception (over and above the automatic cost-of-living increases), and it is now a significant part of the retirement income security system in Canada. However, as income from the C/QPP and private pensions has grown, the proportion of seniors receiving GIS has fallen from 58% in 1973 to 40% in 1995 (National Council of Welfare 1996a).

3.2.4 Spouse's Allowance

The spouse of an OAS pensioner may be eligible for an SA if the spouse is 60 to 64 years of age and has ten years' residence in Canada. Eligibility is also subject to an income test similar to that for GIS. The benefit ceases to be payable if the couple becomes separated or divorced, or if the SA recipient dies. The spouse who is eligible for an SA when the OAS pensioner spouse dies retains eligibility for the SA until age 65 or until remarriage (known as Extended SA). A 1985 amendment provides for payment of an SA to any widow(er) who is between the ages of 60 and 64 who has been a Canadian resident for at least ten years prior to the date of application.

One qualifies for the SA only if married to a low-income person or if widowed. The single, divorced, separated, or never-married are not eligible. This is being challenged under the Charter of Rights and Freedoms. The fact that it is not payable to a same-sex spouse is also being challenged (Townson 1996b, p. 57).

For couples, the SA benefit is based on their combined annual income, whereas for beneficiaries of Extended SA and Widowed SA it is based on the surviving spouse's income only. Assets are not considered for entitlement. The maximum full monthly SA is equal to the full basic OAS pension plus maximum GIS at the married rate. The SA is reduced by $3 for every $4 of the couple's combined monthly income until the OAS equivalent is eliminated. After that, the GIS equivalent of the SA and the GIS of the pensioner are each reduced by $1 for every additional $4 of combined monthly income. SA benefit payments are made from general tax revenues (that is, no contributions are required).

As at January 1, 1999, the maximum monthly allowance to spouses was $728.83, and to widows and widowers $804.64. Benefits are indexed quarterly to the cost of living. In 1996 the number of SA beneficiaries was 107,000, and the total payment made was $440 million (Canada 1996b, p. 22; Caledon Institute 1996a, p. 94).

The combination of the OAS/GIS/SA programs is designed to provide a minimum floor of security. The minimum income guarantee for single, widowed, and divorced pensioners is about 30% of the average industrial wage, while that for pensioner couples is approximately 40% of the average industrial wage. The program offers nothing to low-income people aged 60 through 64 who are never-married, divorced, or separated.

While these plans provide a minimum floor of security, they are not designed to satisfy the requirement of maintaining a consistent standard of living since the benefits are not a function of preretirement earnings. The only government-sponsored programs with this attribute are the C/QPP.

3.2.5 *Canada and Quebec Pension Plans*

The Canada Pension Plan (CPP) and Quebec Pension Plan (QPP; Regie de rentes du Québec) were introduced in 1966 and are compulsory contributory social insurance plans. The CPP operates in all regions of Canada except Quebec. Both plans provide retirement, disability, and survivors' pensions, disabled contributors' children's benefits, orphans' benefits, and death benefits. There is reciprocity between the two plans to ensure coverage for all adult Canadians in the labor force.

The two plans are similar in terms of eligibility criteria, benefits, and financing. The following description applies to both plans; differences are noted where relevant.

Eligibility

The C/QPP are financed by compulsory contributions between ages 18 and 65, based on earned income. Persons over 65 who are still in the labor force have the option of contributing until age 70. Persons already receiving disability or retirement benefits or those with earnings below the Year's Basic Exemption (YBE, $3,500) do not contribute. All benefits under the C/QPP are payable regardless of whether the beneficiary lives in Canada or abroad.

Since 1997 the YBE has been frozen at $3,500. This means that with each passing year more and more Canadians will have to contribute to the CPP (but more and more Canadians will also qualify for benefits), and those who are in the plan will contribute on a wider wage base since contributions are on wages up to the YMPE less the YBE. This reform decreases the progressivity of the C/QPP; it is discussed in greater detail in Chapter 6.

Pension credits earned by one or both spouses during marriage can be divided equally in the event of divorce or legal annulment. In the case of separation, either spouse may apply for a division of pension credits after one year has elapsed.

Under the reciprocal international social security agreements mentioned earlier, persons residing in Canada may add the credits that they have earned under the social security system of a reciprocating country to their Canadian credits. Eligibility for C/QPP benefits is not based on income or assets but on contributions.

Benefits

The C/QPP provide the following monthly benefits, which are treated as taxable income: a retirement pension, a disability pension, a surviving spouse's pension, a disabled contributor's child's benefit, and an orphan's benefit. Once benefits are in place, they are adjusted annually to the Consumer Price Index.

Contributory Period

The C/QPP contributory period starts at age 18 (or January 1966 if later) and ends when the beneficiary retires or turns 70. There are provisions that allow a person to drop, from the contributory period, months of low or zero earnings totaling up to 15% of the total period, so long as the contributory period is not less than ten years. Should an individual choose to defer application for a retirement pension beyond age 65, months of pensionable earnings after age 65 may be substituted for months of low or no pensionable earnings prior to age 65. Any month during which a disability pension was paid is excluded from the contributory period.

A special child-rearing dropout provision allows for the exclusion of any months of low or zero earnings that occurred when a person was caring for a child under age seven.

Retirement Pension

A retirement pension is payable to a person who is aged 60 or over who has made even one contribution to the CPP or for at least one year to the QPP. Persons aged 60–64 who apply for this pension must have retired from work; C/QPP applicants over age 65 are eligible for a retirement pension regardless of whether or not they have stopped working. Once a retirement pension becomes payable, or a person reaches age 70, no further C/QPP contributions can be made.

The annual retirement pension is equal to 25% of average adjusted pensionable career earnings received during the contributory period, that is, earnings for each eligible year worked up to the YMPE. Historic earnings are adjusted upward in line with the YMPE.

Payment of the retirement pension can begin at age 60. For persons retiring between ages 60 and 64, the pension benefit is reduced by 0.5% for each month left until their 65th birthday (or 6% per year). Persons who delay retirement beyond 65 have their pension increased by 0.5% for each month of delay from their 65th birthday until they receive their first pension payment (up to their 70th birthday). Once the entitlement is calculated, the pension remains the same except for annual indexation to the cost of living.

Surviving Spouse's Pension

Benefits are payable to the surviving spouse of a deceased contributor, providing contributions have been made for a minimum qualifying period. Payment to a common-law spouse is subject to further legislated conditions. There is a prorated reduction in this benefit when the surviving spouse is between the ages of 35 and 45, is not disabled, and has no dependent children. A spouse who is under age 35 when widowed, and is neither disabled nor has dependent children, is not eligible for a surviving spouse's pension before reaching age 65.

A surviving spouse over age 65 receives a benefit equal to 60% of the contributor's retirement pension at the time of the contributor's death. Remarriage used to mean a loss of this benefit, but it no longer does.

Financing

The C/QPP are funded through employer and employee contributions plus interest earned on surplus funds. Prior to reform, the CPP excess funds were lent to the provinces in proportion to the province's contributions to the plan. The Quebec Deposit and Investment Fund (Caisse de dépôt et de placement du Québec) manages the excess QPP funds and invests some of the QPP fund in the private sector.

Employee contributions to the CPP in 1999 are made at the rate of 3.5% of earnings between the YBE of $3,500 (now frozen) and the YMPE of $37,400. Persons earning incomes at or above the YMPE pay the maximum contribution. Employers match the employees' contributions, while self-employed persons contribute the total 7.0% themselves.

The contribution rate of 7% (total) for 1999 will move to 9.9% by 2003. This will be more than enough to fund current benefits, and the present contingency fund of $40 billion will grow to a projected $110 billion. Issues around this large accumulation of funds will be explored in detail in Chapter 6.

As of January 1, 1999, the maximum monthly retirement benefit was $526.17 at age 60, $751.67 at age 65, and $977.17 at age 70. This is taxable income to the recipient. About 3.3 million Canadians get CPP or QPP retirement benefits (Canada 1996a, p. 12) worth a total of $14 billion a year (National Council of Welfare 1996a, p. 20). About one million people—89% of them women—receive survivor pensions valued at $3.2 billion a year (ibid.). Total benefit payments from the C/QPP in 1995–96 were $21.8 billion, $16.7 billion for the CPP, and $5.1 billion for the QPP (Caledon Institute 1996a, p. 95). These retirement benefits are only 63% of total benefits for the CPP (and only slightly more for the QPP). This is an important statistic for many Canadians who think of the C/QPP as purely retirement income security schemes. These benefit amounts are projected to rise rapidly, especially after the retirement of the baby boom.

Over 42% of C/QPP benefits come back to the government (federal or provincial) in the form of income tax, decreased benefits under other programs (for example, GIS), and decreased tax credits (MacDonald 1995, p. 62).

For pensioners aged 65 to 69 in January 1996, the average C/QPP retirement benefit paid to men was $517 a month, and the average benefit paid to women was $289, or 56% (National Council of Welfare 1996a, p. 26).

There are many advantages to the C/QPP. Coverage is universal and automatic for those employed and earning at least the YBE. Benefits are immediately fully vested and are fully portable. (These terms are explained in Section 3.3.4). They are indexed before retirement to the YMPE (which approximates the average industrial wage) and after retirement to the cost of living.

However, coverage does not extend to the never employed, the chronically unemployed, or the very poor since a person must have earned income at least equal to the YBE to earn benefit credits. Consequently, homemakers are the largest group of Canadians not covered. For these Canadians, economic security in retirement is reduced since the maximum C/QPP benefit available to them is the 60% survivor's benefit.

However, increasing benefit levels under the C/QPP would do very little for the very poor, the chronically unemployed, or the never-employed (for example, homemakers). For those now eligible for GIS, increases in C/QPP benefits will mean decreased GIS benefits. For example, for a poor worker in 1995, the difference between receiving one-half of the full C/QPP retirement benefit and the full benefit was $4,279 gross, but only $2,191 in net income because of the GIS clawback (National Council of Welfare 1996a, pp. 24–25) and because C/QPP income is taxable (see also MacDonald 1995, p. 62). Since GIS is funded from general tax reserves, while the C/QPP are funded by contributions on earnings, the overall end result would be regressive;

that is, the low-income worker would pay the increased costs of contributions for little in extra benefits. If one totals the cost of the benefits described above, the total is as shown in Table 3.1.

TABLE 3.1
TOTAL PUBLIC PENSION COSTS, 1995–96

Plan	Cost (Billions)
OAS (Gross, without Clawback)	$16.083
GIS	4.700
SPA	0.440
CPP	16.672
QPP	5.085
Total	42.979

Source: Caledon Institute 1996a, p. 98.

3.2.6 Income-Replacement Ratios and Poverty

In Section 2.4.5 the significant decrease in poverty because of government-sponsored income security systems was discussed. Table 3.2 and Figure 3.1 show the income replacement in retirement provided by government programs for an individual in 1993.

Low wage earners actually increase their net-after-tax income after retirement, while those at the upper income levels are expected to provide more of their retirement income through employer-sponsored or personal savings plans (for which tax concessions are available). It would appear that the C/QPP were consciously limited to allow for this flexibility and to encourage the growth of investment funds that arise from private-sector plans.

Low-income senior citizens get virtually all their income (84%) from government sources (see Table 2.15). Also, as stated in Chapter 2, the importance of government-sponsored income rises with age so that, as Canadians age, their income levels become more nearly alike.

3.2.7 Public Policy Issues Not Addressed by C/QPP Reform

Several public policy issues with respect to government-sponsored social security remain. Of these, Chapter 6 looks at the failed Seniors Benefit and its implications plus issues around the freezing of the YBE. Chapter 6 also discusses the implications of fuller funding for the C/QPP. Two issues not addressed in the announced reform of the C/QPP are discussed next.

The Indexation of Benefits—What Index?

There is some question whether the Consumer Price Index (CPI) is the correct index to reflect the cost increases incurred by seniors. Much has been written on this topic (see Task Force on Inflation Protection 1988; Mercer 1997). The most extensive Canadian study found that cost indices for seniors conformed closely with the CPI. In making its recommendation, the report states, "Our conclusion is therefore that the all-Canada CPI would likely be a satisfactory indexing standard for Ontario pensions if a price indexing formula were to be adopted" (Task Force on Inflation Protection 1988, Vol. 1, p. 290).

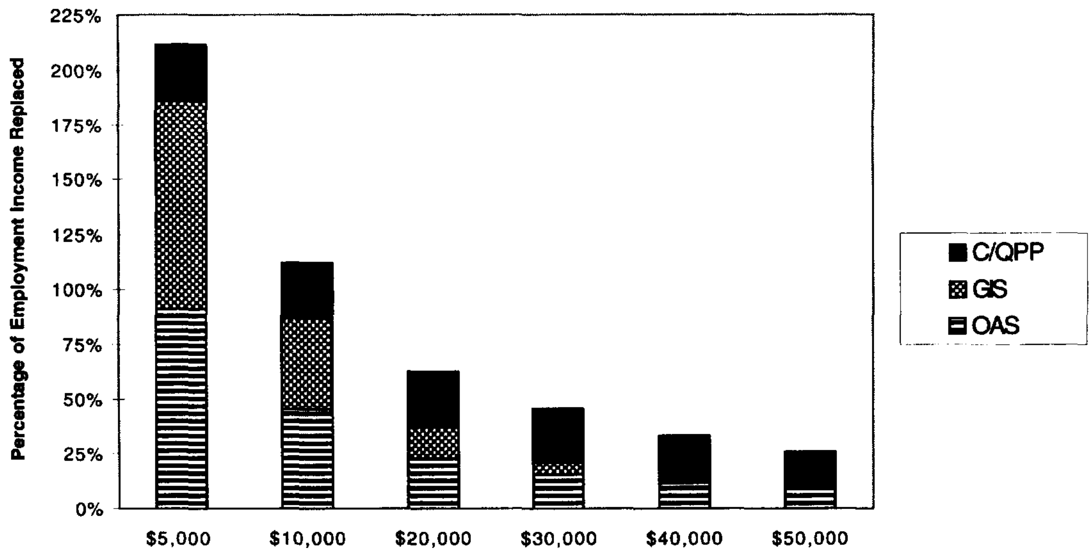
A larger discussion is now ongoing in the United States as to whether or not the CPI overstates the growth of costs. It is argued that this occurs because the index in the United States does not react quickly enough when consumers change their product mix of purchases (for example, substituting pork for beef if beef rises in cost)

TABLE 3.2
INCOME FROM GOVERNMENT-ADMINISTERED PLANS BY INCOME LEVEL, 1993

Employment Income Prior to Retirement	OAS	GIS	C/QPP	Total	Percentage of Employment Income Replaced
$5,000	$4,547	$4,779	$1,250	$10,576	212%
10,000	4,547	4,154	2,500	11,201	112
20,000	4,547	2,904	5,000	12,451	62
30,000	4,547	1,654	7,500	13,701	46
40,000	4,547	404	8,350	13,301	33
50,000	4,547		8,350	12,897	26

Source: Statistics Canada, 1996b, p. 129.

FIGURE 3.1
REPLACEMENT RATIOS FROM GOVERNMENT-SPONSORED PLANS, 1993



Source: Author's graph of Table 3.2.

and does not reflect the increase in quality of many products (for example, tires cost more today but last longer). While the former criticism (regarding product mix) does not appear to be an issue in Canada, the latter is and may require a proper public policy discussion. This may occur if there is a change in the manner of computing the CPI in the United States (for a full discussion of this issue, see Mercer 1997).

Flexible Retirement

Until 1984 for the QPP and 1987 for the CPP, retirement benefits became payable no earlier than age 65. While this is still true for OAS benefits, C/QPP benefits can now be taken at a flexible retirement age, with an actuarial adjustment in benefit level, as mentioned earlier. Take-up of these early benefits has been dramatic. When QPP flexible retirement benefits started in 1984, 80% of new retirees in the first half of 1984 chose early retirement. (It is impossible to know how much of this was caused by the shift to the flexible retirement benefits scheme within the QPP and how much was because of outside pressures for early retirement.) In March 1995, 57% of all new CPP retirement benefits were paid to people under 65 (Baldwin 1996b, pp. 72–73).

There has been some debate as to the level of adjustment in the benefit payable (0.5% per month). Analysis by the QPP actuary (see Menard and Potvin 1993) has shown that the adjustment of 0.5% per month in benefit levels is justified given today's mortality rates and certain reasonable economic assumptions.

A second issue is the effect the new flexible retirement benefits will have on the labor force participation rates of Canadians over the age of 60. In the past two decades, male labor force participation rates beyond age 60 have declined significantly. Although this is not the case for females, whose participation rates beyond age 60 remained relatively level, their rates can be viewed as being in relative decline since all other female age-specific participation rates have risen. The issue of what age should be required for eligibility for retirement benefits is discussed in more detail in Chapter 7.

3.2.8 Conclusion

This section has reviewed the major provisions of the government-sponsored income security systems. There continues to be strong support for government-sponsored social security, as seen in a recent Angus Reid-Southam poll (February 1996). Seventy percent of Canadians polled said the public plans were good and should be fixed rather than being phased out and replaced. However, confidence in the future of the C/QPP is not strong. In a survey conducted in the fall of 1994, Towers/Perrin found that only 29% of respondents between the ages of 18 and 29 believed that they will receive the CPP, and even among 50- to 64-year-olds, the number rose only to 47% (Canada 1996c, p. 15).

The public plans reviewed in this section are available not on a contractual basis (as are private plans) but on a statutory basis. In a private plan, once the contract is issued, it cannot be changed. In a public system, however, today's workers, by paying benefits to today's retirees, establish a social contract in the expectation that the next generation of workers will likewise provide their retirement income benefits. As demonstrated in the 1989 amendment to the OAS benefits and the 1996 introduction of the Seniors Benefit, such contracts can be amended at any time, as long as the voters are supportive.

The publicly administered retirement income systems are not intended to provide all the income needed in retirement. Indeed, when the C/QPP were introduced, they were designed deliberately to leave room for private retirement income schemes (International Social Security Association 1987, p. 106).

3.3 Employer-Sponsored Pension Plans

3.3.1 Introduction

Government-sponsored OAS and GIS provide a basic floor of protection to all Canadians who qualify. Maintaining a consistent standard of living on retirement is *partly* satisfied by the C/QPP for those who are able to contribute and earn benefits.

Whatever needs are not met by government-sponsored retirement income security must be met through private-sector sources, or they will not be met at all. Thus, there is a direct interconnect between the two parts of the system. Any reforms to government systems have a direct impact on the private systems, as will be shown.

Private provisions for improving one's replacement ratio have two advantages. First, the system is flexible. Not everyone requires the same replacement ratio, and few require a 100% replacement, as explained in Section 2.4.6. This wide divergence of need can best be satisfied through schemes tailored to the individual. The second advantage of the private system is that such plans represent an important source of investment dollars that can fund risk ventures upon which the Canadian economy depends. In general, the QPP being an exception, government-sponsored schemes have not provided investable funds in the past. The new CPP amendments do intend, however, to create a fund that will reach $110 billion by 2017 to be available for investment in the Canadian economy. This is discussed in more detail in Chapter 6.

3.3.2 Background and History

In describing the genesis of private pension plans, Morton and McCallum state,

> Once again, pension plans were created to further a company's corporate goals of inspiring loyalty and cooperation among employees, raising morale and efficiency, cutting labour turnover, and inducing the retirement of older workers. In general, the introduction of pension plans helped to reduce labour strife. In 1919, the worst year for strikes in Canadian history, one corporate official explained that a pension plan "is not philanthropy and it is not benevolence: it is a cold-blooded business proposition." (Task Force on Inflation Protection 1988, p.12)

Despite these beginnings as pure business enticements, pensions grew rapidly in importance as one key aspect of employee benefit programs, especially after World War II when unions took a more active interest in this employee benefit.

In the 1960s the government decided to regulate employment pension plans (both defined benefit and defined contribution) to guarantee certain basic rights and minimum benefit guarantees to workers. Ontario was first with its Pension Benefits Act, which came into effect January 1, 1965. This was followed by similar, but not identical, legislation in other jurisdictions. The fact that the provincial Pension Benefits Acts are not identical increases pension plan administration costs.

These acts had several objectives. Their primary concern was that the plans were adequately funded and that the funds were invested prudently (Ontario now has a Pension Guarantee Fund to further protect the benefits of workers whose pension plan might end). There were specific rules as to when employees gained rights to employer contributions (called *vesting*). Also, the acts allowed the transferability of pension rights or assets when a worker changed jobs (called *portability*). Most of these acts have undergone significant revisions as noted later in this chapter.

3.3.3 Existing Plans and Coverage

Coverage

As shown in Table 3.3, growth in the coverage of Canadian workers in employer-sponsored registered

TABLE 3.3
PENSION PLAN MEMBERS AS PERCENTAGE OF PAID WORKERS AND LABOR FORCE

	Paid Workers				Labor Force			
Sex	**1970**	**1980**	**1990**	**1996**	**1970**	**1980**	**1990**	**1996**
Female	32.2%	37.6%	39.0%	40.6%	26.9%	31.2%	33.1%	33.5%
Male	47.0	54.2	49.6	44.0	37.7	45.1	41.1	35.1
Total	42.0	47.7	44.8	42.4	34.1	39.7	37.6	34.3

Note: The difference between the labor force and paid workers is the exclusion of unpaid family workers, self-employed workers in unincorporated companies, and the unemployed from the labor force to get "paid workers."
Source: Statistics Canada, Pension Plans in Canada 1972, 1982, 1992, 1997c.

pension plans has declined since 1980. In fact, coverage has failed to keep pace with the expanding labor force. Table 3.3 also shows that male participation rates in pension plans are generally higher than those for females. One reason for this is the higher participation rates of female workers in industries in which pension plan coverage is lower (for example, personal service industries versus mining, construction, and manufacturing). Females also hold more part-time jobs, which often do not earn pension credits.

However, the gender gap is closing. In fact, in the decade between 1983 and 1993, the number of female plan members was up 47%, while the number of male plan members was down 2%. Most of the drop in male membership was the result of the decline of small pension plans. Membership in small plans (those with fewer than ten members) dropped by 50% between 1986 and 1994 (Statistics Canada 1996b, p. 12). Many small companies have changed to less cumbersome employee retirement packages such as group RRSPs.

As can be seen in Table 3.3, 42.4% of paid workers or 5.1 million employees were covered by registered pension plans (RPPs) as of January 1, 1996, up from 4.5 million in 1980—an increase of about 13% over 15 years. During the same period, the total labor force grew nearly 33%. There were 15,429 RPPs as of January 1, 1996, a drop of 5,439 since a peak of 21,239 in 1988. Reasons for this drop are discussed in Section 3.3.6.

Many employers, especially small employers, prefer to sponsor a group Registered Retirement Savings Plan (RRSP) either as a stand-alone pension program or in addition to a basic pension plan. These plans are not included in the pension coverage statistics maintained by Statistics Canada. Although there are no comprehensive statistics available for group RRSPs, a survey conducted by Benefits Canada (Charles 1994, pp. 29–31) reported that there were more than 22,400 group arrangements covering a total of 949,000 members. If these members are included in the pension coverage statistics, pension coverage in the private sector increases by between 10% and 12% (not allowing for double counting where an employer sponsors both an RPP and a group RRSP). More recent data indicate that by 1996 the number of group RRSP plans in Canada totaled 32,500 with 1.4 million members and $18.2 billion in assets (*Globe and Mail* 1997a, p. C20). Thus, the overall pension coverage in the private sector remains below 50% (see also Table 3.5).

A review of 1992 taxation statistics shows that the percentage of private-sector employees between the ages of 25 and 65 who participated in at least one of an RPP, Deferred Profit-Sharing Plan (DPSP), or RRSP was 58%. The corresponding percentage for the public sector was 86%. Table 3.4 disaggregates these statistics by age and income group.

In general, younger workers and females (see Table 3.3) show lower levels of coverage. Also the level of public-sector coverage greatly exceeds that in the private sector. Public-sector employees represented about one-quarter of the paid workforce but almost one-half of the total RPP membership in 1993 (Statis-tics Canada 1996b, p.12). In a study that analyzed tax filings including RRSP contributions, the Canadian Institute of Actuaries (CIA) found that the public-sector average savings rate was close to 16% while in the private sector it was about 7%. The CIA concluded that public-sector employees will have sufficient resources to be able to retire at around age 58, while private-sector employees will have to wait until about age 68, or ten years later (Canadian Institute of Actuaries 1995b, p. 41).

TABLE 3.4
PERCENTAGE OF TAX FILERS PARTICIPATING IN RPPs, DPSPs, AND RRSPs, 1992

	By Age Group			By Income Group	
	Public Sector	Private Sector		Public Sector	Private Sector
<25	41.0%	20.0%	<$20,000	43.0%	24.0%
25–44	83.0	55.0	20–39,999	87.0	62.0
45–64	90.0	67.0	40–79,999	97.0	87.0
25–64	86.0	58.0	80,000+	99.0	92.0

Source: Canadian Institute of Actuaries 1995b, Appendix D.

One reason for this disparity of coverage is the fact that small employers tend not to offer pension plans to their employees, and most small employers are in the private sector. In 1992 fully 96% of the members of plans with fewer than ten participants were employed in the private sector (Statistics Canada 1994c, p. 25). The relationship between size of the firm and the probability of pension coverage is indicated in Table 3.5.

TABLE 3.5
PENSION COVERAGE BY FIRM SIZE PRIVATE SECTOR, 1989

Size of Firm (Number of employees)	Pension Coverage Ratio
1–19	13%
20–99	27
100–499	48
500 or more	65

Source: Frenken and Maser 1992, p. 28.

The same analysis also found that union affiliation affects pension coverage. For example, the proportion covered among unionized paid workers in the private sector was 67%. Coverage for those not included in a collective agreement was 29% (Statistics Canada 1994c). Persons not covered are primarily low-income workers, employees under the age of 25, part-time workers, and employees of small firms. There may be some acceptable reasons for this lack of coverage:

> For many of these workers, membership in employment plans may not be desirable or necessary. For example, for persons under the age of 26 saving for retirement is not a high priority. Small employers may be financially unable to undertake the cost of a pension plan. In many cases, the small employer will provide other forms of savings such as a deferred profit sharing plan or ownership in the company. (Longhurst and Earle 1987, p. 75)

Types of Plans

Pension plans can be subdivided into two types: contributory (which require employee contributions) and noncontributory (which do not). In 1995, 76% of all plan members were in contributory plans. Virtually all public-sector plan members made contributions, whereas 55% of the private-sector plan members did (Statistics Canada 1997c, p. 21).

Pension plans can also be subdivided according to the method used to determine the contributions and benefits. In a *defined benefit plan* the amount of the member's retirement benefit is specified in advance. The benefit can be a function of earnings and years of service or may be defined as a fixed dollar amount for each month or year of service (flat benefit). This benefit is promised by the plan sponsor, who then builds up a fund to fulfill the promise. The risk that pension-funding variables (for example, rate of investment income earned) may deviate from the expected amount is borne by the plan sponsor, normally the employer, who must make up for any shortfalls.

Defined benefit pension plans provide a more effective means of achieving particular targets of income replacement than defined contribution plans. The defined benefit plan guarantees a pension calculated by the plan formula. They can also be used to grant past service benefits to employees who are already under employment when the plan is initiated. They allow a flexible benefit design, targeted at a particular group of employees, and can easily be adjusted for inflation and wage increases, especially before retirement.

On the other hand, defined benefit plans create open-ended costs for the employer/sponsor. They are administratively complex and costly (partly because of complex regulation). Immediate vesting and portability is not the norm, which is a disadvantage to a mobile labor force.

Finally, defined contribution plans are easier to understand and are more appreciated by employees.

In a *defined contribution plan,* frequently called a money purchase plan, the pension contract specifies the contributions to be made by the employer and perhaps also by the employee. These funds are then invested. The funds that accumulate are usually used at the time of retirement to purchase a retirement annuity (that is, monthly income payments). The risk that the resulting retirement income is inadequate is borne by the employee. The employee also bears the risk that investment rates of return will vary from those expected.

The timing of retirement can affect significantly one's retirement income, as the cost of the retirement annuity will vary with prevailing interest rates. A person who retires when interest rates are relatively high will receive a larger annuity than a person who retires when interest rates are low. These two factors mean that such plans create a substantial level of risk for the person nearing retirement age. Over the past decade, Canadians have experienced variations of more than 50% in the retirement income that could be purchased by a defined contribution scheme.

Thus, unlike defined benefit plans, defined contribution plans place the investment risk on the employee. Particularly for large employers, it is more appropriate for the plan sponsor to bear the investment risk since they can more readily adjust for fluctuations.

However, defined contribution plans have several advantages. They experience lower administration costs and greater employee appreciation. They are easier to understand than defined benefit plans. Benefit accruals can be immediately vested and fully portable. Finally, they guarantee the cost to the employer/sponsor.

In 1995, 44.6% of plans were defined benefit plans, but they contained 88.1% of all workers (Statistics Canada 1997c, p. 27). In 1982 corresponding figures were 57.6% and 93.7% (Statistics Canada 1984a), which means that there has been a slight decline in defined benefit pension plans. In 1995, 53.7% of all plans were defined contribution plans, but with only 10.5% of plan members (Statistics Canada 1997c, p. 27).

In summary, defined contribution plans do not provide as well as do defined benefit plans for continuity of income (one of the income security goals).

3.3.4 Deferred Profit-Sharing Plans

DPSPs are frequently used as a retirement income scheme, either on a stand-alone basis or as a supplement to an RPP. One advantage of DPSPs often espoused by plan sponsors is that they are not subject to the detailed minimum pension standards legislation.

Employee contributions to a DPSP are prohibited. Employer DPSP contributions cannot exceed a maximum contribution per employee that is equal to half of the employer contribution allowed to a defined contribution pension plan (see Section 3.4.4 for details) and 18% of the employee's earnings from the employer. Overall contribution limits apply to total contributions to all plans, so the maximum contribution to a DPSP may be reduced as a result of contributions to other registered arrangements.

Both the number of DPSPs and their total assets are small relative to other retirement income arrangements. A 1994 Benefits Canada survey (Charles 1994, pp. 29–31) reported only 1,182 DPSPs with total accumulated assets of $1.4 billion.

3.3.5 Pension Reform

In 1985 the federal government introduced pension reform legislation that was expected to be the model for uniform provincial legislation (except for federally regulated employment, pensions are a provincial matter). Unfortunately, reform consensus was not achieved, and each province has slightly different legislation. This makes the design and administration of pension plans difficult for companies having employees in more than one province.

Most of the following changes, based on Ontario legislation, were adopted by the provinces on January 1, 1988.

1. *Coverage:* Every full-time employee who belongs to a class of employees for whom a pension plan is provided is eligible to become a member after two years of service. Part-time workers who earn at least 35% of the C/QPP YMPE, or $13,090 in 1999, in each of two consecutive years must be allowed to join if they are in the same category as full-time members (or if they worked at least 700 hours in each of two consecutive years). The federal government expanded the use of RRSPs to allow employees of small firms to accumulate pensions equivalent to those now available only to employees of larger firms.
2. *Vesting and portability:* Vesting and locking-in of contributions now occur after two years of plan membership. A locked-in benefit is not allowed to be distributed before retirement. Upon retirement, it must be used to provide pension benefits. Lump-sum distribution of the entire benefit is prohibited except for very small amounts. A member with vested benefits can transfer the commuted value to another

pension plan or to a prescribed savings arrangement (for instance, certain RRSPs) on a locked-in basis.

3. *Minimum employer cost:* Employers now have to pay at least 50% of the cost of benefits.
4. *Benefits at death:* If a plan member dies before retirement, the death benefit is either a lump sum to the beneficiary or an annuity to the spouse equal to the value of the member's pension credits at the time of death. For death after retirement, any member who is married at retirement must take the pension in a form that provides at least a 60% pension to the surviving spouse. This form of pension is automatic but can be waived if both spouses sign a waiver form. The pension to the worker can be adjusted to reflect the value of the continuing benefit to the surviving spouse.
5. *Retirement age:* Pensionable age is the earliest age at which an unreduced pension is payable. Members must be permitted to retire up to ten years prior to pensionable age, but benefits may be appropriately reduced. Members who postpone retirement and do not take their pension must be allowed to continue to build up credits.

   Defined benefit plans are capable of providing full, or only partly reduced, benefits on early retirement. It is almost impossible, however, for defined contribution plans to provide early retirement benefits without a full actuarial reduction in benefits.
6. *Gender issues:* Pension benefits for men and women retiring in equal circumstances must be equal. Contributions paid by employees must also be equal, but employer contributions may vary by gender. The latter variance is necessary so that total employer contributions will cover the cost of benefits for both male and female employees. In particular, for plans that buy retirement annuities from life insurance companies, such annuities cost more for females than for males based on life expectancies.
7. *Disclosure:* Increased disclosure of pension plan information to plan members and their spouses is required. Material describing the plan must be provided when the worker is hired or at least 30 days before one is eligible to join the plan. Members must be informed of any plan amendments. Additional material must be made available on request (for example, investment results). Moreover, annual statements must be provided showing personal plan information (for example, benefit credits earned to date).

Many of the pension reform issues were of particular importance to women. Examples include coverage for part-time workers, earlier vesting of pension benefits, easier portability of benefits from plan to plan (women often have to move to accommodate the needs of their spouse), elimination of sex discrimination, and enhanced survivorship benefits. As a result of the reforms, the proportion of male participants in plans with spousal benefits increased from 45% in 1978 to 77% in 1988 and was expected to exceed 90% by the early 1990s (Dickinson 1994, p. A-II-19).

3.3.6 Public Policy Issues

Coverage of workers by private pension plans is not expanding, despite the hopes and goals of the 1985 reforms (see Table 3.3). Both Statistics Canada and a recent report from the Canadian Institute of Actuaries (1996b, p. iii) have identified the current regulatory environment as one possible culprit. As stated by Statistics Canada, "The administrative requirements imposed by revised pension regulatory legislation may have influenced employers sponsoring these plans to seek other options, such as group RRSPs" (Statistics Canada 1996b, p. 12). The CIA goes on to propose reduced and simplified regulation as a vital necessity, not just to encourage growth of registered pension plans, but to avoid further erosion in coverage.

One goal mentioned by several commentators is the achievement of uniform regulation across the 11 jurisdictions (ten provinces plus federal regulation). The Canadian Association of Pension Supervisory Authorities (CAPSA) has drafted uniform regulations to which CAPSA have agreed. All that is needed now is the political will to implement these uniform regulations.

On the other hand, if voluntary pension coverage is failing, perhaps what is needed is legislation mandating workplace pensions similar to the approach taken in Australia. Several issues would need to be addressed before such a significant initiative were taken. First, is such a mandatory plan preferable to the flexibility that is now available? Must the government impose mandatory plans, or should individual workers and employers find the mix of salaries and deferred compensation that suits their unique situations? Would small employers be excluded? If not, what are the cost implications to them? Would coverage be for all workers or only full-time workers? Would casual workers be included? What impact might this have on the price of labor? How many jobs would be lost as a consequence? What would be the general economic impact, as this would remove current consumption dollars from the economy?

These are not easy matters, and legislation should not be imposed without full public consultation. Recent experience with mandatory coverage in Manitoba suggests that this might not be popular with either employees or employers.

Another unresolved concern for pension plan sponsors is the ownership of any surplus that accrues in a pension plan. As noted above, in a defined benefit pension plan (to which 88% of Canadian plan members belong), the plan sponsor/employer carries the investment risk; that is, if investment returns on the pension fund assets do not meet projected expectations, then the employer must fund the deficit and guarantee the retirement benefits (hence the name, defined benefits). Thus, sponsors have taken the position that if investment returns exceed expectations (as they often do), any surplus that accrues should be re-turned to the plan risk taker, namely, the plan sponsor/ employer.

However, the matter is not that straightforward. As mentioned above, pension benefits are seen as "deferred wages." Workers often give up salary increases in favor of improved pensions. Unions bargain on a total compensation package that balances pension benefits and salaries. Thus, if the cost of the pension plan is less than projected, because of high investment returns, it is argued that the surplus should belong to the worker and not to the plan sponsor. At the very least, in plans in which employee contributions are required (and 73% of plan members do contribute to their plan), any "excess" investment returns should be shared between the employer and the workers. Despite several court cases on this issue, the matter is still not totally resolved and begs legislative initiative.

3.4 Individual Savings/Registered Retirement Savings Plans

3.4.1 Introduction

As noted in Section 2.4.6, the ratio that one's retirement income bears to one's final salary is called one's replacement ratio. Each individual, or couple, will have a unique target replacement ratio to satisfy perceived economic security. The working poor will require a larger replacement ratio just to achieve a level of income above the poverty line. The higher one's income, the lower the required replacement ratio can be in order to achieve a consistent standard of living. Much of the replacement ratio will be satisfied by government-sponsored and employer-sponsored benefits. Any shortfall must be satisfied through individual savings.

3.4.2 Achieving a Target Replacement Ratio—An Illustration

As shown in Section 2.4.6, a target replacement ratio of between 50% and 80% of final salary should generally allow for no disruption in one's standard of living.

Assuming that a person, earning the Average Industrial Wage, has set a target replacement ratio of 70%, and government-sponsored schemes today replace close to 40% (25% from the C/QPP, and 15% from OAS/GIS), this individual must replace 30% of final salary from employer-sponsored or individually arranged schemes, or both. What will this 30% benefit cost if it is completely the responsibility of the individual?

The calculations that follow are based on the following assumptions:

- Life expectancy: Canada Life Tables 1990–92
- Marginal tax rate: 40%
- Annual salary increase: 4%
- Inflation (per annum): 3%
- Rate of interest (before tax): 6 2/3% (that is, 4% after tax).

If an individual wishes to replace 30% of final income after tax, such that retirement income will increase with the rate of inflation postretirement, and if one uses ordinary savings vehicles (not registered), the percentage of salary that must be set aside each year to meet the 30% target is as shown in Table 3.6.

TABLE 3.6
REQUIRED PERCENTAGE OF SALARY THAT MUST BE SAVED TO ACHIEVE 70% INTEGRATED REPLACEMENT RATIO

Sex	Age at Which Saving Starts	Age at retirement 60	65
Men	25	15.0%	10.8%
	35	21.0	14.5
	45	35.0	21.7
Women	25	18.2	13.5
	35	25.5	18.0
	45	42.5	26.9

Source: Author's calculations.

These figures show how expensive true retirement income security can be, especially if one starts late in life, and especially for women because of their enhanced life expectancy. In fact, for many persons the ability to retire on 70% of final salary would result in a significant increase in *disposable* income since one could then stop saving.

One should also note how much extra it costs to retire at age 60 instead of at age 65. There are three reasons for these cost differentials:

1. Fewer total contributions are made
2. Benefits are payable earlier, so less interest income is earned, and
3. Benefits are payable earlier, so income will be paid out longer.

Hence, one should be realistic in assessing the ability to afford early retirement. However, the government has provided special tax concessions that include employer-sponsored RPPs and individual RRSPs to assist in attaining retirement income security (see Section 3.4.4 for details).

Money contributed to an RPP is tax deductible (within limits) at the time of contribution. Hence, for a worker in the above example, a $1 contribution to an RRP costs only $0.60 directly. Also, the investment income earned in a registered plan accrues tax free until taken as income. Hence, in the example, one earns the full 6 2/3% rate of return (as opposed to 4% after tax) during the life of the plan.

On the other hand, income from an RPP is taxable at the time it is taken out postretirement, which may be at rates either lower or higher than before retirement if all clawbacks are included in the analysis (for example, OAS/GIS). Table 3.7 assumes the same 40% marginal tax rate after retirement as before. Because of the tax advantages of registered funds, the required percentage of salary shown in Table 3.6 reduces substantially, if one saves through registered plans.

TABLE 3.7
REQUIRED PERCENTAGE OF SALARY THAT MUST BE SAVED USING REGISTERED RETIREMENT PLANS TO ACHIEVE 70% INTEGRATED REPLACEMENT RATIO

Sex	Age at Which Saving Starts	Age at retirement 60	65
Men	25	8.9%	6.4%
	35	13.6	9.4
	45	24.7	15.3
Women	25	10.3	7.6
	35	15.7	11.1
	45	28.5	18.1

Source: Author's calculations.

Comparison of Tables 3.6 and 3.7 illustrates that, depending on gender and the age at which savings start, the required savings rate is cut almost in half by using registered plans. It still costs more to retire at age 60 than at age 65 and to provide income for a woman than for a man. Similar realities are portrayed in the annuity quotes provided in Table 3.8. These are life annuities that could be purchased with a $50,000 lump sum at the given age at purchase.

TABLE 3.8
MONTHLY ANNUITY INCOME FOR LIFE

Gender	Age at Purchase 60	65
Male	$378	$418
Female	348	378

Source: Canadian Annuity Exchange (Cannex).

Virtually all employer-sponsored plans are registered, and much of the target replacement ratio will be satisfied in this way. To the extent that it is not, one must assume responsibility for the balance. Obviously it is advantageous to do so through RRSPs.

3.4.3 RRSPs—Background and History

RRSPs started under amendments to the Income Tax Act introduced in 1957. The original legislation provided tax incentives for saving in an RRSP as long as the individual then purchased a *life annuity* by age 71 (now age 69). One could take the proceeds as a lump sum, but this sum would all be taxable income in one year and would thus incur very high tax. Limits on the amount of money that could be placed in an RRSP have been increased regularly.

The intent of RRSPs is to level one's lifetime income. One defers income (and income tax) during the working years and then takes that income (and pays tax) during retirement.

Workers can place their contributions (within limits) into a spousal RRSP. This is often advantageous if the spouse is not earning income or pension credits, since the spouse's income tax bracket after retirement would normally be lower than that of the retired worker. It also provides an incentive to provide retirement income security to the dependent spouse.

3.4.4 Tax Reform

At the same time as it introduced pension reform, the federal government also introduced proposals for tax reform relevant to RPPs and RRSPs. Through tax reform, the government was attempting to correct three perceived shortcomings in the existing system:

1. There was unequal access to tax assistance for workers in different employment situations because the tax incentives differed between employees and self-employed and between defined benefit pension plans and defined contribution arrangements.
2. There was rigidity in the timing of retirement savings. Generally contributions had to be made in particular years or the tax advantage was lost; that is, if one did not take advantage of a tax-deductible contribution in a particular year, that opportunity was gone forever.
3. Dollar limits on tax-deductible contributions and on tax-assisted benefits were not adjusted for inflation. In particular, the amounts that could be contributed to defined contribution plans had fallen behind relative to average wages.

In short, prior to tax reform there were tax incentives that favored the use of defined benefit plans for employer-sponsored pensions over defined contribution (including RRSPs) arrangements. Given the previously noted advantages of defined benefit plans, this may have been fortunate and intentional. Nevertheless, the federal government decided that all forms of private pension schemes (including RRSPs) should operate on a "level playing field" with respect to tax incentives.

In 1999 the maximum pension that the federal government allows in a registered defined benefit plan is 2% of one's best earnings for each year of employment or $1,722.22 per year of employment, whichever is less. A person who works 35 years for the same employer and qualifies for the maximum benefit each year would get a pension of $60,278 a year on retirement. To qualify for this, however, a person would need best earnings of at least $86,111 a year. These limits have been frozen until 2003.

For a defined contribution pension plan, the 1999 maximum contribution that is allowed in a registered plan is $13,500 or 18% of remuneration, whichever is less. These amounts are also frozen until 2003.

Contributions to an RRSP were also limited to the lesser of 18% of earned income and the dollar limits shown in Table 3.9, reduced by the pension adjustment earned in any RPP in the previous year.

After 1996 the $15,500 limit was to have been indexed to the rise in the average industrial wage so as to retain its real value. However, successive governments deferred these increased contribution limits taking effect. In his 1995 budget federal Finance Minister Paul Martin scaled back the contribution level to $13,500, where it will remain frozen until the end of 2003. It is now scheduled to rise to $14,500 in 2004 and then to $15,500 in 2005—a whole decade later than originally intended. This is extremely important. Even if inflation rises only by 2% per annum, the decade deferral in the $15,500 limit effectively decreases the ability to save for retirement by 22% in real terms.

TABLE 3.9
DOLLAR LIMITS FOR REGISTERED SAVINGS CONTRIBUTIONS

Year	Defined Contribution Pension Plan	RRSPs
1994	$14,500	$13,500
1995	15,000	14,500
1996–2003	13,500	13,500

Source: Watson Wyatt Memorandum 1999.

In 1976, when the upper limit on tax assistance for retirement savings was first established, the limit was about five times the average industrial wage. Tax reform in 1991 set the new limit at two and a half times this number, and the 1996 deferral of the extension of these limits effectively means that the eventual cutoff will be twice the average industrial wage (Mercer 1996b).

If one participates in an employer-sponsored plan, the 18%/$13,500 limit is reduced by a factor called a "pension adjustment," which is the "value" of the contribution to the employer-sponsored pension plan. If that plan is a defined contribution plan, it is the total contribution made (employer plus employee). If it is a defined benefit plan, it is nine times the amount of increased benefit in that year. For example, if the defined benefit is 1.5% per year of service, the pension adjustment is 13.5% (9 times 1.5), and the maximum allowable contribution to an RRSP is 4.5% of earnings.

Also, under tax reform, one can no longer roll pension income tax-free into an RRSP. This includes OAS, C/QPP benefits, as well as other pension income. This is consistent with the "deferred wage concept" of tax-encouraged pension plan contributions since the three sources of income listed above do not cease until death. In addition, under recent tax reform, if one cannot contribute the entire allowable amount to an RRSP, any "deficiency" can be carried forward indefinitely. One is still advised to contribute as early as possible, however, to earn the maximum possible tax-sheltered interest.

There are public policy issues around the level of tax incentives provided to private pension plans. Contributions to registered plans (both employee and employer) are tax deductible, and any investment earnings are not taxed until taken as income. Muszynski (1996, p. 121) goes so far as to ask why they should be called "private" plans when the level of public involvement by way of tax subsidization is so significant.

3.4.5 *Registered Payout Options*

The RRSP may be matured or annuitized at any time, except that the annuity payments must commence or the funds must be transferred to an RRIF (explained shortly) prior to the end of the year in which the taxpayer's 69th birthday is reached.

Until 1978 the only form of retirement income that one could purchase from an RRSP was an annuity payable for life. This annuity could have a guaranteed period and could be designed to continue payments to the surviving spouse (last survivor annuity). The more guarantees included, the lower the initial income one receives per unit of RRSP fund.

In 1978 the government introduced two more maturity options. The first was an annuity-certain option payable to age 90 whether the annuitant lives or not, and the second was a special payout scheme, the Registered Retirement Income Fund (RRIF). It is not the purpose of this book to describe these options in detail, but the elderly should investigate these options before committing their life savings (see Turner 1996).

The rules governing RRIFs (which will not be described in detail here) have been liberalized over the years (especially in 1986) so that one can tailor one's income to needs, as long as one withdraws a minimum amount each year and pays income tax on the amount withdrawn. For example, should one wish to retire at age 60 but cannot receive a company pension until age 65, one can take heavier withdrawals from the RRIF for five years and then cut back. Also, one can withdraw larger amounts for emergencies. There is no problem with an RRIF of being forced to buy an annuity when interest rates are low. It is even possible to have more than one RRIF.

RRSPs are a form of a defined contribution pension plan. One makes contributions that grow with earned investment income. As one approaches age 69, one buys an annuity or a payout RRIF. As with other defined contribution pension plans, the interest rate prevailing at the time of the purchase of the retirement income annuity will vary with the prevailing interest rates. Hence, one is well advised not to wait until age 69 to buy a life annuity, in case interest rates decrease just when one is forced to buy. Table 3.10 shows the effect that interest rates have on annuity values. These monthly annuity income figures assume that a $50,000 fund is being used at age 65 to buy a life annuity, guaranteed for 15 years for a male.

TABLE 3.10
ANNUITY INCOMES AT VARIOUS INTEREST RATES

Interest Rate	Monthly Annuity Income
6%	$363.91
8	420.85
9	450.04
10	479.99
11	510.71

Source: Polson and Brett 1993, p. 92.

Many Canadians have locked-in RRSPs, or locked-in retirement accounts from a pension plan. These cannot be cashed out as can a regular RRSP. Until recently the only retirement income option with a locked-in RRSP was the purchase of a lifetime annuity. Now it is possible to purchase a Life Income Fund (LIF). It is also possible to purchase a LIF with any other pension funds.

The LIF is essentially a RRIF with some restrictions. First, one must be at least 55 years old to set up a LIF (there is no minimum age for a RRIF). Also unlike the RRIF, there is a maximum income that can be paid out in any one year (like the RRIF, there is also a minimum amount that must be withdrawn each year). Finally, by age 80 any LIF must be converted to an annuity in all provinces except Alberta and Saskatchewan. This must be a joint-and-last-survivor annuity for those who are married, unless the spouse waives the right.

3.4.6 *The Importance of RPPs and RRSPs to the Economy*

Table 3.11 shows the contributions made to RRSPs by Canadian taxpayers in 1993. As can be seen, RRSPs are used more by the wealthy. There are several reasons for this. First, the poor do not have the disposable income to direct toward RRSPs. Second, the tax incentives that encourage the use of RRSPs are of little or no value to

TABLE 3.11
CONTRIBUTIONS TO RRSPS, AGES 25–64, BY INCOME CLASS, 1993

Income Class	Numbers of Contributors	Percentage of Those with Taxable Returns	Average Contributions to RRSP
Under $10,000	132,063	23%	$1,115
$10–19,999	531,582	23	1,661
$20–29,999	885,262	35	2,058
$30–39,999	973,751	48	2,621
$40–49,999	759,907	57	3,208
$50,000+	1,358,792	69	5,155
Total	4,641,357	43	3,203

Source: National Council of Welfare 1996a, p. 43.

the poor, but are of increasing value as one's income rises. Third, those receiving the federal GIS/SA or provincial supplements will have any RRSP income "taxed back" at marginal rates of 50% to 100% (see Sections 3.2.3 and 3.2.4). Finally, government-sponsored pension plans (see Table 3.2) will replace more than 100% of preretirement net income for the poor, but less than 25% of net income for the relatively wealthy. Thus, RRSPs are not designed to provide a minimum income security floor, but mainly to provide security in maintaining one's standard of living.

RRSP savings provide an important source of investable funds for the economy. In 1969 fewer than 206,000 individuals contributed an average of $867 per person to RRSPs. By 1983, 2.3 million Canadians (or 23% of the paid workforce) contributed to RRSPs, and their average annual contribution was $2,145 (Task Force on Inflation Protection 1988, p. 22). The 1991 legislative changes resulted in extraordinary growth in contributions. While the total assessed income of all tax filers increased just 11% from 1990 to 1993, RRSP contributions grew 70% (Statistics Canada 1996b, p. 80). In 1995, 5.7 million Canadians (or 48% of the paid workforce) contributed to RRSPs, and their average contribution was $4,047, for a total of $23 billion (Statistics Canada 1997c).

Overall, almost one-half (47%) of men saved through RRSPs or RPPs in each of the years 1991 to 1993 (66% did in at least one of these years). For women, the comparable proportions were 36% and 53%, probably because 43% of the women had incomes of less than $10,000 compared to 24% of the men. Among tax filers with incomes of $10,000 or more, women are more likely than men to participate in one or both of an RPP or RRSP (Statistics Canada 1996b, p. 128).

However, Canadians employed in the private sector are not saving enough through their pension plans and RRSPs to guarantee retirement income security. As was mentioned in Section 3.3.3, a recent Canadian Institute of Actuaries Task Force (1995b) found that while most public-sector employees were making adequate provision for retirement through the use of registered plans, only about one-half of the workers in the private sector between ages 25 and 65 and whose incomes were between $20,000 and $80,000 were saving enough for retirement. This is of particular concern when one understands that unused RRSP contribution room can now be carried forward indefinitely and that there presently exists a $179 billion pool of unused contributions (Statistics Canada 1996b).

Total net annual RRSP contributions have risen from $27.5 million in 1960, to $3.7 billion in 1980, and to $19.2 billion in 1993, even though this represented only 15% of what could have been invested and only 11% of tax filers made maximum contributions (Statistics Canada 1996b, p. 13). RRSPs account for 8% of total savings, up from less than 1% in 1970 (Task Force on Inflation Protection 1988, vol. 2, p. 47). By 1993 there were $177.3 billion invested in RRSPs in total (Statistics Canada 1996b, p. 25). Excluded from this amount are an estimated $25 to $30 billion held in self-directed RRSPs, but not deposited with financial institutions (ibid., p. 82). These funds represent an important source of risk capital for the economy (or they could if the national debt were not $600 billion).

Not all of this money is being used to provide retirement income security, however. Many Canadians cash out their RRSP accounts prior to retiring. For example, in 1993, $4.4 billion was withdrawn from RRSPs, or 23% of the total amount deposited. Almost 80% of this amount was withdrawn by persons under 65 years of age

(Statistic Canada 1996b, p. 83). Questions arise as to whether funds that are not used for retirement income security should receive the tax advantages of an RRSP. This issue has not been discussed to any great extent, however, and no legislation has ever been proposed to inhibit early withdrawals. It is interesting to note that in the United States, registered (referred to as "qualified") funds withdrawn prior to age 59 1/2 are subject to a tax penalty equal to 10% of the amount received (with certain exceptions such as disability).

The overall importance of RPPs and RRSPs to the Canadian economy is illustrated in Table 3.12. These assets total $739 billion. Except for the assets of the CPP ($40 billion), this money ($699 billion) is available to be invested in Canadian ventures. One must remember, however, that the federal and provincial debt total $858 billion, which means that there is no net national savings at all (*Globe and Mail* 1997b). If one also considers that 13% of all trusteed pension funds are invested outside of Canada (Statistics Canada 1996b), nothing is left for risk capital.

3.4.7 *Public Policy Issues*

One of the reasons for the deferral in increasing the tax-deductible RRSP contribution limits, and the ability to save for retirement, is the government's perception that the tax incentives provided to RPPs and RRSPs cost the government a lot of money. Just the tax deductibility of contributions is worth $473 per $1,000 contribution for someone in the highest income bracket and $269 to a taxpayer in the lowest bracket (National Council of Welfare 1996a, p. 43). In a 1994 study (Canada 1994), the Ministry of Finance estimated that retirement savings systems cost the federal government $14.9 billion in 1991 ($9.4 billion for RPPs and $5.5 billion for RRSPs), easily the largest federal "tax expenditure." This is because registered contributions are tax deductible and investment income in a registered plan is not taxed until taken as income (most likely after retirement).

The Canadian Institute of Actuaries (1995b, pp. 44–56) disputed these figures. The CIA argued that the Ministry of Finance ignored behavioral response in their analysis; that is, were there no tax incentives for saving for retirement, not as much money would go into registered plans. Adjusting for behavioral response, and some other technical factors, the CIA estimated that the annual cost of the retirement savings system to the federal government, in taxes deferred, is between $4.0 and $5.3 billion. Even this estimate ignores the favorable impact that retirement savings plans have on the cost of income-tested government programs (for example, GIS) and the contribution that retirement savings plans make to capital investment in the Canadian economy.

It has been suggested that perhaps these tax deductions should become tax credits as are given for contributions to the C/QPP. The National Council of Welfare (1996a, p. 44) estimates that Ottawa would gain about $1.4 billion dollars in tax revenues each year if RRSP tax deductions became tax credits. It is difficult to understand, however, why Canadians would use RRSPs to save for retirement if they were to get a 17% tax credit going in to the plan, but paid full marginal tax rates (and clawbacks for OAS/GIS) when the money came out.

Instead of looking at the tax incentives for RPPs and RRSPs as tax expenditures, the government could view the monies accumulating in these funds as the perfect deferred tax asset. This is true because, as the baby boomers retire, they will take their registered income out of their retirement plans and pay income tax thereon, just when the government will need the money to pay for OAS/GIS and health care for the now-aged baby boom.

TABLE 3.12
NUMBER OF CONTRIBUTORS, CONTRIBUTIONS, AND ACCUMULATED ASSETS
C/QPP, RPPs, RRSPs, 1995

Plan	Number of Contributors (Millions)	Contributions (Billions)	Accumulated Assets (Billions)
C/QPP	12.7	$12.8	$ 54
RPPs	5.1	19.7	485
RRSPs	5.7	23.0	200

Source: Statistics Canada 1997c.

3.5 Conclusion

This chapter has reviewed sources of retirement income security. OAS/GIS provide one criterion of economic security, namely, a basic floor of protection. The other requirement of economic security is the maintenance of a consistent standard of living. This is provided by the C/QPP, employer-sponsored plans, and individual savings.

These schemes are not independent. Rather they are interconnected and intertwined. Thus, amendments to one part of the system affect all other parts of the system. This is the focus of later chapters that review recent reforms to the government-sponsored schemes.