The Long-Term Capacity of Workplace Pension Plans to Deliver Retirement Income: A Review of Key Issues

by

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Introduction

The purpose of this study is to assess the ability of workplace pension plans\(^1\) in Canada to be an important source of income for retired Canadians over the long-term future.

The first part of the study provides an overview of the Canadian retirement income system with particular attention to the role of workplace pension plans within that system.\(^2\) Even though the study is focused on the long term, the second part makes note of some current issues with respect to workplace pension plans and addresses the possibility that the future of these plans will not follow a smooth path from the past, depending on how current issues are resolved.

The study then takes a close look at two recent attempts to assess the retirement income prospects of the age cohorts that are approaching retirement. One of the interesting things about these analyses is that the age groups involved include the front end of Canada’s very large baby boom.

The study then discusses some of the longer-term qualitative influences on the ability of workplace pension plans to deliver retirement income in the future. One focus is the impact of demographic change. Demographic changes in Canada and France are compared, and the implications of demographic change for Canadian workplace pension plans are noted. In the case of demographic change, the changes themselves and their implications are reasonably foreseeable.

Looking beyond demographic change, it is possible to identify labour market variables that will have an important impact on the ability of workplace pension plans to be a significant source of retirement income in the future. Unfortunately, the direction of future change in many of these variables is not clear.

It is noteworthy that governments in Canada have not addressed the subject matter of this study in a direct manner. In the 1980s and 1990s, progress was made in requiring financial reporting and projections on publicly administered pension programs, Old Age Security (OAS) and the Canada and Quebec Pension Plans (C/QPP). However, a parallel attempt to assess the adequacy of the incomes that might be generated by publicly and privately administered pension arrangements together was not undertaken. In the concluding section of this study, some thoughts are offered on how one might continue to advance knowledge on the subject matter of the study.

Canada’s retirement income system and the role of workplace pension plans within it

Workplace pension plans play a prominent part in Canada’s retirement income system as part of a three-pillar system. The first two pillars are made up of publicly administered programs that include:
**The basic Old Age Security (OAS) pension**

The basic OAS pension is a flat-rate benefit that pays the same amount of money to all Canadian seniors who satisfy the age and residence requirements (40 years of residence between ages 18 and 65). Partial benefits are paid to seniors with 10 or more years of residence on a pro rata basis, and seniors can qualify with even less than 10 years of residence if they come from a country with which Canada has signed a social security agreement.

Benefits are payable at age 65. They are tax financed and indexed quarterly to changes in the Consumer Price Index. Currently, the basic OAS pension is $491.93* per month ($5,900 per annum); this is roughly 14 percent of average wages and salaries.

Since 1989, higher-income recipients of the basic OAS pension have been subject to a special surtax of 15 percent of their income above a threshold amount. The full amount of the surtax cannot exceed the amount of a full OAS benefit. In 2006, the threshold income level at which the surtax became payable was approximately $63,500 (just under 1.5 times average wages and salaries), and the full basic OAS pension was effectively taxed away at about $100,000.

**Guaranteed Income Supplement (GIS)**

The GIS, as its name suggests, is an income-tested supplement to the basic OAS pension. It pays benefits to qualified OAS recipients who have low incomes.

Under the GIS, maximum benefits are established for each of singles and couples, and the maximum benefits are paid to persons with no income except the basic OAS pension. GIS benefits are reduced by $1.00 for every $2.00 of income from sources other than the basic OAS pension. It is worth underlining that the test for eligibility for GIS is purely an income test; other measures of means and needs are ignored.

GIS benefits are available at age 65 and, like the basic OAS pension, they are tax financed and indexed quarterly to changes in the Consumer Price Index. Current maximum benefit rates are $620.91 per month for singles and $820.08 for couples. Combined with the basic OAS pension, the GIS provides an annual income guarantee to single seniors of just over $13,350, and to senior couples of $21,650. The guarantee to single seniors is 73 percent of the low income line for large cities (those with populations from 100,000 to 499,000), and 96 percent of the low income line for couples.

**Canada and Quebec Pension Plans (C/QPP)**

The C/QPP are mandatory, contributory, earnings-related pension plans for the employed and self-employed. The plans are designed to replace 25 percent of earnings up to an annual maximum known as the Year’s Maximum Pensionable Earnings (YMPE). Maximum earnings are roughly the equivalent of
average wages and salaries, and for 2007 are $43,700. The maximum monthly retirement pension payable beginning at age 65 in 2007 is $863.76.

Retirement pensions can start to be paid at any time between ages 60 and 70. If a contributor wishes to begin receiving a retirement pension between ages 60 and 65, the benefit calculated according to the basic C/QPP formula is reduced by 0.5 percent per month prior to attaining age 65. If a contributor delays the receipt of a benefit beyond age 65, a benefit calculated according to the basic formula is increased by 0.5 percent per month for each month after reaching age 65 when the pension commences.

C/QPP benefits are based on earnings over an entire working career, but the earnings on which benefits are calculated are ‘updated’ at the time of retirement to reflect the growth in earnings over the years. Once benefits begin to be paid, they are indexed annually to reflect changes in the Consumer Price Index.

An entire working career is judged to run from ages 18 to 65. All contributors can remove from their record of earnings 15 percent of this period (a maximum of seven years effective 2013) when their adjusted earnings are below average. In addition, years of below-average adjusted earnings can be deducted from the record of earnings of contributors for periods during which they cared for a child aged under seven.

The C/QPP also provide survivor, disability and death benefits as well as benefits for the children of survivors and disability recipients. Generally speaking, periods in receipt of C/QPP disability benefits are deducted from the 40-year work life requirement for full retirement benefits.

The C/QPP are financed primarily from earnings-based contributions paid by employers, employees and the self-employed. However, the C/QPP have a rather large reserve fund equalling five years’ expenditure. The combination of investment income and contributions is designed to allow the contribution rate to remain stable in the future.

Several things are quite striking about Canada’s publicly administered pension programs.

First, they are very modest in size. This is clear whether one looks at current actual incomes of seniors by source [OECD 2001; Yamada 2002] or whether one looks at the incomes that are projected for the future by source [OECD 2005].

Second, the mix of public programs in Canada is also somewhat unusual by international standards in that earnings replacement through the C/QPP is comparatively underemphasized while programs that provide minimum income guarantees are relatively strong. The basic OAS pension and the GIS are not only strong in addressing the low income issue by international standards, but they provide higher benefits in a less intrusive way than are provided to Canada’s non-seniors with low incomes. However, the basic OAS pension and the C/QPP retirement pension combined only replace 40 percent of average earnings of individual workers. Thanks to the flat-rate basic OAS pension, these programs
replace higher percentages of lower earnings (55 percent of half average wages) and smaller percentages of higher earnings where the low ceiling on C/QPP benefits also comes into play (e.g., the basic OAS pension and the C/QPP retirement benefit replace only 20 percent of twice average wages). The combination of the basic OAS pension, the GIS and the C/QPP retirement benefit comes close to providing a flat-rate benefit to seniors.

Third, Canada’s public pension programs will not, by themselves, provide adequate incomes in retirement. In particular, they will fall well short of allowing middle and higher earners to maintain their standard of living in retirement. Thus, if middle and high earners want to maintain their standard of living in retirement, they will have to supplement public pension benefits with income from workplace pension plans and/or registered retirement savings plans (RRSPs) and/or savings that have not been tax sheltered. This is not only an observed fact, but an outcome sought through public policy choices.

In both the 1960s and again in the 1980s, the overall structure of Canada’s retirement income system was debated. In both cases, the governments of the day concluded that the publicly administered programs should be kept small in order preserve room for private pensions and individual savings to play a significant role [Bryden 1974; LaMarsh 1968; Simeon 1973; Finance Canada 1984]. The role played by private arrangements in facilitating the maintenance of living standards increases with pre-retirement earnings, thanks to the structure of the public arrangements. Indeed, thanks to the tax back rate on the GIS and the presence of other selective measures for seniors with low incomes, it has been argued that they have little incentive to save for retirement [Shillington 1999].

Workplace pension plans have existed in Canada since the late nineteenth century when the Government of Canada (usually referred to as the federal government) established a pension plan for its employees. While provincial governments and a number of large private-sector employers followed suit relatively quickly, it was not until the period following the Second World War that workplace pension plans became widespread. It was at this time that unions began to make pensions an important item in collective bargaining.

Generally speaking, workplace pension plans are created by individual employers for their own employees. There is no legal obligation on employers to create a pension plan and, when they do, it is usually with a view to attracting and retaining employees and facilitating the orderly exit of older employees. There are, however, occasions where workplace plans are created through the collective bargaining process. Often the union-initiated plans are designed to provide pensions to workers at a number of different workplaces in the same industry or occupational group in a particular geographic area. For reasons that are explained below below, these union-initiated plans are often referred to as target-benefit multi-employer pension plans (MEPPs).

The public policy interest in workplace pension plans is manifest in the fact that such plans receive tax support in two forms. Within limits prescribed by the Income Tax Act and regulations, contributions to workplace pension plans by employers and employees are tax deductible, and investment earnings of a pension fund are non-taxable. When pension benefits are paid out, they are taxed as normal income.
The income tax rules governing pensions and RRSPs underwent substantial change in the early 1990s. Prior to that time, the income tax rules gave a substantial preference to defined benefit (DB) pension plans compared to defined contribution (DC) plans and RRSPs. For moderate to high earners, DB plans could get tax sheltering in support of benefits that greatly exceeded what could be provided by DC plans and RRSPs. One of the major motivations for the income tax reforms of the early 1990s was to equalize the tax support that was available to different types of retirement savings vehicles. In particular, there was a desire to equalize the tax sheltering opportunities between DB plans and RRSPs. This was seen as improving the relative opportunities for retirement savings of the self-employed versus the employed.

The new income tax rules are highly integrated. An annual retirement savings ceiling (the maximum allowable ‘room’ for tax-sheltered retirement savings) is established based on a taxpayer’s earnings in the previous year. Benefit accruals under DB plans cause a deduction to be made from the maximum tax room available, as do DC contributions. The residual is available for tax deductible contributions to an RRSP. Tax room that is not used in one year can be carried forward to future years without limit until age 69.

There are certain respects in which the design of workplace pension plans reflect quite strongly the provisions of the *Income Tax Act*. These are noted below.

Workplace pension plans are also quite closely regulated under pension benefit laws that operate in all of Canada’s legal jurisdictions except for the small province of Prince Edward Island. Regulatory jurisdiction in Canada is deemed to be a derivative of the responsibility to regulate specific industries. Under Canada’s Constitution, the federal government has the right to regulate certain industries, including banking, inter-provincial and international trade and transportation, and communications. Thus, the federal government also has the responsibility to regulate workplace pension plans whose members work in those industries. Provincial governments regulate workplace pension plans that apply to workers in other industries. The federal regulatory jurisdiction applies to about 10 percent of plans and plan members. Ontario is the largest regulatory jurisdiction.

Despite the fact that the field of pension regulation is occupied by 10 federal and provincial players, there are some general similarities in the regulatory law that are worth noting, particularly in three areas: financing requirements, minimum benefit protections and governance. In addition, it is important to note that, in all jurisdictions, pension benefit laws have been written with a view to providing minimum standards for the protection of plan members. The laws are explicit that pension plan provisions that provide more generous protection to plan members than is required by the laws are acceptable under the laws.

The overriding objective of the financing requirements for DB plans is that such plans be self-insuring. Thus, the pension benefit laws require employer contributions to equal the value of benefits that accrue each year, minus any employee contributions. Contributions must be deposited with and invested by a pension fund that operates at arm’s length from the employer itself. In addition, two pension balance sheets must be prepared on a regular basis, once in no more than every three years, to compare
the plan’s assets and liabilities. One balance sheet has to be prepared on a ‘solvency basis,’ meaning that it has to be prepared as if the pension plan is being wound up on the effective date of the valuation. The other balance sheet has to be prepared on a ‘going-concern basis,’ meaning that it has to be prepared as if the plan will last forever. If a solvency balance sheet reveals a deficit, the shortfall must be amortized over no more than five years, while a deficit on a going-concern basis can be amortized over as long as 15 years. (Some recent developments with regard to these rules are discussed below.)

Pension benefit laws also establish certain minimum benefit protections for plan members. Key issues dealt with in all jurisdictions include:

- rules governing eligibility for plan membership
- rules governing benefits to be paid in the event of termination of plan membership before retirement
- the benefits to be paid in the event of a plan member’s death before or after retirement
- early retirement benefits.

Among Canadian jurisdictions, there is a great deal of commonality in the ways these issues are dealt with.

If a pension plan offers the opportunity to participate in it to a particular class of employees, any person who qualifies as a member of that class of employees must be allowed membership in the plan after two years of service with the employer. Part-time employees must be allowed membership if for two successive years they have earnings above a threshold level. The threshold level is 35 percent of average wages and salaries, which is a high threshold level. Some jurisdictions supplement the earnings threshold with an ‘hours-of-work’ threshold.

In most Canadian jurisdictions, benefits from workplace pension plans must be vested if a plan member leaves the employer after two years of plan membership but before the plan member has come within 10 years of being eligible for unreduced retirement benefits. In the case of DC plans, this means that the employer and employee contributions belong to the plan member, as do the employee contributions from the first day of participation in the plan. In the case of DB plans, it means that the accrued benefit promise must be honoured after two years of plan participation.

When a plan member has a vested benefit and leaves their employer before reaching retirement age, the member has three options:

- the member can leave the money with the plan he or she is leaving and get a benefit at retirement age
- the member can transfer the commuted value of his or her DB benefit or the DC accumulation to an individual ‘locked-in’ retirement savings vehicle (RRSP)
- the member can transfer the commuted value or DC accumulation to a new employer’s pension plan if the new employer will accept the money.
In order to protect employers and other plan sponsors against having to maintain large numbers of records where small amounts of money are involved, pension benefit laws allow employers to require small accumulations to be transferred to ‘locked-in’ RRSPs. In addition, the laws in all jurisdictions require that employee contributions plus interest not amount to more than half of the lump-sum value of DB benefits on termination of employment – something that could easily be the case until an employee is aged in the 40s.

In the event that a plan member dies before reaching retirement age, the lump-sum value of his or her DB benefit, or the amount of money that has been credited to his or her DC account, must be transferred to the member’s estate. When a plan member reaches retirement age, the member must take a benefit in the form of a joint survivor benefit, with the survivor benefit amounting to 60 percent of the retirement benefit carrying on to the surviving spouse of the plan member. In spite of this requirement, many plans still provide that the ‘normal form’ of benefits is something other than a joint survivor pension, and in many cases the ‘normal form’ will have a lower actuarial value than a joint survivor pension. For example, the ‘normal form’ might be a benefit only for the life of the plan member, or for the life of the plan member with a guarantee of payments for a period of 10 years. The regulatory laws permit workplace pension plans to satisfy the need to provide a survivor benefit by actuarially reducing retirement benefits in cases where the ‘normal form’ of benefit is less in value than a joint survivor pension.

The regulatory laws also require that when a plan member is within 10 years of the earliest age at which the member can qualify for unreduced benefits, she or he must be allowed to receive an early retirement benefit on an actuarially reduced basis. An actuarially reduced benefit is one that is calculated according to the benefit formula in the plan, and then reduced to reflect the longer period of payment. In most Canadian workplace pension plans, the actuarial reduction is calculated according to a formula that approximates actuarial equivalence. The most common reduction formula is 0.5 percent per month for each month prior to the age at which ‘unreduced’ benefits would be available.

The benefit protections that are prescribed by pension benefit laws and that have just been discussed are commonly directly reflected in Canadian workplace pension plans. In context, it should be noted that many such plans provide joint survivor benefits as the normal form of payment, while many do not.

With one notable exception, all jurisdictions require that a company, person or committee be designated as the plan administrator responsible for the overall operation of the plan. Plan administrators can and do hire professional support in various areas but cannot delegate their overall responsibility for the plan. The extent to which professional service providers (e.g., actuaries; pension fund managers; lawyers) owe fiduciary duty to plan members is a hotly debated issue, as is the question where an employer’s responsibility as an employer ends and its fiduciary responsibility begins. Typically, in a single-employer plan, the administrator will be someone designated by the employer sponsoring the plan. Plan members can require the creation of an advisory committee and are entitled to general information about the plan if they request it. They must be provided with information on an annual basis about the status of their own pension entitlement.
The province of Quebec provides an important exception to the general rule just described. In Quebec, the plan administrator must be a committee, and the committee must include one voting member who represents plan members who are still employed and one voting member who represents retired plan members. The committee must also include a non-voting alternate who represents active plan members and a voting member who is neither a plan member nor a representative of the employer.

In union-initiated multi-employer pension plans, the administrator is a board of trustees that is either made up solely of union representatives or, more commonly, a mix of union and employer representatives.

Within the tax and regulatory framework just described, there is a great deal of variety in the basic features of Canadian workplace pension plans. Presently, just over half of Canadian plans are DC plans, but only 20 percent of plan members belong to DC plans. Over the period since the mid 1980s there has been an ongoing move from DB to DC plans, and this trend has accelerated somewhat since 2000. Moreover, some data sources suggest that the shift to DC plans has been understated in the most commonly used source of data on workplace pension plans in Canada.

Within the DB world, there are also changes in the use of different types of benefit formula. A common element in DB benefit formulae is that benefits are based on years of service under the plan. However, what one becomes entitled to based on years of service varies among several basic plan types.

- **Final average earnings** plans provide a percentage of earnings averaged over the final several years of employment for each year of service;
- **Best average earnings** plans provide a percentage of earnings averaged over the best years of earnings for each year of service;
- **Career average earnings** provide a percentage of each year’s earnings for each year of service; and
- **Flat benefit** plans provide a fixed number of dollars per month for each year of service.

Irrespective of the type of benefit formula in a workplace pension plan, rules under the *Income Tax Act* do not permit DB benefits to be paid that exceed: $2,000 multiplied by the number of years of service, or 2 percent multiplied by the number of years of service multiplied by a person’s best three years consecutive earnings. (DC plans face an effective limit on combined employer and employee contributions of 18 percent of earnings up to $100,000, which is about 2.5 times average wages and salaries.)

Table 1 shows the distribution of workplace pension plans and plan membership in 2004.
Four things about the data in Table 1 deserve comment.

The fact that nearly half of the workplace pension plans are DC schemes, while only about one fourth of plan members are in DC plans, indicates that DC plans are more common at smaller workplaces. Smaller employers prefer the certainty of their financial obligations under DC schemes and the comparative administrative simplicity of DC plans. DB plans have held up against the trend to DC schemes in three sectors in particular: plans for public employees, the unionized private sector and plans set up exclusively for executives.

Flat benefit plans are overwhelmingly plans for union members in the mining and manufacturing sectors.

Career average earnings plans were very widespread into the early 1970s. However, the strong wage growth and inflation of that period exposed their limitations, and they were generally abandoned in favour of best average earnings plans.

It is important to note that while the distinction between DB plans and DC plans is taken at face value in this discussion, there are many types of hybrids as well. The target-benefit multi-employer pension plans are an important case in point. In these plans, unions negotiate a contribution rate with employers, and the employers’ financial obligation is limited to contributing at the agreed rate. In this respect, they are like DC plans. The board of trustees of the plan works with a plan actuary to determine a benefit level that can be provided by the plan based on the contribution rate, the age structure of the membership and so on. Benefits are usually established in flat dollar amounts per year of service. In this respect, they are like DB plans. However, the trustees of these plans have a right that is not normally available to the administrator of a DB plan: If a multi-employer pension plan gets into financial difficulty, the trustees can lower accrued benefits, including benefits in pay. Normally, the administrator of a DB plan can only lower the benefit rate associated with future service.

### Table 1

<table>
<thead>
<tr>
<th>Plan type</th>
<th>Number of plans</th>
<th>Number of plan members</th>
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<tbody>
<tr>
<td>Defined contribution</td>
<td>7,507</td>
<td>876,559</td>
</tr>
<tr>
<td>Defined benefit</td>
<td>7,014</td>
<td>4,557,408</td>
</tr>
<tr>
<td>Best or final average earnings</td>
<td>3,450</td>
<td>3,366,819</td>
</tr>
<tr>
<td>Career average earnings</td>
<td>2,618</td>
<td>186,043</td>
</tr>
<tr>
<td>Flat benefit</td>
<td>946</td>
<td>669,824</td>
</tr>
</tbody>
</table>

There is also a great deal of variation among DB plans with respect to two other basic aspects of their design, namely the age at which unreduced benefits are available and the presence of formal inflation protection. Almost all workplace pension plans in Canada provide that age 65 is the normal retirement age; 94 percent of all plans with 89 percent of all members do so. However, it is also common in large plans in the public sector and, to a lesser degree, in the private sector to establish other conditions under which unreduced benefits are available (i.e., benefits established according to the benefit formula in the plan with no further actuarial reduction). In the unionized parts of the mining and manufacturing sectors, a straight service requirement of 30 years of service is common in large plans (e.g., in auto assembly and steel). Elsewhere, it is more common for eligibility to be established through a formula that includes age plus years of service. A common formula is age plus service equals 85. Often when pension benefits are available before age 65, it is also the case that special benefits are paid from the age of early retirement until age 65 because neither the basic OAS pension nor ‘full’ C/QPP retirement benefits are available until that age. These special benefits are known as ‘bridging benefits.’

Formal provisions to adjust retirement benefits in line with changes in the Consumer Price Index were almost unheard of at the beginning of the 1970s. Sadly, pensions that began on January 1, 1970, and that were not adjusted during the decade lost half of their purchasing power by the end of the decade. Not surprisingly, the 1970s were a period when progress was made in terms of providing inflation protection. However, even today, formal inflation protection is the exception rather than the rule. Table 2 shows the percentage of workplace pension plans and plan members who received either full or partial inflation protection in 2004 in the public and private sectors.

<table>
<thead>
<tr>
<th>Sector/degree of inflation protection</th>
<th>Plans</th>
<th>Plan members</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number</td>
<td>Number</td>
</tr>
<tr>
<td><strong>All Sectors</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Full</td>
<td>548</td>
<td>780,559</td>
</tr>
<tr>
<td>Partial and other</td>
<td>2,585</td>
<td>1,548,209</td>
</tr>
<tr>
<td><strong>Private Sector</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Full</td>
<td>486</td>
<td>44,809</td>
</tr>
<tr>
<td>Partial and other</td>
<td>2,270</td>
<td>364,626</td>
</tr>
<tr>
<td><strong>Public Sector</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Full</td>
<td>62</td>
<td>735,750</td>
</tr>
<tr>
<td>Partial and other</td>
<td>163</td>
<td>1,139,252</td>
</tr>
</tbody>
</table>

In general, full inflation protection has become quite common in large public sector plans, and this has been the case for some years. It is striking that, in the private sector, there is a rather large number of smaller plans with full or partial inflation protection. These are likely plans for corporate executives.

### Table 3
**Workplace pension plans and RRSPs as sources of income for Canadians aged 65 and over, selected years**

<table>
<thead>
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</thead>
<tbody>
<tr>
<td>Percent with pension income</td>
<td>27.9</td>
<td>35.1</td>
<td>45.4</td>
<td>53.2</td>
<td>66.3</td>
</tr>
<tr>
<td>Pension income as a percent of total income</td>
<td>10.4</td>
<td>10.5</td>
<td>14.8</td>
<td>22.3</td>
<td>29.4</td>
</tr>
<tr>
<td>Average amount of pension income</td>
<td>$8,394</td>
<td>$8,170</td>
<td>$10,632</td>
<td>$13,351</td>
<td>$15,881</td>
</tr>
<tr>
<td>Average amount of total income</td>
<td>$23,803</td>
<td>$27,380</td>
<td>$32,677</td>
<td>$31,834</td>
<td>$35,363</td>
</tr>
</tbody>
</table>

#### Women seniors

| Percent with pension income | 17.6  | 17.6  | 34.2  | 47.9  |
| Pension income as a percent of total income | 7.8  | 11.6  | 17.4  | 31  |
| Average amount of pension income | $6,349 | $7,284 | $8,490 | $8,830 |
| Average amount of total income | $14,372 | $16,912 | $16,883 | $18,315 |

#### Men seniors

| Percent with pension income | 39.9  | 48.3  | 57.4  | 68.1  |
| Pension income as a percent of total income | 16.0  | 21.3  | 31.3  | 40.2  |
| Average amount of pension income | $9,227 | $12,136 | $14,950 | $15,169 |
| Average amount of total income | $23,051 | $27,458 | $27,362 | $28,223 |

**Note:** All dollar amounts are in constant 2000 dollars.

Having reviewed many features of the design of workplace pension plans and noted how they have been brought into being, it is important to assess their role as a source of retirement income in Canada. Table 3 provides data on the growth in income from workplace pension plans and RRSPs over the period from the early 1970s to 2000.

The period from 1973 to 2000 was marked by rapid income growth for Canadian seniors. The growth in real total incomes of senior households and of men and women seniors is clearly shown in Table 3. Between 1973 and 2000, the incomes of senior households grew by nearly 50 percent. Over the period from 1981, the real incomes of individual men and individual women seniors increased by 22 percent and 27 percent, respectively. Not shown in the table, but equally true is, that the income gap between senior households and non-senior (prime-age) households declined but did not disappear. Poverty among seniors also declined significantly [Baldwin and Laliberté 1999; Myles 2000].

It is also striking that, while the real incomes of seniors grew rapidly, income from workplace pension plans and RRSPs grew even faster. Thus, while pension income amounted to only 11 percent of the income of senior households in 1981, it amounted to 29 percent in 2000. The percentage of senior households in receipt of pension income increased from 35 percent to 66 percent.

It is also evident from Table 3 that workplace pension plans have historically been a more important source of income for senior men than for senior women. In 1981, senior men were more than twice as likely as senior women to be in receipt of pension income. By 2000, senior men were about 1.5 times as likely as senior women to have pension income. The difference between men and women in this respect reflects both a difference in historic patterns of labour force participation and a lower likelihood of employed women belonging to workplace pension plans. Both sources of difference have declined in recent years. According to the most used Canadian data source on pension coverage, there is no longer any difference between the percentages of employed men and women belonging to workplace pension plans.

There are some things about income from workplace pension plans which are not reflected in the data in Table 3 and that are worth noting.

Within the senior population, income from workplace pension plans is concentrated at the higher end of the senior income spectrum. In the year 2000, more than 80 percent of men over 65 in deciles five through 10 received income from workplace pension plans, and the amount of income received from workplace pension plans increased with each decile and always amounted to more than 25 percent of income. In decile nine, pension income amounted to more than half of total income. In deciles one through three, the following percentages of men received pension income: 11 percent, 23 percent and 41 percent. For senior women, the pattern is broadly similar but at lower levels of receipt. More than 80 percent of women in deciles eight, nine and 10 have pension income as do just under 70 percent in decile seven. However, in the lower five deciles, 25 percent or less of senior women have pension income. As one would expect, pension income is a smaller share of total income for women than for men.

It is not at all evident from the data in Table 3, but it is worth noting that, relative to income provided by publicly administered pensions, income from workplace pension plans is even more important prior to age...
65 than it is after. This is because the basic OAS pension, the GIS and unreduced C/QPP retirement benefits are not available until age 65. Indeed, with the introduction of the C/QPP in 1966, many workplace pension plans were restructured, to some degree, to place greater emphasis on the provision of benefits before age 65 and less on providing a lifetime benefit thereafter.

Finally, as was noted above, the share of income that seniors received from workplace pension plans increased greatly in the latter part of the twentieth century as did income from the C/QPP. Indeed, the maturation of these two sources of income was vital to the improvement in living standards noted above. The sources of income that declined in importance over the period are employment income and investment income. The decline in employment income is ‘expected’ in the sense that the pension systems that were maturing were designed to facilitate exit from the labour force. The decline in investment income may reflect a number of things, one of which may be the substitution of pension savings for other forms of investment.

Some current concerns about workplace pension plans

Although this study deals with longer-term issues facing workplace pension plans and their ability to provide retirement income, it is important to make brief note of some current concerns about such plans because the successful or unsuccessful resolution of these issues could put workplace pension plans on a different trajectory than at present. Thus, the starting point for the consideration of long-term developments could change considerably. Although a sudden change in direction in the development of workplace pension plans is not highly probable, neither is it out of the question.

One of the major concerns about workplace pension plans has been evidence of an ongoing decline in the portion of the employed workforce that participates in such plans. Data that emerges from Canada’s best known data source on pension plans, the Pension Plans in Canada (PPIC) database, show that the percentage of employed workers that participate in these plans reached a peak in the early 1980s and has been trending downward since that time to 39 percent in 2004. This downward trend is a source of concern about the ability of workplace pension plans to provide income to seniors of the future. That said, it is important to note at the same time that the longstanding gap between the portion of employed men and employed women who participate in these plans has disappeared over the years. Unfortunately, they have equalized at the lower female rate of participation.

Three considerations might mitigate, by degree, the concern that one would otherwise have about the decline in the coverage rate.

First, the use of employed persons in the denominator of the coverage calculation is appropriate insofar as one is concerned about whether employed persons will be able to replace their earnings in retirement. However, if one is concerned about the portion of seniors in the future who may have some pension income, the denominator in the calculation could be all persons aged 18 to 64. With the total adult population as the denominator, pension plan coverage has been very stable over the years, as can be seen in
Table 4. What underlies the different trends in the two measures is an increase in the employment-to-
population ratio in recent years.

As one would expect, however, the overall stability reflects a declining portion of adult men covered
by workplace pension plans and a growing portion of adult women covered.

Second, it is important to note that no country has pension plan coverage much in excess of 50 percent
unless such coverage is effectively made mandatory through legislation or highly centralized collective
bargaining. The Netherlands and Switzerland provide examples of achieving high coverage through legislation,
and Sweden and Denmark provide examples of achieving high coverage through centralized collective
bargaining [Queissar and Whitehouse 2006].

Finally, there is a measurement issue with respect to the PPIC data. This database does not include
information on what are know as group RRSPs. These are individual retirement savings accounts that are

<table>
<thead>
<tr>
<th>Year</th>
<th>All members as a percentage of the total population</th>
<th>Male members as a percentage of the male population</th>
<th>Female members as a percentage of the female population</th>
</tr>
</thead>
<tbody>
<tr>
<td>1974</td>
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<td>41</td>
<td>18</td>
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<tr>
<td>1982</td>
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<td>25</td>
</tr>
<tr>
<td>2004</td>
<td>27</td>
<td>29</td>
<td>25</td>
</tr>
</tbody>
</table>

Source: Author’s calculations based on Statistics Canada [2006] and Statistics Canada Census Population data and
between-census population estimates.
established by agreement between employers and financial institutions. Through group RRSPs, employers (and often employees) make contributions to retirement savings accounts that are established for individual employees and that belong to the employees. Conceptually, group RRSPs are very much like DC pension plans. However, because they operate outside the regulatory framework for workplace pension plans, their existence is not captured in the PPIC data.

In the mid-1990s, two researchers, Lipsett and Reesor [1997], estimated that a coverage rate by workplace pension plans of 42 percent without including participation in group RRSPs would be 51 percent if participation in group RRSPs were reflected in the data. However, if one wishes to consider group RRSPs as part of the universe of workplace pension plans, the shift from DB to DC is more pronounced than is indicated by the PPIC data. Given that group RRSPs are found predominantly in the private sector, the 25 percent of members of workplace pension plans in the private sector who belong to DC plans would be 33 percent if group RRSPs were included among DC plans.

The shift from DB to DC plans has also been a source of concern. The major issue that has been raised is the unpredictability of the incomes to which DC plans give rise. In addition, Canada’s financial regulators have expressed concern about the appropriateness of the range of investment choices offered to DC plan members and whether they have sufficient access to investment counselling to make informed choices [Joint Forum of Financial Market Regulators 2004]. Even more fundamental concerns have been raised by a leading finance economist about the knowledge of investment advisors [Bodie 2003].

Since 2000, the financial problems of DB plans have attracted a good deal of attention. Both the asset and the liability sides of the pension balance sheet have faced adverse experience in the past seven years compared to the experience of the 1980s and 1990s when pension surpluses were widespread. On the asset side, the fall in stock prices from early 2000 through early 2003 reduced accumulated assets. Moreover, as long-term interest rates fell, so did the discount rates used to value DB liabilities. Thus, plan liabilities were increasing in response to interest rate declines while asset values were falling. The result was widespread underfunding of DB pension plans. In the province of Ontario, the percentage of DB plans that are underfunded on a solvency basis increased from 58 percent in 2001 to 83 percent in 2004 [FSCO 2006].

The underfunding led to the need for employers to increase their contributions to DB plans from $6.5 billion in 2000 to $18.5 billion in 2004. This increase is not attributable to membership growth in DB plans because there was none. Not surprisingly, some employers decided that this was the time to convert DB plans to DC plans. Another effect of underfunding was that some high profile employers came to the brink of bankruptcy with insufficient assets in their pension funds to pay all promised benefits, leaving plan members with the prospect of reduced benefits. The financial situation of DB plans has spawned a widespread debate over the appropriateness of financing rules and the best means of securing plan members’ benefits. Several jurisdictions have adopted ‘temporary’ measures to provide some relief in terms of required contributions to workplace pension plans. However, generally speaking, these measures do not provide permanent solutions to financing problems and leave plan members’ benefits somewhat more exposed to risk.

The impact of declining stock prices and interest rates has been discussed most widely with respect to DB plans. The point should not be missed, however, that the same developments affected DC plans as well.
Their asset accumulations fell and declining interest rates raised annuity prices. However, given that these developments in DC plans were felt by individuals rather than corporations and institutions, they tended to attract little attention.

It was noted above that there are some unresolved issues about governance of workplace pension plans in Canada. These focus on the imprecision in the boundary line between where the responsibilities of employers sponsoring plans end and where their fiduciary duties begin [Gillese 1996]. There are also unresolved issues about the fiduciary duties of professional service providers to plans (such as, actuaries) and about the proper role of plan members in plan governance. These debates about governance are intrinsically interesting. They also overlap with financing debates in that key pension financing decisions are being made and, in some cases, it is not clear that the decision-makers are the same people who have to bear the consequences of the decisions.

**Canadians approaching retirement age: Some recent estimates of their likely well-being in retirement**

In the recent past, two systematic efforts have been made to gain insight into the retirement income prospects of persons who are approaching retirement age. While these efforts have employed quite different methodologies, in very general terms they have reached a common conclusion. They also provide insight into the pre-retirement conditions that are likely to make for a comfortable retirement, including the role of participation in workplace pension plans.

One of these analyses was built on the results of the 1999 Survey of Financial Security (SFS) [Maser and Dufour 2001]. The SFS is a survey of the assets and debts of Canadians which is conducted on an intermittent basis by Statistics Canada, Canada’s national statistical agency. The 1999 version of the SFS asked respondents if they belonged to a workplace pension plan or an individual or group RRSP. Enough information was gathered about the workplace pension plan that the actual plan to which the respondent belonged could be identified. Thus, detailed qualitative information could be gathered about a respondent’s pension plan coverage without concern about the accuracy of the respondent’s knowledge. (An illustration of why data on the coverage by workplace pension plans based on household surveys can be a problem is found in Morissette and Zhang [2004]).

The 1999 SFS was the first Canadian survey of its kind that permitted insight into the extent of the private pension wealth of Canadians. A general conclusion that emerged from the SFS was that, for adult Canadian households, private pension assets are the second biggest asset Canadians have after their principal residences. Some of the social and economic characteristics that are positively associated with private pension wealth are income, being employed in the public sector and having a management occupation. Not surprisingly, private pension wealth peaks in the age range of 55 to 64 years. Pension wealth is also very highly concentrated, with more than 80 percent being held by one-quarter of households.
Maser and Dufour also used the SFS data to assess the likelihood that households approaching retirement age would be able to maintain their standard of living in retirement. They looked at households in which the head of the household (defined as the person with the highest income) was aged 45 to 64 in 1999 and was still employed. Persons in this age range were born between 1933 and 1954 and therefore include the front end of the baby boom. The definition of persons who will be able to maintain their standard of living were: persons with earnings above Statistics Canada’s low income lines; persons whose income in retirement will be two-thirds or more of their pre-retirement income; and individuals with incomes above $60,000 and couples with incomes above $100,000, irrespective of pre-retirement income.

The basic approach taken to determining whether persons were in a position to maintain their standard of living in retirement was to compare the wealth they had accumulated by 1999 with a target level of wealth they should have accumulated by that time in order to satisfy the income maintenance criterion noted in the previous paragraph. The actual wealth that had accumulated by 1999 included workplace pension plan and RRSP wealth. However, it also included half of the equity that persons had in their home, equity that persons had in other real estate or a business, and financial assets other than pensions. The estimate of the wealth needed also took account of the basic OAS pension, the GIS and C/QPP benefits to which persons will be entitled.

The overall conclusion reached through the analysis was that approximately one third of households in the age group that is approaching retirement age have not accumulated enough wealth to maintain their standards of living in retirement. (If the threshold replacement rate for judging adequacy is raised to 80 percent, 44 percent of households have likely not saved enough.) The likelihood of not having enough assets to maintain living standards in retirement is greater at the two ends of the income spectrum than it is in the middle. Thus, the odds of not matching the two-thirds threshold (or the low income line) decline from very low earnings to approximately one half of average wages and salaries, and they increase steadily thereafter.

The low probability of persons with very low earnings having an adequate income reflects the difficulty they will have generating an income above the low income line. However, the fact that the lowest probability of having an inadequate income is as low as half average wages reflects the structure of Canada’s public pension benefits, which reduces the need for retirement saving at the low end of the earnings spectrum. It is not the case that persons at the low end of the spectrum have more assets. As levels of earnings rise, the need for private pension wealth increases, and if it is not present, inadequate income will result. The net worth of households with incomes above $75,000 that have not saved enough is barely half that of those that have ($235,300 versus $628,400).

The probability of having an inadequate income varied with several social and economic characteristics. For example, the self-employed are less likely to have inadequate savings, thanks in part to their having accumulated business assets. Home-ownership with no mortgage is another important attribute of persons who have saved enough. Working in the public sector and having higher than median incomes are also associated with having saved enough for retirement.

Given the subject matter of this study, it is unfortunate that Maser and Dufour focused so little attention on the role of workplace pension plans in their analysis. What is clear is that pension wealth is the largest
source of wealth that is included in the analysis, 44 percent of the total. In addition, the high probability of households in which the household head is employed in the public sector having saved enough for retirement likely reflects the high quantity and quality of coverage by workplace pension plans in the public sector. One thing that was not done in the analysis was to take the universe of persons who are plan members and try to determine the likelihood within that population of not having an adequate income in retirement.

The other recent attempt to assess the preparedness of near retirees for having a materially comfortable retirement was based entirely on persons’ self-assessment of their preparedness [Schellenberg 2004]. The data that was used in the analysis came from the General Social Survey (GSS) of 2002. The GSS is undertaken on an annual basis but has thematic foci that change from year to year. Retirement issues are the focus once in every several years, and the 2002 version was the most recent to focus on retirement.

For purposes of this study, it is important to note that the GSS respondents aged 45 to 59 (birth cohorts 1943 to 1957) who had never retired were asked to assess the adequacy of their financial preparation for retirement and whether they think their income in retirement will be adequate. No guidance was given to the GSS respondents in terms of how adequacy was to be defined.

The overall result was that about one in three GSS respondents (30.8 percent) said that their preparation was not adequate, and 38.0 percent thought their income would be barely adequate or inadequate. The GSS allows the sense of preparedness to be compared with a wide range of social and economic characteristics. Thus a greater sense of preparedness was found among respondents who belong to a workplace pension plan, own their own home, have higher personal and household incomes, and have more weeks of employment during the year.

As was true of the analysis based on the SFS, the self-employed seem to be better prepared for retirement, although Schellenberg notes that the self-employed plan to retire later and do, in fact, retire later. Positive perceptions of one’s health status are also positively related to self-assessed preparedness for retirement. Being a recent immigrant to Canada is negatively related to preparedness.

Fault could easily be found with both the Maser and Dufour and the Schellenberg analyses. Yet the consistency of the overall results and a number of the characteristics that are associated with being adequately prepared for retirement suggest that the results merit attention. The age group dealt with in the two analyses is important because it includes the front end of Canada’s very large baby boom generation (persons born between 1946 and 1966). They are a large enough group that their well-being will be a significant determinant of the overall well-being of Canadians. However, as will be noted in the following portions of this study, there are other forces at play that may have an impact on pension incomes well beyond the baby boom years.
Demographic change and workplace pension plans

Canada, like most high income countries, is going through a period of demographic change characterized by a significant ageing of the population and a deceleration of population growth. The effect of this change on the operation of Canada’s public pay-as-you-go pension plans has received a great deal of attention. However, the impact of demographic change on the operation of workplace pension plans has not received comparable attention.

This section of the study will describe the demographic changes that are well under way in Canada and, to provide some context, will compare them with similar developments in France. The implications of these developments for workplace pension plans will be considered. The focus of this discussion will be overwhelmingly on DB plans. This discussion will also make note of two or three issues that are pertinent to both workplace pension plans and publicly administered pension plans in Canada.

One of the most widely used measures of population ageing is the percentage of the population aged 65 and over. As can be seen in Table 5, both Canada and France have been in, and will continue to go through, a process in which larger parts of the population are aged 65 and over.

<table>
<thead>
<tr>
<th></th>
<th>1950</th>
<th>2000</th>
<th>2050</th>
</tr>
</thead>
<tbody>
<tr>
<td>Canada</td>
<td>7.7</td>
<td>12.6</td>
<td>25.6</td>
</tr>
<tr>
<td>France</td>
<td>11.4</td>
<td>16.3</td>
<td>27.1</td>
</tr>
</tbody>
</table>

Source: UN Population Projections, Medium Variant.

France has had an older population than Canada, but both are getting older and the difference between them is diminishing over time. Data on the portion of the population aged 65 and over are highly relevant to discussions of the future cost of pension programs. However, it is worth noting that the active labour force will also be older, and this has a number of implications as well.

The other important demographic change to be noted is the deceleration of population growth. Comparative data for Canada and France are given in Table 6. Once again, the direction of change is the same in both countries, and France has moved further in the common direction. Much of the interest in the deceleration of population growth revolves around a concern that it is a harbinger of decelerating labour supply in the future, especially when it is combined with population aging and early retirement. In the analytical work of the Organization for Economic Cooperation and Development (OECD), for example, this combination of forces is seen as posing a threat to future economic growth, fiscal balances and public pension expenditures [OECD 2000; 1998].
Table 6
Population growth in percent, Canada and France, 1950 to 2002 and 2000 to 2050

<table>
<thead>
<tr>
<th></th>
<th>1950-2000</th>
<th>2000-2050</th>
</tr>
</thead>
<tbody>
<tr>
<td>Canada</td>
<td>123</td>
<td>40</td>
</tr>
<tr>
<td>France</td>
<td>42</td>
<td>6</td>
</tr>
</tbody>
</table>


A common factor that is animating both population ageing and the deceleration in population growth is a decline in fertility rates. In Canada, fertility rates dropped from 3.73 in the early 1950s to 1.51 in 2000 while in France they declined from 2.73 to 1.87 over the same period. It is noteworthy that in both countries, as in most of the OECD area, fertility rates have dropped below the 2.1 level that is required to maintain a population. With fertility dropping below 2.1, stabilization and growth in population require net immigration.

The other underlying factor that is relevant to the increasing portion of the population aged 65 and over is increased life expectancy at all ages, but especially in old age. In Canada and France, the life expectancy of persons aged 65 and over increased by two years for women and men in France, and for men in Canada. Canadian women aged 65 experienced an increase in life expectancy of 1.4 years.

Table 7
Life expectancy at age 65 in years, by sex, Canada and France, 1980 and 2000

<table>
<thead>
<tr>
<th></th>
<th>1980</th>
<th>2000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Canada</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Women</td>
<td>18.9</td>
<td>20.3</td>
</tr>
<tr>
<td>Men</td>
<td>14.5</td>
<td>16.5</td>
</tr>
<tr>
<td>France</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Women</td>
<td>18.9</td>
<td>20.9</td>
</tr>
<tr>
<td>Men</td>
<td>14.4</td>
<td>16.5</td>
</tr>
</tbody>
</table>

Source: UN Population Projections, Medium Variant.

If the population aged 65 and over were divided into subgroups based on age (e.g., 65 to 74; 75 to 84; 85 and over), more rapid growth in life expectancy would be seen at the higher ages.
The demographic changes just noted will have a variety of impacts on workplace pension plans. While there are many opinions on the subject, it is generally thought that population aging and the deceleration in population growth will have some degree of adverse effect on the returns on financial assets that play a crucial role in financing both DB and DC plans. Some feedback will come through the negative impact on growth in Gross Domestic Product and, therefore, the growth in capital income, and some may come through a change in the balance of buyers and sellers of securities as population aging increases the relative number of sellers. While there is a great deal of controversy about the degree of the effect that one should anticipate, it is not easy to find anyone predicting a positive effect of demographic change on returns on financial assets. (An overview of the literature on this subject is available in Bosworth et al [2004].) All things being equal, lower returns on financial assets will increase the contributions required to DB plans, and they will reduce the amount of capital that accumulates in DC plans. The change in the balance of sellers and buyers is also thought to have an adverse effect on the prospects of older persons realizing capital gains on the sale of their principal residences.

Some effects of population aging are more specific to the financial operation of workplace pension plans and are worth noting. All things being equal, an older active workforce means that the average gap in years between the attained age of plan members and retirement age will become smaller. Thus, contributions made on behalf of an average member will earn compound interest for a shorter period of time before it has to be paid out. This will increase the contributions required to DB plans.9

Generally speaking, population aging will increase the ratio of plan liabilities associated with retired plan members compared to the liabilities associated with active plan members. This is significant because, in practice, plan sponsors show more inclination to match the liabilities of retired plan members with bonds than they do the liabilities of active members. Thus, aging is likely to bring with it some shift in the assets of DB plans from equities to bonds, and this usually results in a lower rate of return.

The increased life expectancy noted above also has the effect of increasing the contributions required to DC plans. As usual, the parallel in DC plans is higher annuity prices and, therefore, a lower income. In the DC case, there is an additional consideration. Some DC arrangements, including RRSPs, offer the choice at retirement of buying an annuity or using a self-managed phased withdrawal of plan assets during retirement. In the case of the phased withdrawal option, estimating life expectancy incorrectly creates the risk that assets will be totally consumed before one’s life is complete.

Before concluding this discussion of demographic change, three additional points that bear on workplace pension plans and the retirement income system more widely are worth making.

In the future, Canada’s retired population will include a growing numbers of adult immigrants to Canada. They will not have complete adult work histories in Canada and, therefore, will have difficulty qualifying for pensions based on full work histories. Moreover, adult immigrants to Canada are likely to spend some period in Canadian employment in sectors and occupations where workplace pension plans are not common. The retirement prospects of adult immigrants bear close scrutiny.
Canada is one of a number of OECD countries in which a long-term trend to earlier retirement has been reversed. The reversal began in the mid 1990s and does not seem to be related to income need. In fact, a significant portion of employed persons aged 55 to 64 is also in receipt of pension income [Baldwin 2005]. Looking to the longer-term future, it is also striking that many of today’s young employees have postponed key passages in the life course (e.g., age of leaving the parental home; getting married; having children) [Beaujot 2004]. These delayed transitions have consequences for the future financial position of these young persons. For many of them, it may not be possible to retire as early as their parents and grandparents.

Two inferences can be drawn from these comments on retirement age. One is that the strong appetite for early retirement that has animated a good deal of interest in workplace pension plans in recent decades may decline somewhat in the future. It may also be the case that greater heterogeneity in the front end and the mid part of the life course will manifest itself in increasingly differentiated desires with respect to retirement age. There is no particular reason to think that a professional worker who does not enter the labour force until her or his mid to late 20s will want to retire at the same chronological age as someone who begins heavy physical labour at age 18. Retirement age may come to focus less on chronological age and more on the span and quality of work life.

Finally, while population aging is commonly discussed in terms of its impact on pension expenditures and public budgetary balances, the well-being of seniors will be increasingly relevant to an assessment of social well-being generally. Societies have to be concerned about the expenditure implications of a growing senior population. They also have to be concerned about having a growing portion of the population possibly living on inadequate incomes.

**Some important determinants of future pension income**

In addition to the demographic influences just noted, there are factors that will have an important influence on how effective workplace pension plans will be in providing retirement income in the future. In this regard, probably nothing is more important than the extent to which employees will participate in such plans.

As the author has shown in a separate study [Baldwin 2007], research has established a number of labour market variables that are strongly associated with participation in workplace pension plans [Lipsett and Reesor 1997; Morissette and Drolet 1999; Luchak and Fang 2006]. Among these variables, the size of firm in which one works, whether one is unionized, the sector of employment and occupation are the most important. Being a full-time, permanent employee is also significant. The trend in recent years toward employment in small firms in the service sector and toward precarious work has been unhelpful in terms of pension plan coverage. With respect to employment in small firms, trade unions have addressed this issue in a number of sectors through the creation of multi-employer pension plans. To date, however, the ability of trade unions to achieve this outcome has been limited by the limited scope of collective bargaining coverage in Canada. Establishing an organizational platform for the operation of workplace pension plans at a higher level than the firm for non-unionized workers is an important challenge. Ambachtsheer [2004] provides a general commentary on the importance of the size of organization that tries to deliver pension benefits.
The overall tightness or slack in labour markets may be a determinant of both the extent of precarious work and pension plan coverage, through their impact on employers’ ability to recruit and retain employees. Thus, if labour shortages materialize as is often predicted as a by-product of population aging and decelerating population growth, improved conditions for the spread of coverage by workplace pension plans may also emerge. Moreover, given that the active workforce will be older, one would expect the relative attractiveness of DB plans to increase.

Another important consideration for the longer-term future of workplace pension plans is the shift from DB to DC plans. At an abstract level, it might be tempting to dismiss this as a significant issue on the grounds that what is paid out of both DB and DC plans will reflect what goes in. Therefore one might conclude that, as long as DC contributions are comparable to DB contributions, the incomes they generate should be similar. However, there are some clear problems with this line of reasoning. One is that even if all goes well, there will be substantial ebbs and flows in the incomes generated by DC plans through time as the relationship between wage growth and financial returns ebbs and flows [Thompson 1998]. Within age groups, there will also be substantial variations in incomes that will reflect both differences in ability to manage money and luck. Moreover, there may be systematic differences in the way that money is managed. For example, men and women show different tendencies in the way they manage money [Turner 2001]. It is not clear that these differences in outcome will be acceptable as social policy as DC plans come to play a more prominent role in the pension system as a whole.

The relatively minor role that DC plans have played in Canada is part of the reason they have been left largely untouched by regulatory law. However, as was noted earlier in this study, Canada’s financial regulators have seen fit to issue guidelines that cover DC pension plans and other savings schemes that employers might offer to employee [Joint Forum of Financial Regulators 2004]. The guidelines seek to identify the appropriate range of investment choices that should be offered to employees and to ensure that employees have access to proper counselling. In the United Kingdom, there was a scandal that emerged as a result of the vendors of individual retirement schemes misleading potential purchasers of their products with respect to the retirement incomes they could reasonably expect if they saved through those products. If DC plans continue to play a more prominent role in the Canadian pension system as a whole, they may require more regulatory attention than they have received to date, and they may have to be supported by stronger efforts in financial education.

It is also important to recall the point made earlier: as this study is being prepared, important issues regarding the financing, organization and governance of workplace pension plans are under debate in Canada. The outcome of these debates and their consequences for workplace pension plans are quite unpredictable at this time. The mishandling of the issues could cause plan sponsors or plan members (or, conceivably, both) to want to abandon workplace pension plans in general or DB plans in particular. A successful resolution of the issues could have the opposite effect.

It was noted at the beginning of this study that workplace pension plans in Canada are designed to supplement the benefits provided by Canada’s modest public pension programs. The retirement income that Canadians need from workplace pension plans to maintain their standard of living in retirement depends directly on what is available to them from public programs. Thus, one important question about the long term is the future level of the basic OAS pension and the GIS. The question arises because these benefits are price
indexed. If real wage growth resumes in Canada, as the prospect of tight labour markets would suggest it might, the basic OAS pension and the GIS will be of less help in replacing pre-retirement earnings. The declining role of these benefits will be felt most strongly at the low end of the earnings spectrum.

One of the trends noted earlier in this study is the erosion of the historic tendency for workplace pension plans to cover a larger percentage of men in Canada than women. It is now the case that the percentage of employed women who participate in workplace pension plans is the same as the percentage of men. This tendency for male and female rates of participation to equalize is to be welcomed. However, the ability of workplace pension plans to deliver equal retirement incomes to men and women does not equalize as an automatic consequence. The ability of women to maintain coverage through time may still be unequal, and dollars of benefits paid to men and women will reflect their earnings, which are still lower for women.

In the design of workplace pension plans there are still choices to be made where the differences in female and male experiences are quite relevant. This is true of eligibility requirements where access to coverage by part-time workers remains an issue; the treatment of temporary leaves from employment, particularly during periods of child bearing and child rearing; benefits on termination of employment; and the indexation of benefits in pay.

**Conclusions and reflections for further study**

Over the period from the end of the Second World War to the end of the twentieth century, workplace pension plans came to play an important role in providing retirement income in Canada. In addition to being an observed fact, it was a desired outcome sought through public policy choices. The continuing ability of workplace pension plans to play this role faces some challenges.

In the near term, there are a number of challenges that arise from the dramatic shift in financial markets at the start of the new century. A long period during which DB pension surpluses accrued with ease has been reversed and underfunding is now common. On the one hand, this has pushed up required contributions to these plans and, on the other, it has jeopardized plan members’ benefits. It may not be easy to resolve these problems in a way that leaves both plan sponsors and plan members feeling confident about DB plans. This episode underlines a more general point. The success that was achieved by workplace pension plans was not just a reflection of the inherent strengths of these plans; it also reflected the way in which they interacted with a particular set of economic circumstances in the late 20th century that included low inflation, stagnation in average real wages and very high rates of return on financial assets.

Based on the work of Maser and Dufour [2001] and Schellenberg [2004], it appears that a significant minority of persons now approaching retirement age are at risk of suffering a substantial reduction in their standard of living in retirement.

Looking to the longer-term future, demographic change will have the effect of making workplace pension plans more expensive. This will result from feedback through its impact on economic growth and a
change in the balance of buyers and sellers of securities. Demographic change will also have operational impacts on workplace pension plans as the period between the attained age of plan members and retirement age shrinks, and as pension portfolios shift more strongly to bonds. Increasingly, life expectancy on its own will have the effect of raising DB contributions and lowering DC benefits. One source of relief may be provided by a tendency of future generations of workers to retire somewhat later than at present.

There are a number of labour market conditions that will have an impact on the future of workplace pension plans. In this regard, some key considerations will be the overall tightness or slack in the labour market, the extent of unionization, the sectoral and occupational composition of employment and the extent of non-standard employment. An older workforce and a relative shortage of labour supply would seem to bode well for overall pension plan coverage and, in particular, DB coverage, things being equal.

In addition to a general concern about the ability of workplace pension plans to remain an important source of income for Canadian seniors, concern needs to focus on women and adult immigrants. The historic shortfall in women’s participation in workplace pension plans has disappeared. However, it is not yet clear to what extent the retirement incomes generated for women and men will equalize. In the case of adult immigrants, major differences in participation still seem to be apparent. The resolution to their problems will not be easy.

At the time that this study is being prepared, there are developments taking place in Canada that might make the issues raised worth revisiting in the future. Data from the 2005 Survey of Financial Security (SFS) are in the processing stage and will be available in the near future. This would allow for an updating of the analysis discussed above. Indeed, more can also be garnered from the 1999 SFS. In addition, Statistics Canada continues to make progress on the development of its computer-based longitudinal micro simulation model, LifePaths. This type of model is ideally suited for addressing the questions raised in this study.

**Acronyms**

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
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<tbody>
<tr>
<td>DB</td>
<td>Defined benefit</td>
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<tr>
<td>DC</td>
<td>Defined contribution</td>
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<tr>
<td>C/QPP</td>
<td>Canada/Quebec Pension Plans</td>
</tr>
<tr>
<td>FSCO</td>
<td>Financial Services Commission of Ontario</td>
</tr>
<tr>
<td>GIS</td>
<td>Guaranteed Income Supplement</td>
</tr>
<tr>
<td>GSS</td>
<td>General Social Survey (Statistics Canada database)</td>
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<tr>
<td>MEPP(s)</td>
<td>Multi-employer pension plan(s)</td>
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<tr>
<td>OAS</td>
<td>Old Age Security</td>
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<tr>
<td>OECD</td>
<td>Organisation for Economic Cooperation and Development</td>
</tr>
<tr>
<td>PPIC</td>
<td>Pension Plans in Canada (Statistics Canada database)</td>
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<tr>
<td>RRSP(s)</td>
<td>Registered retirement savings plans(s)</td>
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<tr>
<td>SFS</td>
<td>Survey of Financial Security (Statistics Canada database)</td>
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<tr>
<td>YMPE</td>
<td>Year’s maximum pensionable earnings</td>
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Endnotes

1. These plans are sometimes referred to as occupational pension plans, employer-sponsored pension plans, private pension plans, or, in Canada, registered pension plans.

2. For a more complete discussion of Canada’s retirement income system and the role of workplace pension plans within it, see Baldwin [2007].

3. Whenever the dollar sign ($) and the term ‘dollar(s)’ are used in this study, they refer to Canadian dollars (CAD).

4. The province of Quebec requires immediate vesting, and the province of Alberta requires vesting after five years of employment.

5. Income tax rules limit both the earliest age at which benefits from workplace pension plans can be made available, and the maximum bridging benefit that can be paid. These are described in Baldwin [2007].

6. The data on income from workplace pension plans also includes income generated by RRSPs. The author understands that most of the income from these two sources comes from workplace pension plans. However, this is changing through time as an increasing portion of it is coming from RRSPs.

7. Despite low levels of labour force participation among Canadian seniors, earnings from employment still provide a significant amount of income to seniors who are employed. Thus, if one wishes to compare incomes of seniors and non-seniors for purposes of commenting on the income situation of pensioners or retirees, it is important to remove from the seniors’ universe the portion of seniors who are still engaged in employment.

8. The issues discussed here are examined in greater length in Baldwin [2007].

9. It is worth noting that the aging of the workforce and population will not happen uniformly across the economy; some firms and industries will experience much more rapid aging than others. In addition, some firms will go through periods when large numbers of retirements will lead to a decline in the average attained age of plan members, and the current service costs of the plan will decline.

10. Labour law in Canada does not permit the juridical extension of collective agreements beyond workplaces where unions have been certified as a collective bargaining agent. Thus the rates of union membership and collective bargaining coverage are virtually the same in Canada; about one third of the employed workforce belongs to a union and is covered by a collective agreement [Jackson 2005; Jackson and Schetange 2003].

References


