



Canada's Retirement Income System: A Reform Agenda

Discussion Paper

Bob Baldwin

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About the author: Has worked for more than 40 years in various pension management and research roles. He currently serves on a number of pension related boards and committees in addition to his research and writing. He is a former Director of Social and Economic Policy at the Canadian Labour Congress and is a former member and Chair of the Canada Pension Plan Advisory Board.

About the companion paper: The Experts Panel asked two of its members to draft papers on possible reforms to the Retirement Income System. The current paper focuses on existing programs and how they might be reformed. The companion paper, [*Retirement Income Policies: Reform Pressures over the Coming Decade*](#) prepared by Peter Hicks looks at trends that may require policy attention over the coming decade.

Note to the Reader

This paper has been prepared on the assumption that most readers will have a good working knowledge of the basic structure of Canada's retirement income system. For readers to whom that assumption does not apply, Annex 1 provides an overview of the basic structure of Canada's retirement income system.

In order to allow readers to follow most easily the arguments that are put forward in this paper, I have put a good deal of supporting information and data in five Annexes at the back of the paper.

This paper's coverage and general directions reflect a consensus of the [Experts Panel on Income Security of The Council on Aging of Ottawa](#) (COA) although not all members of the Panel agree on all the specific points, which remain the sole responsibility of the author. (Panel members are listed at the back of the paper). Also, while the paper does not necessarily reflect official views of the Council on Aging or its Board of Directors, the Council is pleased to distribute the document to inform and engage interested individuals and organizations including all levels of governments on these issues affecting Canadian seniors.

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Introduction

Canada's retirement income system (RIS) has functioned reasonably well for the current elderly. The two main objectives of a RIS are to alleviate poverty among the elderly and to help people avoid a serious decline in their standard of living as they transition from employment to and through the retirement period. Both objectives are met reasonably fully for most but not all of today's elderly. The financial situation of today's elderly in Canada is also relatively strong by international comparison. (Information that supports this general assessment is provided in the companion paper and is summarized in Annex 2).

Canada's relatively strong RIS has also been strengthened in recent years through changes to a number of components of the RIS. The minimum income guarantee for the single elderly has been increased through the Guaranteed Income Supplement (GIS), increased benefits from the Canada Pension Plan (CPP) are being phased-in; some of the large pension plans for public employees at the provincial and municipal levels are garnering global reputations for their strong management as have some pension investment funds at all levels of government; and the emergence of Exchange Traded Funds (ETFs) has created relatively inexpensive opportunities to invest in low cost, diversified individual retirement savings plans.

There have also been some important improvements to data and analytical capacity with respect to the RIS. Statistics Canada has said it will produce the Survey of Financial Security (SFS) - a wealth survey - on a regular basis. Employment and Social Development Canada has just let a contract to construct a longitudinal micro-simulation model. These are important steps forward.

With all these relatively positive outcomes and initiatives, it may seem a little out of place to be worrying about reforms to the RIS. But there are several reasons for doing so.

First, as strong as Canada's RIS is, it would be a stretch to say that perfection has been achieved. There is some room for improvement in both program provisions and in the area of management of the RIS.

Second, the existing RIS will give rise to outcomes with respect to costs and benefits that will be constantly changing through time. This will result in part from the fact that the rules that govern the various component parts of the RIS are interacting with an ever changing demographic, labour market, financial and economic environment. For example, the cost of

providing a dollar of pre-financed retirement income has been pushed up in recent years by low interest rates and increased longevity. (Some of the trends that will have an important impact the RIS in the future are documented in the companion paper: *Retirement income policies: pressures over the coming decade*).

In addition to the changes brought on by an ever changing environment, some components of the RIS are also undergoing change. This is particularly true of workplace pension plans (WPPs) which have been an important source of retirement income for middle earners.¹ Based on data from the pension plans in Canada (PPIC) database, the rate of participation in these plans has declined in recent decades and there has been a shift from defined benefit to defined contribution plans. These changes have been much stronger in the private sector than in the public sector. That said, as can be seen in Tables 1 and 2 below, the rate of decline in participation has levelled off somewhat in the recent past.

Given the changes that will flow from the changing environment and from changes in the components of the RIS, it is not safe to assume that future outcomes of the RIS in terms of its costs or benefits will be the same as current outcomes. Some developments will have positive impacts on retirement incomes (e.g. the longstanding increase in the labour force participation of women is positively impacting their receipt of retirement incomes)² others will be less favourable (e.g. declining participation in WPPs).

Changes to the RIS may also be driven by changes in preferences and values, and financial and economic capacity. Thus while retirement income planning regularly and quite properly utilizes long planning horizons, the reality is that there is a constant process of adaptation that goes on with respect to the RIS. This is true of the major components of Canada's RIS and of retirement income systems internationally. (See: Annex 3)

Another feature of Canada's retirement income system that is important to the discussion in later sections of this paper is its complexity. (The major components of the RIS are identified in Annex 1 using the three pillars typology of the Organization for Economic Cooperation and Development (OECD)).

In some cases the different components of the RIS interact with each other in a complementary fashion that contributes to the achievement of a goal of the RIS. For example, the basic OAS benefit can be seen as complementary to the CPP and WPPs in preventing a serious decline in people's standard of living in retirement. But in some cases – especially where income-tested

¹ Throughout this paper many references will be made to earnings and earners rather than more common references to incomes and income earners. This is because the form of income that needs to be replaced in retirement for most people is earnings from employment.

² Information related to this important point is provided in Annex 5.

benefits are involved – the interaction among components of the RIS may diminish the achievement of one objective (e.g. earnings replacement) while advancing another (e.g. providing a minimum income guarantee). Moreover, since most of the components of the RIS other than the GIS generate taxable income under the personal income tax (PIT), the net gains to individuals from enhancing many components of the RIS will fall short of gross gains (and will enhance government revenues at the current moment or in the future). We return to the issue of interactions among components of the RIS and the PIT below.

The complexity of the RIS and the interactions among its component parts is, to a degree, an inevitable consequence of the RIS having multiple objectives combined with constraints on available choices for meeting objectives. The two objectives that tend to dominate both Canadian and international discourse on pensions and retirement income systems are minimizing poverty and preventing a significant decline in people's standard of living in retirement. While these two objectives may be pre-eminent, other objectives may come into play as will constraints.

A consideration that frequently garners attention is the income situation of the older population relative to the younger population. In periods of low to moderate economic growth, price indexed retirement benefits that allow individuals to maintain their standard of living in retirement, will be compatible with the incomes of the elderly keeping rough pace with the rise in incomes of the non-retired population. But during periods of rapid economic growth, the incomes of the elderly will fall behind the incomes of the younger population and the opposite will happen in periods of economic decline. It is worth adding that as retirement periods grow in length, the possibility of declining relative incomes grows, and declining relative incomes may serve as a basis for demanding reforms.³

The design of an RIS and changes to it need to be seen as fair across generations. This consideration can be seen as an objective and/or as a constraint on the design of the RIS and its components.

We accept that intergenerational fairness is an important consideration. But, we are struck by the fact that there are a variety of interpretations on how the concept should be made operational. (See: Wolfson and Rowe, 2007) Also the concept tends to get applied in a somewhat selective way.

In the name of intergenerational fairness, the 1997 amendments to the CPP required that future benefit increases should be fully funded: each generation should pay its own way. Yet

³ Even in periods of low growth, pensions that do not increase with inflation will result in declining living standards for pensioners. Inflation of 2 per cent per year will eliminate 1/3 of the purchasing power of a pension that is not indexed to inflation over 20 years – the average life expectancy of a 65 year old.

the full funding concept has no presence in discussions of OAS and GIS where intergenerational transfers are also present. Nor does it get a lot of attention in DB workplace plans which frequently involve intergenerational transfers.

At the risk of pushing our point a step too far, we note that many public initiatives that extend well beyond the RIS involve intergenerational transfers – often from old to young – but seldom get discussed in intergenerational terms (e.g. infrastructure development, environmental initiatives, education, and so on). In the private household sphere, transfers from old to young are ever present.

A more rapid phasing-in of the recently established CPP benefits would involve an intergenerational transfer of wealth. But whether it would be intergenerationally unfair would depend on how the concept of inter-generational fairness is to be made operational and how broad a perspective one wants to take on intergenerational transactions. A pension reform that - taken in isolation - might be unfair to the young, might be deemed acceptable if it is seen as an offset to other transfers in the opposite direction.⁴

A key constraint in decision-making with respect to the RIS and its various components is affordability. This constraint has somewhat different implications in the tax financed pillar 1 component than in pillars 2 and 3 which involve earnings' related contributions and benefits.

A key consideration in pillar 1 is the claim that programs will make on budgetary expenditures both presently and in the future. (Currently annual OAS expenditures – including the GIS – amount to just over \$50 billion). There are tradeoffs between pillar 1 expenditures and the other possible uses of public funds. The tradeoffs apply to other types of expenditures on the elderly (e.g. general income support versus homecare) and between the elderly and expenditures on other segments of society.

Benefits in pillars 2 and 3 involve foregoing pre-retirement consumption possibilities in the form of pension contributions or pre-retirement saving in exchange for post-retirement income. Ideally, the consumption possibilities foregone prior to retirement and post retirement income will contribute to comparable living standards in the pre and post retirement years. It is important to note in context that the contributions/savings prior to retirement could be too low in which case living standards in retirement would drop below pre-retirement levels. Or, the pre-retirement contributions/savings could be too large so that pre-retirement living standards are reduced below post-retirement levels. (It is possible to have too much pension).

⁴ Reactions to the establishment of the CPP noted in Annex 3 put the issue of intergenerational fairness in an interesting perspective.

The issue of affordability forces us to think about the trade-off between pension costs and other possible uses of funds. But there are also trade-offs within pension plan design. The cost and generosity of a pension can be thought of as having at least three dimensions:

- The initial amount of periodic pension payments.
- The way that payments are (or are not) adjusted through time.
- The period of time over which pensions are paid.

Choices made with respect to any one dimension will have an impact on the others.

Because pension plans make commitments that have to be fulfilled many years in the future, pension plans need to be affordable not only when they are established or are being assessed as in periodic actuarial valuations, they need to be affordable many years in the future. Thus pension affordability is often expressed as sustainability. Notwithstanding the difficulties that are inherent in foreseeing the future, best efforts need to be made to make pensions sustainable over long time horizons.

Pension reform has an intermittent presence as a high profile political issue. But we can't emphasize too strongly that the RIS and its component parts are in a continual state of evolution thanks to interactions between the RIS and its components on the one side and the demographic, labour market, financial and economic environment on the other. The PIT adds another dimension to the complex set of interactions. Stable pension plan rules with respect to pension financing and benefits do not guarantee stable outcomes in terms of required contributions or benefits.

In the discussion that follows, a number of suggestions are made with respect to policy and program design changes. These fall more into the realm of issues for discussion rather than firm recommendations for specific courses of action. All of the possibilities require research and analytical work, as well as public engagement before a firm course of action can be established.

Some Observations on WPPs

The publicly administered components of Canada's RIS have been designed so that people with earnings of roughly half average wages and salaries (AWS) and above will have to rely on income from any or all of WPPs, registered retirement saving plans (RRSPs), tax free savings accounts (TFSA) or some other private source if they are going to avoid a significant decline in their standard of living in retirement. Even after the newly created CPP benefits are fully phased-in, this generalization will require little change. (See: Annex 1) Leaving space for private arrangements has been a longstanding component of retirement income policy in Canada. (See: Bryden, 1974)

In this discussion we focus particular attention on WPPs. We believe that the public components of the RIS and the other privately administered components such as RRSPs and TFSA are better known to readers. We note too that income from WPPs is particularly important to many current retirees and likely to many future ones as well.

We are not attempting a comprehensive overview of WPPs here, but we are raising some issues that hopefully will help to make sense of some of the suggestions in later sections of the paper.

Participation rate and the shift from DB to DC⁵

We noted above the declining rate of participation in WPPs and the shift in WPP participation from DB to DC plans. Data from the PPIC are presented in Table 1 below to illustrate this point.

Table 1

Percentage of the Employed and the Population Age 18 to 64 Who Participate in a WPP

	1980	1990	2000	2010	2016
Employed	45%	43%	40%	39%	38%
Population	29%	29%	27%	27%	27%

Author's calculations based on CANSIM 280-0016, 282-0012 and 051-0001.

⁵ The need for some caution in generalizing about DB and DC is explained in Annex 4.

Table 2

DB Plan Members as a Percent of All WPPP Members

	1980	1990	2000	2010	2016
Both Sectors					
	94%	93%	85%	75%	67%
Private Sector					
	90%	85%	76%	55%	42%
Public Sector					
	98%	94%	94%	94%	91%

Source: CANSIM 280-0016 (Also: 11-10-0106-01)

The developments documented in Table 1 are a cause for concern. But there are a number of reasons why these data need to be interpreted with care.

The PPIC data do not include group RRSP participants. In 2011 the last year when Statistics Canada provided data on group RRSP participants, there were three times as many participants in group RRSPs as in registered DC plans. Even though there may be an overlap between the participants in the two types of plans, group RRSP participants increase the number of Canadian employees who participate in a workplace retirement savings plan. Moreover, according to PPIC data from 2017, there were about 720,000 participants in plans requiring new entrants to an older DB plan to participate in a DC component of the plan. Members of these plans don't show up in either the DB or DC categories in Table 1.

The denominator in most presentations on declining participation is employed persons. But, if the denominator was the population 18 to 64, the rate of participation would be much more stable. The reason for this is that the employment to population ratio was going up and offsetting the decline in the portion of employed people participating in WPPs.

Also, because the PPIC data are cross sectional and individually based, they don't capture individuals who may be owed a WPP benefit from previous employment or the possibility that a spouse is owed a WPP benefit. Thus while just under 40 per cent of the employed population participated in a WPP in 2017 according to PPIC data, as did barely a quarter of the population aged 18-64, more than half the economic families did so according to data from the SFS. In fact

more than 60 per cent of the economic families in the age 55-64 age range had WPP wealth. (See: Baldwin, 2019a). Extrapolating directly from PPIC data to ultimate retirement incomes is likely to overstate declining participation but understate the shift to DC. The PPIC data on their own tend to overstate the degree of threat posed by declining participation in WPPs.

With respect to the shift to DC, two problems are worth noting. First, to date contribution rates to DC plans tend to be too low for middle earners and above to provide adequate retirement incomes in the current financial environment. And, in their most common form which involves individual investment management and the running down of assets on a self-managed basis, the retirement incomes to which they give rise will be quite unpredictable. (See: Baldwin, 2015) Survey research suggests that this clashes with Canadians' preference for a predictable retirement income. (See: Baldwin, 2017)

The importance of scale

One of the great paradoxes in retirement saving is that needs and aspirations for retirement income are very individual while the most effective means of satisfying these needs is on a large group and compulsory basis in plans with DB elements.

Large plans with DB elements have several advantages over alternatives. They allow for the pooling of risks which makes some risks – like mortality risk - more predictable. They can invest retirement savings at a lower management cost and can access private asset classes at a reasonable price. Their administrative costs will be lower and they can afford specialized “in-house” technical expertise. Large plans will also have an advantage in recruiting appropriate people for governance roles. Many dimensions of the importance of scale have been documented over the years by Ambachtsheer. (See: Ambachtsheer 2007 and 2016) On their own, most small workplaces are inappropriate organizational platforms for the provision of a good WPP.

Looking beyond the theoretical, it is an observed fact that Canadian WPPs have tended to be more common in large places of employment than in small places of employment. DB plans have also been more common in large versus small places of employment.

In some unionized settings the limitations of small workplaces as organizational platforms for WPPs have been overcome through union initiated multi-employer plans (MEPPs). Employer contributions to these plans are set by collective agreement; the governing bodies of the plans include at least equal representation by plan member representatives; and, they are subject to less stringent financing rules than single employer DB plans. All importantly, MEPPs are allowed to reduce accrued benefits if they get into financial difficulties while single employer DB plans are not.

A recent development that helps to address the problem of scale is the emergence of large plans that can take in new smaller memberships from employment unrelated to the workplaces that founded the plans. The plans engaged in this activity are transitioning from being pension plans to pension platforms. As helpful as these initiatives are, much more needs to be done to create reasonable organizational platforms for small employers to provide retirement incomes.

The 21st century: a difficult time for WPPs

The decline in participation in WPPs in the early part of the 21st century and the shift from DB to DC participation provide key outward manifestations of the financial difficulties faced by WPPs in the 21st century. Underlying these developments was a rapid growth in required contributions to DB pension plans and a closely related growth in actuarial deficits in these plans.

In Table 3, the rapid escalation in contributions to DB plans after the year 2000 and the strong growth in employer special payments are striking as is the growing gap between DB and DC contributions per member. Not surprisingly, these data have a parallel in data provided by the Financial Services Commission of Ontario (FSCO) on the funded status of plans registered in Ontario. The FSCO data show that in the period from 2009-12 about a quarter of all plans were less than 90 per cent funded on a going concern basis and just over 70 per cent on the more interest rate sensitive solvency basis.⁶ The presence of under-funding or actuarial deficits triggers special payments to amortize the deficit.

⁶ Going concern valuations are prepared on the assumption that a pension plan will last for an indefinite period in the future. Discount rates are chosen to reflect the long term returns on the plans' investments and actuaries have a good deal of discretion in choosing the discount rate. Solvency valuations assume the plan is being wound up on the effective date of the valuation. The choice of discount rate is tightly prescribed by a mix of regulation and actuarial standards of practice. Generally they will reflect current yields on long term bonds. In the current period of low interest rates, the solvency discount rates are very low.

Table 3
Contributions to DB and DC Pension Plans, by
Total, Employer and Employee Contributions

Selective Years 1980 to 2015

Current Dollars (000s)

DB Contributions		1980	1990	1995	2000	2005	2010	2015
Total		7,405,71	13,379,12	18,226,63	17,205,40	30,014,11	44,725,48	50,862,04
		1	0	9	1	9	0	0
Employer		4,929,31		11,461,09	11,042,13	21,230,55	31,589,61	33,112,42
Emper/total		9	8,530,064	3	1	4	9	5
		67%	64%	63%	64%	71%	71%	65%
Emper special		1,859,01					10,687,95	
Special/emper		5	1,842,161	2,147,133	1,488,176	5,448,059	3	7,967,955
Mbers millions		38%	22%	19%	13%	26%	34%	24%
Total/mbers		4.2	4.6	4.6	4.5	4.4	4.5	4
		1763.26	2908.50	3962.31	3823.42	6821.39	9939.00	12715.51
DC Contributions								
Total		311,227	810,110	1,189,237	1,706,337	3,175,129	3,705,742	5,162,785
Employer		195,221	476,570	667,038	1,010,446	2,104,703	2,247,042	3,155,906
Emper/total		63%	59%	56%	59%	66%	61%	61%
Mbers millions		0.2	0.4	0.5	0.7	0.9	1.0	1.1
Total/mbers		1556.14	2025.28	2378.47	2437.62	3527.92	3705.74	4693.44
1995 members use 1994 data								
2005 members use 2004 data								

The rate at which pension plans participants have to contribute in order to replace a given percentage of pre-retirement earnings declines as the gap between investment returns and wage growth increases. We can see in Table 4 that the gap was unusually large in the 1980s and 1990s and contracted significantly in the 2000s. Combined with lower interest rates and increased longevity which have pushed up the price of a dollar of retirement income, earnings replacement through pre-funded pensions has become much more expensive in the 21st century.

Table 4

Decade by Decade Annual Real Returns on a Portfolio of 60% Canadian Stocks and 40% Long Term Government Bonds, and Annual Real Wage Growth, 1930-2009

Decade	Investment Returns	Wage Growth	Difference
1930s	6.7%	1.8%	4.9%
1940s	4.2%	1.5%	2.7%
1950s	5.2%	3.0%	2.1%
1960s	4.6%	2.2%	2.3%
1970s	0.6%	1.3%	0.7%
1980s	5.9%	0.1%	5.9%
1990s	11.1%	0.3%	10.8%
2000s	3.9%	0.7%	3.2%

Source: CIA, 2012

The declining participation in WPPs and the shift from DB to DC are the appropriate headlines in terms of how the financial environment of the 21st century has affected WPPs. But it is striking too that many very well managed public employee plans at the provincial level have shifted some financial risk from the contribution rate to the benefit side of the plans in order to cope with the financial difficulties of the 21st century. Many of the changes to these plans took place before the financial crisis of 2008-09 and reflect the decline in interest rates that had been underway for many years before the crisis. The most common form of risk shifting has been to make the price indexation of benefits contingent on the funded status of the plan.

Looking to the future, one might reasonably be hopeful that interest rates will rise above levels of the recent past as would pension fund and retirement savings returns more generally. But professional students of investment returns warn against expecting a return to the higher returns of earlier periods. It is noteworthy too that when actuaries prepare going concern valuations they have a good deal of latitude in choosing the discount rate they will use. The starting point and key determinant of the discount rate is expected future returns on pension fund investments. In context it is striking that in the most recent FSCO report on the funding of DB pension plans that covers the period from 2014 to 2017 only 10 per cent of valuation reports used a going concern discount rate of 6.0 per cent or more. In the first of the reports for the period 2000 – 2004, only 2 per cent used a discount rate of less than 6 per cent. (FSCO 2005 and 2018) Going concern discount rates have clearly been declining over this period.

DB plans have provided the specific points of reference for the foregoing comments. But the impact on DC plans has been similar. The cost of a dollar of DC retirement income has also gone up for the same reasons that the cost of DB benefits has gone up. Unlike the situation with DB plans, there is no automatic adjustment to DC contributions to meet pre-determined retirement income targets. Thus in DC plans, adverse financial circumstances will show up in lower benefits or later retirement as opposed to increased contributions.

Program Design Issues

In this section of the paper we discuss the design of the various components of the RIS. In many cases the suggested changes reflect trends noted in the companion paper *Retirement Income Policies ...*. While our focus is on changes that may be prompted by changes in the pension environment and pension institutions, we note that change may also be brought on by changes in values and preferences as well as by real and perceived changes in economic and fiscal capacity.

Age as an eligibility criterion

The OAS/GIS and CPP are both based on the implicit assumption that people enter the labour market at about age 18 and leave the labour market at about age 65. These assumed ages of entry and exit are increasingly inaccurate reflections of the behaviour of Canadians. Labour force entry and exit ages are increasing on average. They are also becoming more diverse.

With respect to entry into the labour force, we have people completing graduate degrees before entering the labour force in their late twenties or later while others still enter before age twenty with the expectation of remaining in the labour force. This substantial variation in labour force entry raises the question why one would expect retirement benefits to begin at a common age. We believe that some thought needs to be given to supplementing chronological age criteria for receiving benefits with a “years of participation in the labour force” criterion. We recognize that any move in this direction has to take account of gender differences with respect to the impact of child bearing and rearing.

We note positively that CPP additional benefits effectively define lifetime contributions without anchoring the end of working life at age 65. As in the base CPP, the additional benefits make provision for limited periods not in the labour force due to child birth and rearing. (The mechanics of these “drop out” year calculations used in the CPP’s base benefits and additional benefits are different).

If age, then what age?

It is our expectation that even if age is supplemented by a years of participation eligibility criterion, age will remain as an eligibility criterion – especially for OAS/GIS which does not require labour force participation to establish eligibility. From our perspective, there are two reasons for considering an increase beyond age 65 as the basis for establishing eligibility for OAS/GIS and CPP benefits. We are quick to add that moves in this direction require caution in order to limit adverse impacts of an increase in the age of eligibility – especially for those with low earnings.

One reason for considering an increase in the age of eligibility is that increasing numbers of Canadians are working past the current age of eligibility – 65. Thus, an increasing portion of pension benefits are serving as supplements to earnings from employment rather than providing “retirement” income. A large and growing portion of OAS payments are missing their target.⁷

The other reason for considering an increase in the age of eligibility is to create some additional fiscal space for financing improvement to the RIS and/or other priorities – including other seniors’ spending priorities like health care and long term care. Increasing the age of eligibility might also create the fiscal space to improve other dimensions of OAS/GIS.

Fiscal considerations are somewhat paradoxical as they relate to future expenditures on OAS/GIS. The actuarial reports on the OAS that are prepared by the Office of the Chief Actuary (OCA) include projections of OAS/GIS expenditures as a per cent of GDP. These projections show an increase in OAS/GIS spending/GDP through 2031 and a decline thereafter.

Underlying this pattern of change there are two competing forces at work. On the one hand a growing portion of the population over 65 is pushing the OAS/GDP expenditure ratio upward. On the other hand, the price indexation of OAS is reducing the OAS/GDP ratio in the face of real wage increases. An increase in the portion of the population over 65 is the dominant force up to 2031 and causes an increase in OAS/GIS expenditures as a per cent of GDP. But, after that date, the decline in the value of the price indexed OAS/GIS benefits relative to assumed growth in AWS becomes dominant and OAS/GIS expenditures as a per cent of GDP begin to decline. The OCA estimates OAS expenditures as 2.37 per cent of GDP in 2015; 3.22 in 2031 and 2.65 in 2060. (See OCA,2017).

Because OAS/GIS plays such an important role for low earners both in terms of providing a minimum income floor and in replacing pre-retirement earnings, we believe that OAS/GIS benefits ought to keep pace with the growth in AWS through time. This objective could be met through formal indexation to AWS and/or through *ad hoc* adjustments.

If the future value of OAS/GIS were to keep pace with the AWS, the decline in the OAS/GIS expenditures relative to GDP as projected by the OCA will disappear. OCA 2017 provides some insight on this point by estimating OAS expenditures to GDP in 2060 assuming AWS growth of only 0.3 per cent per year (versus a base case assumption of real increases in AWS of 1.1 per cent per year). The result is that OAS expenditures increase to 3.83 per cent of GDP instead of declining to 2.65 per cent. OAS expenditures are 45 per cent higher under the alternative

⁷ For broadly similar reasons, the Canadian Institute of Actuaries (CIA) has recently recommended an increase in the age of eligibility for OAS benefits. (See: CIA, 2019)

assumption and would, of course, be higher still under a 0.0 assumption which would be the equivalent of indexation to AWS.

For a variety of reasons, the issues are a little different with respect to CPP than with OAS/GIS. (Differences arise from different financing and accounting arrangements and different decision-making processes). But the same basic trade-off exists between the age of eligibility and the level of benefits: at a given level of contributions an increase in the age of eligibility can create the financial scope for an increase in the amount of initial benefits or increased adjustments to benefits in pay.⁸ We will return to the level of CPP benefits below.

If the age of eligibility for OAS and CPP benefits is increased, consideration should also be given to a parallel increase in the age up to which actuarially increased benefits are provided.

In suggesting that there be some increase in the age of eligibility for OAS/GIS and C/QPP benefits we are mindful that for some labour force participants, remaining employed to 65 is a challenge. Early, unplanned labour force exits due to permanent layoffs and health shocks are common. Earlier research found that just over 25 per cent of people who have left the labour force identify reasons for their departures that suggest that their departure was not entirely voluntary. (See: Data Angel, 2011)

For people in this situation delayed eligibility will cause hardship⁹. Thus, we would recommend that any increase in the age of eligibility for OAS be separated from the age of eligibility for GIS which would remain at 65. The maximum GIS payable between 65 and the new age of eligibility for OAS would be the similar to the super GIS available to people with less than 40 years of residence in Canada. (People receiving partial OAS payments have their maximum GIS payment topped up by the difference between the maximum OAS payment and the partial OAS payment to which they are entitled. The higher maximum is reduced by 50 cents per dollar of income from sources other than OAS).

There is a strong case to be made that the reallocation of savings from increasing the age of eligibility for pensions be targeted at low earners who are likely to suffer the negative effects of raising the normal age for receiving OAS and CPP most acutely.

Before closing this discussion, we note two things.

First, a significant number of other countries have raised the age of eligibility of publicly administered retirement benefits in recent years. (See: OECD, 2015) Most often this has been done by identifying a date some years in the future when the age eligibility will begin to be

⁸ Wolfson, 2013 illustrates the scope for providing an accelerated increase in CPP enhancements that is facilitated by an increase in the normal age for receiving CPP retirement benefits.

⁹ Similar concerns are raised in Clavet, Duclos, Fortin and Marchand, 2015

raised in stages to a new, older age. We note however, that in some cases a formula is used to introduce automatic increases based on some variant of the growth in the size of the older population or changes in life expectancy. Recent Canadian proposals to use a formula approach are provided by Brown and Aris, 2017 and Dussault 2013)

Second, people with governance responsibilities for WPPs need to be encouraged to review eligibility criteria for retirement benefits. Many WPPs in Canada have quite generous special early retirement (SER) provisions in place. These SER provisions often include very strong incentives for people to leave their employment with the employer providing the WPP as soon as they become eligible for the SER benefits. (See: Schirle, 2008) But because of the later entry into employment noted above, declining portions of new entrants to these plans will become eligible for them.

OAS/GIS and Incentives

For the last 40 years when governments have wanted to increase the minimum income guarantee to older Canadians, successive governments have placed exclusive reliance on *ad hoc* increases to GIS benefits over and above those provided by price indexation. Thus, over the years, the balance between OAS and GIS in providing a minimum income guarantee has swung in the direction of GIS. This approach to providing a minimum income guarantee has had an obvious fiscal advantage: a higher guarantee can be provided at a lower level of expenditure by increasing GIS rather than OAS. But this approach also comes at the cost of lowering incentives to save for retirement for people who can anticipate receiving GIS. It also lowers the incentive to take employment while receiving GIS.

The disincentive created by the GIS tax-back is compounded for low earners by the overlap with provincial income-tested supplements to the GIS in the seven provinces that offer them and further again by income-tested provincial health and housing programs. Thus, as has been shown in a number of studies, these tax-backs result in people with low earnings getting little from the creation of the additional benefits under the CPP. (See: Baldwin and Shillington 2017, Milligan and Schirle 2016, and Vettese and MacDonald 2016)

To date much of the attention that has been paid to overlapping tax and tax-back rates has focussed on the very low end of the income range at which GIS is paid. But, at the upper end of the range, there is an overlap with the PIT. This overlap is complicated by the phasing in and out of tax credits for all tax payers with low incomes.

The policy decisions and program design options that might reduce disincentives involve difficult choices. A minimum income guarantee with substantially reduced disincentives resulting from lower tax-back rates would be very expensive. But efforts to limit the disincentive problem are warranted by the overlapping tax-back and tax rates noted above and

in Baldwin and Shillington, 2017. In context, we note with approval the recently announced changes to the earned income exemption under the GIS.

Level of CPP Retirement Benefits

The increase in CPP retirement benefits that is now being phased-in starting in 2020 includes a modest increase in both the target benefit rate from 25 to 33.3 per cent and in the level of contributory earnings to 1.14 per cent of the existing Year's Maximum Pensionable Earnings (YMPE). The increase in pensionable earnings is phased-in in two equal installments in 2024 and 2025. These benefit increases are important but still leave people with middle and upper levels of lifetime earnings needing significant income from other sources if they are to prevent a significant decrease in their standard of living in retirement.

We will not pass judgement on the appropriate CPP retirement benefit level or on the appropriate design of further enhancements to the CPP. But it is our belief that debates on the appropriate level of CPP benefits will continue in the future – especially given the difficulties being faced by WPPs.

It is our view that alternatives to a straightforward increase in the benefit rate on the newly established level of contributory earnings should be given a fulsome airing:

First, the possibility of an increase that only applies to earnings above a higher threshold than the current Year's Basic Exemption (YBE) – say, one half AWS.

Second the possibility of an increase that only applies to earnings of people who do not belong to a WPP that meets certain standards.

The former possibility is similar to what was known as the PEI proposal and the latter to the proposed Ontario Retirement Pension Plan. The first alternative is also proposed by Wolfson, 2011 and is part of the mandatory DC plan promoted in Ambachtsheer, 2008 .

Also, as suggested above, we do not accept without question, the idea that a more rapid phase-in of increased CPP benefits is inherently unfair intergenerationally.

A third possibility that deserves consideration is the recommendation of the d'Amours Committee in Quebec which recommended a QPP enhancement that would be available at age 75 – referred to as a longevity pension. One element in the rationale for this proposal was that people are increasingly forced to rely on the run down of self-managed assets and have to guess at their personal mortality. With a longevity pension in place, personal assets can be allocated more fully to finance the equivalent to a term certain annuity to 75 rather than a life annuity.

The d'Amours Committee proposal also reflects the increase in employment after age 65.

Regulatory and Tax Law relating to WPPs

Regulatory rules and tax provisions relating to pensions and RRSPs play an important role in shaping the components of the RIS to which they apply. We have several directional suggestions for change in these areas.

First, both sets of rules took their current form many years ago when DB pensions plans were the predominant form of retirement saving vehicle. In the meantime, various alternative forms have emerged and there has been a tendency to put patches on the original legislative provisions to try to accommodate new types of plans.

One of the core themes of both the Alberta and BC Joint Expert Panel on Pensions and the Ontario Expert Commission on Pensions was that the regulatory law needs to be re-set to accommodate new designs that may incorporate elements of DB and DC. We endorse this view and note with approval the efforts in several jurisdictions to establish a legal basis for single employer target benefit plans so that plan sponsors who are not willing to take on a DB plan have an alternative to DC. Moves in that direction need to make sure that plan member interests are protected through joint governance of the plans and/or regulatory law. Both regulatory and tax law need to be reviewed with a view to identifying reforms that would encourage and facilitate more flexible plan designs.

We note too that the federal government has recently conducted a consultation on how to make DB promises more secure and in its background paper to the consultation it mooted possible changes to regulatory law, bankruptcy law and corporate law. In responding to the consultation paper we noted that care needs to be taken with respect to the regulatory law as some of the changes that could be readily imagined that would increase the security of promised benefits would likely result in higher and more volatile pension contributions. The higher and more volatile contributions may lead to DB plan closures and/or conversions to DC. Indeed at this point in time a number of jurisdictions are studying changes to WPP funding rules that will reduce contribution volatility but increase the odds of plans terminating with actuarial deficits. With respect to funding rules, there is a real trade-off between the level and volatility of contributions on the one hand, and the security of benefits on the other.

The consultation paper includes some proposals that would impose obligations to limit payments to other stakeholders (executives and shareholders) when DB pension plans and sponsoring companies face financial difficulties. This proposal raises some more fundamental questions about the regulation of WPPs.

Our current arrangements not only focus on DB plans but are rules-based and assume that plan governance will be dominated by an employer plan sponsor. One could imagine a regulatory regime that is more principles or objectives-based and demands a greater separation of plan sponsor and plan trustees. In a related vein, one could imagine a regulatory regime in which highly prescriptive rules remain in place for plans in which governance is dominated by employer representatives while a more general set of rules would apply to plans in which members can protect their interests through joint governance. It is worth devoting some thought to this wider field of change in the regulatory law before advancing on specific measures.

In the near future, the cleanest way to make progress on the pension benefit security issue may be through reforms to the status of WPPs under bankruptcy legislation. Even here some effort needs to be made to understand the quantitative impact of a change in the priority of pensions in bankruptcy on borrowing costs.

In recent years there have been a number of papers published that are critical of the current tax rules governing WPPs and RRSPs. A major point of contention has been that in the current financial environment, the current rules provide DB plans with much more scope for tax assisted retirement saving than is the case for DC arrangements. (See for example: Robson, 2017) One underlying lesson from our experience with the current rules is that their impact on different types of plans will vary through time with changes in the financial environment. In addition, some dimensions of the rules were framed with life expectancies in mind that are now out of date. Some process for regularly reviewing and adjusting tax rules should be put in place.

It is also worth giving some thought and research effort to the question whether retirement saving is “habit forming”. If it is, consideration should be given to focusing incentives on getting people started on retirement saving rather than on providing ongoing tax support.

Other tax issues needing consideration are:

- 1) Finding ways to strengthen the retirement saving incentive for low earners by, for example, converting the contribution deduction to a credit and allowing WPPs for low earners to operate on a TFSA basis;
- 2) Increasing the age at which pension and RRSP payouts are required: and,
- 3) reviewing the distributional effects of both the tax support for retirement saving¹⁰ and pension splitting.

¹⁰ The distributional effect of tax assistance for retirement saving can be looked at on either a cross-sectional or a lifetime (longitudinal) basis. The conclusion that one reaches will differ based on the approach that is chosen. The same alternative approaches exist in assessing the impact of tax assistance on public finances.

Finally, we note that recent shifts from DB to DC will put a growing number of Canadians in a situation where they have to manage the run-down or “decumulation” of their retirement assets. This involves trying to manage longevity risk individually with the likely outcome that assets will be run down at an unnecessarily slow pace. In context, we note with favour the government’s proposal to permit the purchase of deferred annuities with DC assets.

Governance and Management of the RIS

Throughout the life of the Expert Panel on Income Security of the Ottawa Council on Aging, the Panel has been concerned about the analytical capacity and data that are necessary tools for good public policymaking with respect to pensions and retirement income policy. Thus we are pleased by a number of developments in the recent past: the commitment to conduct the Survey of Financial Security on a regular basis, the call by ESDC for proposals to develop a longitudinal micro-simulation model; and, the support to be provided to the pension and retirement saving work of the Global Risk Institute.

In order to promote broadly based informed debate about Canada’s RIS, it is important that these newly developed data and modelling capacity be widely accessible to stakeholders.

This progress has been gratifying to see, but there are still significant gaps in the data that are available – especially with respect to WPPs and individual savings. Valuable data are collected through the Pension Plans in Canada (PPIC) data collection process, but many gaps remain. (Specific data gaps are identified in an earlier publication by the Panel: *Upgrading Social Policy Research and Advice: Modernizing our Data, Tools and Practices to Meet Evolving and New Challenges*).

One of the key themes in this paper is that the RIS and its component parts are in a constant state of evolution as a result of changes on the environment in which they operate. As a result, regular adjustments to the RIS will be required. We have also noted that the RIS has many components that interact with each other and, in some cases, can work at cross-purposes. We would observe too that the sustainability of the RIS depends not only on technical and financial features of the RIS but on public confidence in it. These considerations lead us to raise several issues related to the governance and management of RIS.

- 1) The interdependent nature of the various components of the RIS requires that a premium be placed on co-ordinated consideration of each of the component parts. Yet our view from the outside of government causes us to be concerned that various components may be considered in isolation from the other components. To overcome this problem completely requires co-ordination not only within the federal and provincial governments but between them as well. Within government co-ordination

may require direction from the centre combined with ministerial responsibility from a minister who can give the time and effort required by the issue.

- 2) Monitoring of the RIS as a whole requires an ongoing collaborative federal-provincial effort. Regular updates on changes to the RIS and the income situation of older Canadians should be produced and put into the public domain. The OECD's *Pensions at a Glance* serves as a useful model.
- 3) Once the longitudinal micro-simulation modelling capacity being developed for ESDC is in place, it should be used on a regular basis to create an assessment of the income situation of the current and future elderly that would serve as a basis for a broadly based dialogue with stakeholders about the state of Canada's RIS. The QPP requirement for reviews and consultation on the future of the QPP every six years may serve as a model.
- 4) Governments need to demonstrate a greater willingness to lead public discussion on RIS issues and to engage with stakeholders on those issues. We note that the volume and quality of the background material that has preceded each of the past three major reforms to the CPP/RIS has diminished as we have moved from one round of reform to the next and so has dialogue with stakeholders. Among other things, this requires government spokespeople to step outside their legislative roles in tax and regulation and try to act as advocates and facilitators of WPP reforms.

There are also several governance issues that are specific to the CPP:

- 1) Financial reporting on the plan should include an analysis of the probability that default adjustments to the Plan will be required.
- 2) There is an incredible amount of Plan detail embedded in legislation and it would be more consistent with the need for ongoing adaptation if much of it was moved to regulation that would still require federal provincial agreement to change.
- 3) An effort should be made to determine whether there is an optimal size to the assets under management of the CPP Investment Board.
- 4) The triennial financial review process needs more transparency and needs to include stakeholder engagement.

Finally, we note that further steps can be taken to make it easier for people who are eligible for OAS/GIS and CPP to get the benefits to which they are entitled. For instance, auto enrollment is in place for GIS only where auto enrollment is in place for OAS. There should be auto-enrollment for everyone eligible for OAS. In a related vein, given the complicated nature of the CPP and GIS and in some cases OAS, we recommend that when these benefits are paid, the beneficiary should be offered an explanation as to how the amount of the benefit was determined.

Conclusion

Canada has a strong RIS and important improvements have been made to it in the recent past including increases in GIS and CPP benefits. In addition, steps have been taken to make people aware of their eligibility for benefits. And, improvements have been made to the data and analytical capacity needed to know how the RIS is evolving. As favourable as this situation is, there is still room to make positive changes to the RIS and the room for improvement will be reinforced by emerging social trends.

As we have discussed above, the RIS is subject to constant change even if basic rules with respect to pension financing and benefits remain unchanged. Change will occur because of the interaction between stable plan rules and an ever changing environment.

It is also important to recognize the complexity of Canada's RIS. This becomes particularly important in thinking about changes to individual components of the RIS. It will rarely be the case that a change in an individual component in the RIS will have no impact on other components of the RIS.

Given the reality of constant change and complexity, ongoing monitoring of the RIS is essential and so is a high degree of co-ordination of analytical work, policy analysis and program design both within and between the federal and provincial governments.

The complexity of the RIS is also an issue for the beneficiaries for whom the system and its components can be bewildering. Fair treatment of beneficiaries and clear communication with beneficiaries is an important contributor to the political sustainability of the RIS.

The timing of future rounds of pension reform is unpredictable. What is predictable is that change will occur and we attach a great deal of importance on the need be prepared for it. Being prepared means:

- 1) filling the data gaps related to the RIS that now exist;
- 2) moving forward with the development of the micro-simulation model; and
- 3) preparing for stakeholder engagement.

We expect too that variants on some of the suggestions for change that are discussed above will be part of future discussions of pension reform. Studying those options and variants of them will likely prove useful in the future.

Annex 1

Three Pillars of Canada's Retirement Income System

Pillar One: Tax Financed programs that provide benefits based on age and years of residence. Pillar one programs include income or means tested programs.

The Government of Canada operates two major pillar one programs: Old Age Security (OAS) and the Guaranteed Income Supplement (GIS). It also operates a much smaller program, The Allowance, that provides income-tested benefits to a subset of the population aged 60 – 64.

OAS provides a common dollar amount of benefit to Canadians 65 and over. Full benefits are paid to people with 40 years of residence in Canada after age 18 and partial benefits to people with 10 or more years of residence. OAS recipients with incomes above about \$75,000 in 2019 are subject to a special benefit recovery tax (clawback) of 15 per cent on income above that level until the full amount of the OAS clawed back.

The OAS benefit is \$601.45 per month in June 2019. If the receipt of OAS is delayed past 65, a somewhat larger – “actuarially adjusted” – amount will be paid.

Maximum GIS benefits are paid to people with no income except OAS. GIS benefits are reduced by 50 cents per dollar of income from other sources. (There is a small tranche of low income to which a 75 per cent tax-back applies). Separate monthly maximums are established for singles and couples: in June 2019 the maximums are \$898.32 and \$540.77 per spouse.

OAS and GIS maximums are adjusted every three months to reflect changes in the Consumer Price Index (CPI).

For Canadians 65 and over with at least ten years of residence in Canada, OAS benefits are prorated to the number of years of residence divided by forty. For people receiving partial OAS benefits, the maximum GIS is increased by the difference between the full and partial OAS payment. (Slightly modified rules apply to adult immigrants from countries with which Canada has signed a social security agreement).

Seven of Canada's ten provinces provide income-tested supplements to the GIS. (The provinces that do not are New Brunswick, Prince Edward Island and Quebec).

Pillar Two: Mandatory earnings related programs.

In Canada the pillar two programs are the Canada Pension Plan (CPP) which applies to employment and self-employment outside Quebec and the Quebec Pension Plan (QPP) which applies to employment and self-employment in Quebec.

These plans now have base benefits that are fully phased-in and additional benefits that will be phased-in over a period of forty years starting in 2020.

The base benefits are designed to replace 25 per cent of pre-retirement earnings up to a maximum level of earnings that is roughly equivalent to average wages and salaries. The additional benefits will, when fully phased-in, increase the percentage of earning that is replaced to 33.3 per cent and increase the level of earnings up to which benefits are earned to 114 per cent of their current level.

The “normal age” for receiving retirement benefits under these plans is 65. Reduced benefits can be claimed as early as age 60 and increased benefits at ages up to 70. These plans also provide survivor, disability and children’s benefits to survivor and disability beneficiaries.

Once benefits under these programs begin to be paid, they are increased annually to reflect changes in the CPI.

The maximum monthly new base benefit payable at age 65 in 2019 is \$1,154.58.

Pillar Three: Programs that are voluntary to employers and/or individuals.

In Canada, the main examples of pillar three programs are pension plans that are specific to individual workplaces or groups of workplaces (single employer pension plans or multi-employer pension plans) and individual registered retirement savings plans.

A central characteristic of pillar three programs is variety. Some provide very predictable benefits that are generous and keep pace with prices increases after they begin to be paid and are available at relatively young ages (e.g. before age 60) and some have none of these characteristics.

Pillar three programs are administered by governments for their own employees and otherwise by private employers and/or administrative agents that might be hired by private employers. Both individual and employer based plans are registered with the Canada Revenue Agency and receive special tax treatment by being registered. Workplace pensions are also regulated to protect plan members.

Other sources of retirement income:

The three pillars of the RIS discussed above focus on sources of income that are specifically designed to provide retirement income and/or income in old age. But older Canadians do get income from other sources as well. Two are particularly worth noting: equity in a principal residence which may provide a valuable flow of housing services rather than a monetary flow, and income generated by a Tax Free Savings Account (TFSA). TFSA's have only been around for a decade but are widely used (See: Baldwin,2019a) and can be particularly valuable to low earners who often face higher tax and tax-back rates in retirement than in the pre-retirement years.

Table 5

**Pillar 1 and 2 Benefits Expressed as a Per Cent of Pre-retirement Earnings
Pre and Post-CPP Reform**



Annex 2

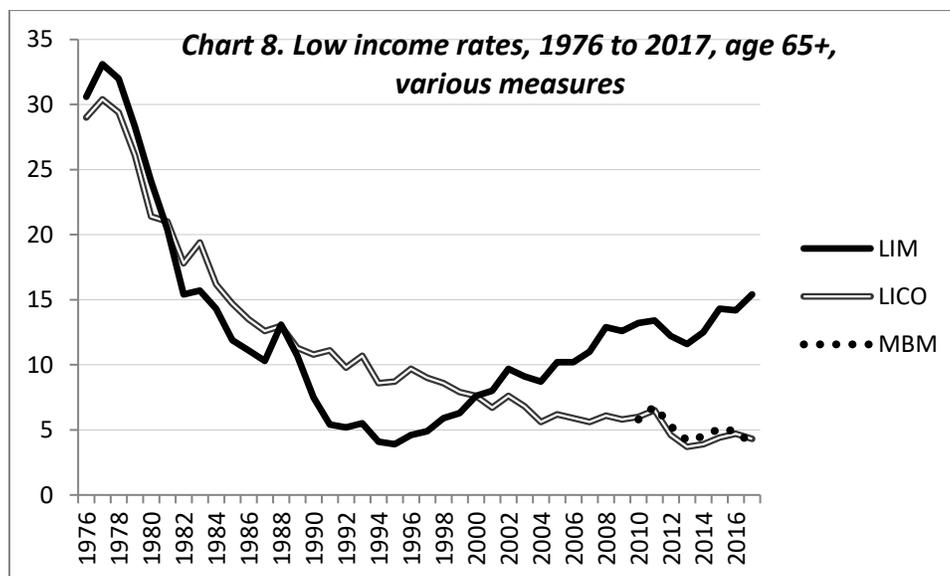
Canada's RIS in Relation to Objectives

The companion paper by Peter Hicks provides a more thorough discussion of the performance of Canada's RIS in relation to its key objectives. Here I will limit myself largely to summarizing Hicks.

Limiting Poverty

The extent of poverty among older Canadians would seem to be a simple thing measure. Unfortunately, this is not the case. There is conceptual disagreement on whether poverty should be looked at as deprivation from the ability to buy goods and services, or as low income relative to the society at large. The former approach is embedded in the official poverty line adopted by the Government of Canada, the Market Basket Measure (MBM). The latter approach, which is more widely used internationally, is the Low Income Measure which defines poverty as having a family income less than half that of median income in the society at large after adjusting family incomes for differences in family size.

The chart below is taken from Hicks' paper and shows the decline in elderly poverty over the long stretch back to the 1970s and the divergent paths of the two measures in recent years. The increase in the LIM measure in the recent past reflects that fact that the incomes of older Canadians with lower incomes have not grown as fast as incomes in society at large.



Separate MBM lines are calculated for 50 geographic regions in Canada. In only 9 of the 50 regions does the minimum income guarantee for singles in 2019 exceed the MBM lines for 2017. The same is true of only 8 regions for couples. The LIM lines are calculated on a Canada-wide basis. The minimum guarantee for singles falls \$5,000 short of the LIM line for singles and the guarantee for couples is \$8,000 short of the LIM line.

Maintenance of Living Standards

Unfortunately, it is also difficult to get an up to date assessment of the extent to which older Canadians are maintaining their standard of living in retirement. The last analytical work on that issue is now a decade old and is summarized by Hicks as follows:

- After-tax family income available to the median individual during his or her 70s was about 80% of that observed when the same person was in his or her mid-50s. (70% is often taken as the target gross replacement rate in order to maintain pre-retirement living standards.)
- Replacement levels are negatively correlated with family income: 110% among individuals in the bottom income quintile, 75% in the middle quintile, and 70% in the top quintile.
- However, some individuals have very low replacement rates. For example, 20% of individuals in the middle income quintile had replacement rates below 60%.
- Generally speaking, more recent cohorts have improved their income positions at all ages, whether before the retirement years (i.e., in their mid-50s) or in the later retirement years (at age 70 and over). This improvement was driven by both higher earnings and higher private-pension income

There have also been some significant attempts made to assess the likelihood of the future elderly being able to maintain their standard of living in retirement. There are some strong points of disagreement among the studies. But they tend to agree that 30 to 50 per cent of middle earners are likely to experience a significant decline in their standard of living. Two sources of difficulty for the future elderly are non-participation in WPPs and the declining value of OAS compared to growth in AWS. Baldwin2016 reviews key studies.

An international comparative perspective on Canada's RIS is provided through the biennial OECD publication *Pensions at a Glance*. The 2017 version of the publication provides comparative data on poverty rates among the elderly in OECD countries. Canada ranks 17th out of 35 countries in that comparison. The comparison is based on a LIM measure. Stylized replacement rates are also provided.

International comparisons of retirement income systems are also provided by the Melbourne, Australia office of the Mercer Consulting firm. Systems are evaluated in three broad areas:

adequacy, sustainability and integrity. In the most recent (2018) ranking Canada is ranked 10th out of 34 countries. The 2018 report on Canada is generally positive but identifies several areas where the Canadian RIS could be improved. Increasing participation in WPPs is the first noted area of improvement. (See: Mercer, 2018)

A very favourable assessment of Canada's RIS was provided by Whitehouse in a paper prepared for federal and provincial finance ministers in their review of retirement income adequacy a decade ago. (See: Whitehouse, 2010).

Annex 3

The Evolution of OAS/GIS and the CPP

OAS/GIS and the CPP have been designed and managed to last for long periods of time. Yet change in each of the programs has been a regular occurrence. Since the time of its establishment in 1952, the OAS – including the GIS component – has been changed 38 times. A handful of the changes have dealt with administrative matters such as privacy protection. But most have changed either the eligibility criteria for receiving benefits or the amount of benefits.

Changes to the CPP have been a little less frequent. There have been 16 in all compared to 31 changes in OAS since the CPP was established. The lower frequency of changes in the CPP may reflect two related things: changes to the CPP benefits and contributions require an agreement between the Government of Canada and two thirds of the provinces with two thirds of Canada's population. (The CPP amending formula gives Ontario a veto over changes). In addition, the revenues and expenditures of the CPP are not included in the budgetary revenues and expenditures of the federal government. In contrast, the OAS/GIS is unilaterally controlled by the federal government and its expenditures are a budget item.

In view of the issues raised in other parts of this paper, several things about the evolution of OAS are interesting.

The age of eligibility for OAS when it was first established was 70. The age of eligibility was lowered in one year steps between 1966 and 1970 when it became 65. In 2012, the government announced that it would increase the age of eligibility to 67 over a six year span starting in 2023. The proposed increase in the age of eligibility was reversed in 2016.

When the OAS was established there was no automatic adjustment to benefits to reflect changes to prices or wages. In 1970 price indexation capped at 2 per cent per year was introduced. In 1972 full CPI indexation was introduced and CPI adjustments were made annually until 1974 when they took on the current form of quarterly adjustments to increases in the CPI.

Over the period since CPI indexation was introduced, *ad hoc* adjustments that exceed CPI adjustments have been quite common for the GIS: there have been six of them often timed with upcoming elections. The last *ad hoc* adjustment to the basic OAS was in 1973.

When the OAS as introduced in 1952, it did not include a GIS component. The GIS was introduced in 1966 and its creation was linked quite directly to the launching of the CPP.

When the legislation to establish the CPP was introduced, the NDP and PCs criticized it on the grounds that it did nothing for the current elderly. The government of the day responded with an increase in the OAS benefit and the creation of the GIS.

The GIS was to be a temporary program: it was only to be available to people born in 1910 or earlier and it was to provide a maximum benefit of 40 per cent of an OAS benefit. The year of birth restriction and the limitation on the size of GIS benefits were dropped by the early 1970s. The sense of what constitutes intergenerational fairness that animated the debates of the 1960s and 1970s was quite different than what animated the debates of the late 1990s.

The changes to the CPP were, as noted, less frequent than OAS changes and many of the changes to the program came in three significant reform exercises in which many aspects of CPP financing and benefits were changed at the same time. Changes to the Plan in 1986, 1997 and 2016 were multi-dimensional - dealing with both financing and benefit issues and culminating extensive debates on CPP and pension reform.

In addition to these large scale reforms to the CPP there have been more focussed reforms that have dealt with specific (and important) aspects of the CPP. In 1977 the federal government adopted proposed changes to allow credit splitting on divorce and to establish a child rearing drop-out. (Implementation of the latter change was blocked by Ontario for several years while certain CPP financing issues were resolved). In 2012, a number of changes to CPP were introduced with a view creating incentives to postpone claiming CPP retirement benefits past 65 and to eliminate some work disincentives in the Plan,

Regular changes to the public components of the RIS are not unique to Canada. Each edition of the OECD's biennial publication *Pensions at a Glance* includes a review of reforms to retirement income systems in OECD countries. The reality of regular change in systems is clear – especially in the 2013 and 2015 editions of *Pensions at a Glance*.

Annex 4

Nuance Needed in Discussing DB and DC

As is common in pension discourse, this paper makes many references to DB and DC pension plans. It is common to suggest that pension plan design involves a binary choice between these two types of plan. DB plans have a formula – usually linked to years of service – on the basis of which benefits will be calculated. In pure DB, all financial risk shows up in uncertain levels of contributions. In pure DC, all financial risk shows up in variable benefits. DB plans are often praised for their ability to provide predictable benefits.

The distinction between DB and DC just noted has important elements of truth to it. But the actual world of pension design is a little more subtle than one might infer from the distinction as it was just presented.

There are a wide variety of specific designs that properly belong under each of the DB and DC headings and not all of the specific DB designs can provide predictable (and adequate) benefits throughout the retirement period. In addition there are pension designs emerging in Canada and elsewhere that combine elements of DB and DC. Thus, pension design has come to look more like a spectrum of choice rather than a binary choice. Finally, there are times when DB plans are managed as if they were collective DC plans as benefit adjustments are driven by changes in the rate of return on investments.

It should be noted too that while DB plans can generate gross replacement rates that are predictable, net rates that take account of pre-retirement contributions are far less predictable. There can also be problems of transparency in DB plans that result from a lack of understanding of the cross-subsidies within and between different cohorts of plan members.

These issues are addressed in Baldwin 2015 and in an unpublished paper (Baldwin 2019b) that is available from the author on request)

Annex 5

Participation by Women in the Labour Force and Pension Arrangements, Evolution in Recent Decades

Female participation in pillars 2 and 3

One of the most important social and economic changes that has occurred since the end of World War II is the increased participation of women in paid employment. The table below provides data on employment rates of Canadian women with selected birth years at different ages. Two things stand out about the data in the table below. First, there is a marked increase in employment rates of younger versus older age cohorts. Second and closely related, the employment experience of women born after World War II is markedly different than for women born prior to World War II.

In context, it is important to note that when we look at cross sectional data on the incomes of women currently over 65, the front end of the baby boom only reached 65 in 2011 and the tail end of the baby boom will only reach age 65 in 2031. Most of the observed incomes of the females over 65 will be incomes of pre-boomers.

Table 6
Employment Rates of Canadian Women,
Selected Birth Years and Ages

Birth Year	25-29	35-39	45-49	55-59	60-64
1927-31			48.0	38.8	22.1
1937-41		49.7	60.8	44.4	28.6
1947-51	52.4	65.5	72.4	51.2	38.2
1957-61	67.3	71.4	79.4		
1967-71	71.5	78.0			
1977-81	77.6				

Source: Authors' calculations based on CANSIM 282-0001

Females' participation in the CPP

Increased female participation in paid employment also means increased participation in the CPP. Over the period from 1980 to 2015, the number of female contributors increased from 3.5 million to 6.1 million. The share of contributors who are female increased from 40 to 47 per cent and the average level of female contributory earnings increased from 55 per cent of average male contributory earnings to 77 per cent of average male contributory earnings. By 1990, women were the recipients of 44 per cent of new CPP retirement benefits and by 2000, they were half of new benefit recipients. Differences in contributory earnings between females and males are constrained by the YMPE.

Females' participation in workplace pension plans

Statistics Canada's data on participation in workplace pension plans by gender dates from the mid 1970s. In the early years for which data are available, participation in workplace pension plans was overwhelmingly male. Women made up only 27 per cent of plan members. Even as late as 1990, women were only 39 per cent of plan members. Through the 1990s and 2000s female participation became a larger part of the total membership and by 2010 the membership in workplace pension plans was almost equally divided between men and women.

The percentage of employed women who participate in workplace pension plans has followed a somewhat different pattern than men. The percentages continued to increase into the early 1990s and have declined only slightly since then from 42 per cent in 1994 to 40 per cent in 2012. Female employment tends to be concentrated in areas of very low rates of participation in workplace pension plans (e.g. personal services) and in areas with very high rates of participation (e.g. health care and education).

Not surprisingly, the odds of an adult woman belonging to a workplace pension plan have gone up with increased participation in paid employment. In the 1970s, female participants in workplace pension plans were the equivalent of only 14 per cent of the female population aged 18 to 64. By 2009, this number was up to 27 per cent – the same as for all participants in workplace pension plans compared to the total population aged 18 to 64. Increasing employment rates have tended to offset the decline in the portion of the employed population that participates in workplace pension plans.

Females' use of RRSPs

The CANSIM data on RRSP contributions by gender only goes back to the year 2000 and does not indicate any particular change in the use of RRSPs by women. Nonetheless, it is worth reporting that over the period since 2000 women make up just over 50 per cent of tax filers and 45 to 47 per cent of RRSP contributors with a slight increase through time. Contributions by females have consistently been 39 to 40 per cent of all contributions. The use of RRSPs has clearly become common among women. The median RRSP deduction by women has declined somewhat as a percentage of men's from 73 to 68 per cent. What would be interesting to know but can't be gleaned from the CANSIM data is the comparative use of RRSPs by men and women with similar incomes and other characteristics.

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EXPERTS PANEL ON INCOME SECURITY

This Panel (membership listed below) has been meeting regularly over the past three and a half years, analyzing issues affecting our pension programs and other aspects of Canada's retirement income system including tax provisions, and examining the interactive effects of the various components of the system as well as specific program designs and administrative practices.

Our Panel has developed and submitted to the federal government numerous papers on relevant policy and program issues. We have expressed particular concerns about the quality and availability of data, analytical models and relevant policy research relating to Canada's seniors. These concerns support the present government's stated priority that good government policy decisions should be based on solid evidence. For example, the Panel has been discussing with Statistics Canada their data priorities and challenges, including their program of Statistics on Population Aging and Seniors.

The group has also been communicating actively with several government departments, particularly with the Department of Employment and Social Development including the Minister, his office and senior departmental policy staff, in light of their important income security mandates and programs. Several submissions contributed to, then commented on, the government's 2018 Strategy for Poverty Reduction.

In partnership with the Ottawa Public Library, we are conducting a set of workshops on "Planning for Retirement on a Low Income," designed to assist public understanding of the programs, benefits and choices confronting lower income Canadians, and in particular those likely to be in the lower income category in their retirement years. Taxation issues along with support program rules and administration are key elements of the presentations and discussion. These workshops follow the successful model in place for several years in the Toronto area, developed by John Stapleton, one of our Panel members.

INCOME SECURITY PANEL MEMBERS

Russell Robinson, Chair. Former Policy Research and Planning ADM, Health & Welfare Canada; ADM for Federal-Provincial Relations and Social Policy, Finance Canada.

russrobinson@rogers.com

Bob Baldwin. Former Director, Social and Economic Policy, Canadian Labour Congress; member and Chair of the Canada Pension Plan Advisory Board. bob.baldwin@sympatico.ca

Bernard Dussault. Former Chief Actuary of Canada; Consulting Actuary with focus on pension issues. Member, executive of the Canadian Coalition for Retirement Security.

bdussault1797@gmail.com

Peter Hicks. Former Policy ADM in several social departments and in central agencies; internationally, coordinated OECD's work on policy implications of aging populations.

peterhicks@sympatico.ca

Andrew Jackson. Former Chief Economist and Director of Social and Economic Policy, Canadian Labour Congress. Adviser to the Broadbent Institute; adjunct professor, Carleton University.

ajacksonclc@gmail.com

Jennifer Robson. Assistant Professor, Carleton University. Research and publications on social and tax policy, poverty in Canada and public administration. jenniferrobson@cunet.carleton.ca

Richard Shillington. Statistician, researcher, consultant and commentator on social policy. Author of reports and books on seniors' poverty and their income. richard@shillington.ca

John Stapleton. Former Ontario government official; member of numerous governmental review panels, advisory groups and task forces, including the 2017/2018 federal advisory committee on poverty reduction. jsbb@rogers.com

Michael Wolfson. Former Assistant Chief Statistician, Statistics Canada, and Canada Research Chair in Population Health Modeling. Research and publications on wide range of social policy issues and reforms, including income security policies. Michael.Wolfson@uOttawa.ca