



COMMENTARY NO. 359

Pooled Registered Pension Plans: Pension Saviour – or a New Tax on the Poor?

Ottawa needs to rethink the tax rules for Pooled Registered Pension Plans (PRPPs) to realize their potential. As it is, many low- to middle-income Canadians should avoid this new retirement saving vehicle.

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The Study In Brief

In June 2012, the regulatory framework for a promising new retirement savings vehicle, Pooled Registered Pension Plans (PRPPs), was passed into federal legislation. The hope is that PRPPs will improve pension coverage and retirement-saving outcomes by reducing costs and improving investment returns through asset pooling and third-party administration. Since most employers under federal pension legislation are already providing pension coverage to their employees, PRPPs were introduced in the expectation that provincial governments would follow the federal lead and adopt PRPPs for the vast majority of Canadian workers under provincial pension jurisdiction. As of now, only the province of Quebec has announced its intention to create its own distinct version of PRPPs, branded Voluntary Retirement Savings Plans.

Although the intentions behind PRPPs are commendable, PRPPs represent only a mild improvement over existing options such as Registered Retirement Savings Plans (RRSPs) and defined-contribution (DC) pension plans. This is because tax rules for PRPPs – essentially identical to those that apply to RRSPs and similar to those for DC plans – will prevent many private-sector workers from saving enough for retirement and from receiving retirement income in the form of a life pension.

Tax rules are the foundation for retirement saving because of the advantages they offer in registered plans, such as deferral of tax on contributions and non-taxation of investment income. If the foundation isn't right, these plans cannot operate to their potential or in the interest of all Canadians. As a result, this paper focuses on tax rules and makes recommendations that, if implemented, are likely to make PRPPs perform better for Canadians than their closest comparators – DC plans and RRSPs.

Firstly, we demonstrate that many lower-income and middle-income workers who save for retirement should not do so in tax-deferred accounts because if they do, they will pay taxes and government benefit clawbacks on withdrawals in retirement at rates that are significantly higher than the refundable rates that apply to contributions. Over a lifetime, these workers would be much better off financially to save for retirement in existing Tax-Free Savings Accounts (TFSAs). Therefore, we propose that tax rules be amended to allow tax-prepaid saving within PRPPs.

Secondly, guidelines should be developed to help PRPP administrators protect lower-income retirees from the punitive effect of high government benefit clawbacks in retirement.

Thirdly, PRPP members should have the option of accumulating self-funded, "target" pension benefits providing the same advantages enjoyed by federal government workers and other DB pension plans that are not available in RRSPs and DC plans.

And lastly, it seems almost too obvious to state that a pension plan should pay pensions or – at the very least – be able to pay them. But PRPPs will not be able to do so because federal tax rules prohibit any pension plan from paying a pension unless it is a defined-benefit (DB) plan. Allowing PRPPs to pay pensions would improve retirement income security for all PRPP members and turn PRPPs into a truly new and innovative retirement savings vehicle.

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In June 2012, the House of Commons passed Bill C-25 (Canada 2011a), containing the regulatory framework for "Pooled Registered Pension Plans" (PRPPs), a new kind of retirement-saving vehicle described by the government as "an effective and appropriate way to help bridge existing gaps in the retirement system (Canada 2011c).

According to the report of a federal-provincial Research Working Group on Retirement Income Adequacy, cited by the federal government prior to the introduction of Bill C-25, these gaps likely relate to "modest- and middle-income" Canadians who are not saving enough for retirement (Mintz 2009).

The federal government's apparent hope is that PRPPs will improve pension coverage and retirement-saving outcomes by reducing costs and improving investment returns through asset pooling and third-party administration. Analogous to the federal *Pension Benefits Standards Act*, 1985, which establishes the rules for federally regulated employers who sponsor workplace pensions, Bill C-25 sets standards for PRPP administration, asset management, member enrolment and locking-in of benefits.

The federal government has jurisdiction over specific kinds of employers – e.g., railways, banks, the postal service, etc. Most of these employers provide pension coverage to their employees. Therefore, Bill C-25, which received Royal Assent on June 28, is not expected to affect most workers unless the provinces cooperate.

For this reason, Bill C-25 was drafted in the hope that provincial governments would adopt

enabling legislation and pursue bilateral or multilateral agreements (Canada 2011b). Though not impossible, this is unlikely given provincial pension regulators' historically staunch resistance to nationally harmonized pension rules (Van Riesen 2009).

Quebec announced in its 2012 budget that it intended to implement its own distinct version of PRPPs (Quebec 2012) and on June 12, 2012, tabled *Bill 80 – An act respecting voluntary retirement savings plans*. Bill 80 would require that employers with five or more employees offer membership in a "Voluntary Retirement Savings Plan," albeit with no requirement that employers contribute. By comparison, the Ontario government expressed concerns regarding the proposed PRPP framework in its March 2012 budget, suggesting that it may not increase pension coverage, retirement saving adequacy or adequately protect members' interests. The Ontario budget instead advocated a "modest" enhancement to the Canada Pension Plan (CPP).

When the federal government first announced the basic PRPP framework in 2010, it indicated that it would develop tax rules to put PRPPs "within the basic system of rules and limits" for Registered Retirement Savings Plans (RRSPs) and

The authors would like to thank Faisal Siddiqi for his help on annuity calculations, as well as members of the C.D. Howe Institute's Pension Policy Council for their comments and suggestions.

pension plans (Canada 2011d). Proposed tax rules for PRPPs were released on December 14, 2011, the main elements of which are as follows:

- PRPP contributions will be limited to an individual's available RRSP contribution room;
- Self-employed and employed individuals will be able to join PRPPs, with no requirement for an employer to participate;
- "De-accumulation" options will be similar to those available for defined-contribution (DC) pension plans – i.e., transfer to a RRIF, payment of variable benefits or purchase of a life annuity; and
- PRPP administrators must be licensed as such and must be corporations resident in Canada.

While the federal government presents PRPPs as a way to "bridge existing gaps" in Canada's retirementsaving system, they have received a tepid response from many pension experts and commentators. For instance, PRPPs cannot require mandatory participation and, therefore, have "very little advantage compared to a group RRSP" (Hurst 2011). Second, and unlike employer-sponsored definedbenefit (DB) pension plans and the Canada and Quebec pension plans (C/QPP), a PRPP represents another savings vehicle that "will not guarantee any particular pension" (Townson 2011).

In terms of providing opportunity to accumulate a pension, Table 1 shows how PRPPs stack up compared to the C/QPP and to private retirementsavings vehicles now permitted under federal tax rules – DB pension plans, DC pension plans and RRSPs.

The proposed tax rules for PRPPs are essentially identical to those that apply to RRSPs and similar to those for DC pension plans (see Table 1). As discussed in previous papers of this series, tax rules for DC plans and RRSPs are inferior to tax rules for DB pension plans in terms of providing adequate and secure pension incomes.¹ As compared to DB pension plans, the important deficiencies of DC pension plans and RRSPs are as follows:

- They do not pay retirement pensions.
- Contribution room will be inadequate for many workers.
- Investment losses result in permanent loss of retirement saving room.

In essence, and despite the word "pension" in their name, PRPPs will not be "pension" plans because a) they will not pay pensions to their members and b) they will not allow workers or their employers to contribute to the kind of predictable or target retirement income provided by the C/QPP and by existing single-employer, multi-employer or jointly sponsored DB pension plans. Instead, PRPPs will provide a lump-sum account that members will manage through retirement. Given "the large body of research that demonstrates that financial planning and investing for retirement is not something that comes easily to most people and that many individuals lack even the basic knowledge required to successfully manage their own retirement plans" (Broadbent et al. 2006), many PRPP participants are unlikely to manage their accounts well – especially in retirement when many will experience physical or mental infirmities that can be expected to further reduce their ability to manage their retirement accounts.

As such, PRPPs represent a perpetuation of a problem that has existed since federal tax rules first permitted retirement saving almost 100 years ago: one cannot participate in a plan promising "target" or "defined" pension benefits unless one is fortunate enough to have an employer provide it. Today, only about 15 percent of Canada's private-sector workers are in this position (Statistics Canada Tables 1 and 2).

Table 1: Comparison of PRPPs, RRSPs, DC plans, DB Plans and the C/QPP					
Feature	PRPP	RRSP	DC Plan	DB Plan	C/QPP
Pays a pension	No	No	No	Yes	Yes
Predictable, target pension benefit	No	No	No	Yes	Yes
Disability pension	No	No	No	Yes	Yes
Pension accrual possible during disability or other workforce absences	No	No	Yes	Yes	Yes
Participation mandatory	No	No	Usually	Usually	Yes
Risk pooling	No	No	No	Yes	Yes
Asset pooling	Partial	No	Partial	Yes	Yes
Investment losses generate new contribution room	No	No	No	Yes	Yes
Payroll taxes payable on employer contributions	No	Yes	No	No	n/a
Note: C/QPP allows exclusion of some low-earning years for pu	rposes of deterr	nining a retiren	nent pension.		

Source: Authors' calculations.

Although PRPPs may represent a modest step forward in terms of asset pooling, they won't give the remaining 85 percent the opportunity to enjoy the benefits of DB workplace pension plans. PRPP outcomes risk being similar to that of RRSPs and DC plans because they will provide only limited asset pooling and will not pool pensioners' market and longevity risks, which helps large DB plans to provide annuities at lower costs.

Perhaps the most troubling aspect of PRPPs is the constituency for whom they appear intended, as indicated in a background document on PRPPs released by the federal government in November 2011:

Some Canadian households, especially modestand middle-income households, may be at risk of undersaving for retirement While aggregate RPP/RRSP participation rates for middle- and higher-income earners are quite high, the research indicated that a portion of Canadians may not be saving enough (Canada 2011c).

The federal government's intent, it appears, is that PRPP membership will be largely made up of low- and lower-middle income workers. This is a departure from the federal government's longstanding view that "tax-assisted" retirement saving in pension plans and RRSPs is primarily intended for Canadians with middle and upper-middle incomes (Canada 1984).

For many low- and middle-income workers, saving in a PRPP (or any other tax-deferred plan) will be worse than saving for retirement outside of them because of often misunderstood tax consequences. Conventional wisdom suggests that retirees pay lower taxes on their pension income than they paid on earnings while working. But for younger low- and middle-income workers who are now starting to save for retirement, the opposite is generally true: income taxes and government benefit clawbacks may actually result in higher effective tax rates on their retirement income than on earnings saved during working life. High effective tax rates that result in part from the clawback of income-tested benefits for the elderly mean that governments are effectively getting more taxes back from many Canadians when they retire than the amount of taxes forgone when those Canadians contributed to pension plans and RRSPs (Laurin and Poschmann 2010; Figure 1 below).²

With the exception of potential efficiency gains through pooling of assets, PRPPs will be nearly identical to RRSPs. This means that as currently proposed, PRPPs are unlikely to improve the retirement incomes of tomorrow's seniors (Ambachtsheer and Waitzer 2011). However, and notwithstanding the fact that pension regulation is largely a provincial matter, the federal government need not be a toothless tiger when it comes to helping Canadians prepare for better retirements. This is because the federal government controls tax incentives for retirement saving in all tax-deferred retirement plans, including PRPPs, which have the potential to contribute in a more meaningful way to Canadians' retirement income security.

What can the federal government do to make PRPPs better? Below, four changes are proposed that will make PRPPs an innovative and effective new retirement saving option for all Canadians:

- Allow tax-prepaid saving within PRPPs. This will ensure that PRPPs can be a good retirement saving vehicle for lower- and middle-income workers.
- Develop guidelines to help PRPP administrators discourage or prevent lower-income workers from contributing to tax-deferred PRPP accounts.

This will help protect lower-income retirees from punitive effective tax rates in retirement.

- Allow workers to contribute to their own "target benefit" pensions. This will be of particular benefit to workers who are older and/or have middle- and upper-middle incomes, as well as to lower-income workers – if tax-free pension accounts are permitted.
- Allow PRPPs to pay pensions. This will improve retirement income security for all PRPP members and turn PRPPs into real pension plans.

Because tax rules for PRPPs have to be correct before anything else can be, this paper does not address a number of issues important to PRPP delivery. Some of these issues include optional versus voluntary enrolment, the design of default investment options and PRPP governance.

Tax rules are the foundation for retirement saving in all pension plans and RRSPs because of the advantages they offer, such as deferral of tax on contributions and non-taxation of investment income. If the foundation isn't right, these plans cannot operate to their potential or in the interest of all Canadians. As a result, this paper focuses on tax rules and makes recommendations that, if implemented, are likely to make PRPPs perform better for Canadians than their closest comparators – DC plans and RRSPs.

This is an area where the federal government can make a difference. Tax reforms tailored to PRPPs would enable providers to offer plans better adapted to the needs of the workers who need them most, with wider acceptance and without compromising PRPPs' intended simplicity.

1. Tax-Free Pension Saving

Canadians can save for retirement in a variety of ways. They can invest their after-tax savings in real or financial assets and pay taxes on their

² This appears inconsistent with the federal government's assertion that "tax-assisted" retirement savings plans cost the federal and provincial treasuries \$30 billion annually in lost tax revenue (Canada 2011b).

investment income as it accrues (interests, royalties and dividends) or as it is realized (capital gains). Or, they can take advantage of government-registered savings vehicles in which most investment income accumulates tax free. Some employers – particularly in the public sector – sponsor registered pension plans (RPPs) for their employees, in which income tax payable on contributions (or some equivalency for the promised pension in defined/target benefit plans) is deferred until pension benefits are paid out. The same investment-income sheltering and income-tax deferral is granted on contributions made to individual RRSPs.

A new savings option, the Tax-Free Savings Account (TFSA), became available to Canadians in 2009. Canadians over age 18 can invest up to an inflation-indexed limit of \$5,000 annually in a TFSA; unused investment room can be carried forward indefinitely. TFSA-eligible investments are also sheltered from investment income taxation. TFSAs are funded with income that has already been subject to personal taxation, and no taxes are payable on withdrawals. For this reason, these plans are often dubbed "tax-prepaid."

TFSA withdrawals do not affect entitlement to income-tested benefits, which means that low-income workers can use TFSAs to save for retirement tax-effectively, without reducing their entitlement to Guaranteed Income Supplement (GIS) benefits. For lower-income retirees, marginal effective tax rates on taxable pension income are very high: the combined effect of income taxes and clawbacks of federal and provincial income-tested benefits such as the federal GIS and associated provincial supplements means that some low-income retirees can expect to pay marginal effective tax rates of as much as 80 percent on their PRPP savings.³

A common misconception is that tax-deferred (RRSP/RPP) investments are superior to taxprepaid (TFSA) contributions because the tax deferral on RRSP savings will often give rise to a refund of income taxes previously collected at source on workers' pay. However, a tax deferral is not new income or a reduction in tax, but simply a postponement of tax payment to a future time. Conceptually, the tax deferral or refund of tax can be viewed as money borrowed by taxpayers from governments to be reimbursed - with interest - when sums are withdrawn. As demonstrated in Kesselman and Poschmann (2001), Laurin and Poschmann (2010) and Golombek (2011), tax-deferred and tax-prepaid investments are arithmetically equivalent, for a given constant rate of return and tax rate.

However, actual taxes will vary depending on the level and source of income. Therefore, the taxes on earnings put aside for retirement will usually be different from the taxes on withdrawals from registered plans in retirement. If the tax rate on income withdrawn is lower than when invested in the plans, inter-temporal tax savings are available from tax-deferred plans (RPP/RRSP) as opposed to tax-prepaid investments (TFSA). And viceversa, a higher tax rate in retirement would mean tax savings are available from saving in a TFSA in preference to an RRSP.

If the objective is to minimize taxes over a lifetime, then one would be better off saving for retirement in the tax-preferred form (tax-deferred vs. tax-prepaid) likely to result in the lowest average lifetime tax rate, based on individual circumstances. A multitude of individual factors can influence these circumstances, including determinants of effective tax rates, such as levels and sources

³ The issue of high effective marginal tax rates on tax-deferred retirement savings accumulated by low-income workers has been discussed extensively in previous publications. See Shillington 2003, Poschmann and Robson 2004, Milligan 2005, Pierlot 2008, Laurin and Poschmann 2010, 2011a, 2011b and 2011c, and Pierlot/Siddiqi 2011.

Box 1: Simulating Lifetime Income Taxes Paid (and Government Benefit Reductions) on Tax-Deferred Retirement Savings (RRSP) vs. Tax-Prepaid Savings (TFSA)

Results presented in Figure 1 are scenario-based lifetime tax simulations for modelled 30-year-olds putting aside for retirement a constant fraction of gross earnings annually until retiring at 65. Assumptions are made with respect to family situation, starting income levels, earnings growth (2.5 percent per year), inflation rate (2 percent per year), desired pre-tax income in retirement (60 percent of final-year earnings), rate of return on investments (5 percent) and annuity factors. As illustrated in Table 2, these assumptions enable us to compute the amount of gross savings and associated annual constant savings rate required to purchase an inflation-indexed annuity in retirement that produces a yearly gross income stream sufficient to bridge the gap between the target retirement income and the sum of CPP income and government income-tested benefits.

When one calculates tax burdens shouldered by individuals and families, it is important to consider all relevant aspects of the tax system. Federal and provincial income taxes are naturally based on the combination of taxable income, schedules of statutory tax rates and eligible credit amounts used to reduce tax payable. Those are payments from the pockets of taxpayers to governments.

But governments also transfer money to individuals and families through the tax system for programs such as the Canada Child Tax Benefit, the GST/HST credit, the Working Income Tax Benefit and the Guaranteed Income Supplement for seniors at the federal level, and many other similar programs at the provincial level. These payment amounts are usually determined based on taxable income; i.e., they are clawed back by reduction rates beyond certain income thresholds. Tax burden estimates computed in this analysis include all these payments from taxpayers to governments and from governments to tax filers. Effective tax rates, therefore, measure how household disposable income (available after-tax income) changes in response to income from various taxable sources.

The analysis presented here is based on simulations carried out using Statistics Canada's Social Policy Simulation Database and Model (SPSD/M). The SPSD/M is a micro-simulation model used by researchers across Canada to assess the implications of tax policy changes. The model is comprehensive in that it integrates all of the various parts of the tax system, including benefit reduction rates and tax credits, enabling the computation of effective tax rates on working income and on taxable retirement income later in life. We further assume no major change in tax laws and regulations. Taxes are computed for the 2011 tax year.

We can compute effective tax rates on income saved into a TFSA while working, using our tax model, our calculated required constant savings rate and assumed income levels throughout one's working life. (Income flowing out of TFSAs in retirement is tax-free.)

While earnings saved into RRSPs are not taxed, income flowing from RRSPs in retirement is fully taxable. Effective tax rates on taxable pension income from RRSPs are calculated on top of Q/CCP income and are inclusive of any remaining clawbacks of GIS and associated supplements, which explains their relatively high levels at lower levels of income.

of income, existing savings, desired income in retirement, clawbacks of income-tested government benefits and family situations.

Given reasonable assumptions regarding individual lifetime savings, earnings and desired income in retirement, and assuming no change to tax laws, it is possible to simulate and compare lifetime after-tax outcomes of retirement savings depending on whether savings occur in tax-deferred or in tax-prepaid plans. We have built a simulation model enabling such calculations (see methodology in Box 1).

Take, for example, a 30-year-old single individual in Alberta with employment earnings of \$50,000, rising at 2.5 percent per year for the next 35 years (Table 2). He or she would need to save about

	(Cur	(Current \$)		(Current \$)	
Earnings at 30 years old	\$5	\$50,000		\$33,300	
Real earnings at 65 years ⁽¹⁾	\$5	9,004	\$39	,323	
Target gross real income in retirement ⁽²⁾	\$3.	\$35,426 \$23,594			
Estimated real CPP benefits in retirement	\$1	\$11,903		\$8,207	
Estimated real government benefits ⁽³⁾	\$1	\$10,135		\$12,621	
Target private annuity pension ⁽⁴⁾	\$1	\$13,388		\$2,766	
Lump-sum required to purchase target indexed annuity ⁽⁵⁾	\$21	\$215,314		\$44,490	
Annual savings rate required to accumulate desired lump sum ⁽⁶⁾	6	6.7%		2.1%	
	Tax Calculations		Tax Calculations		
	RRSP	TFSA	RRSP	TFSA	
Effective lifetime tax rate on earnings saved ⁽⁷⁾	0%	32%	0%	29%	
Lump sum of investments at 65	\$215,314	\$146,414	\$44,490	\$31,588	
Gross indexed annuity	\$13,388	\$9,104	\$2,766	\$1,964	
Effective tax and benefit clawback rate on annuity income	46%	0%	67%	0%	
Annuity income available for consumption	\$7,230	\$9,104	\$913	\$1,964	
Financial gain (loss) as a percentage of gross savings	(14%)	14%	(39%)	39%	
Percentage gain (loss) of consumable annuity income	(26%)	26%	(115%)	115%	

(1) Assuming 2.5 percent earnings growth per annum minus the effect of 2 percent inflation.

(2) 60 percent of final-year earnings.

(3) Amounts for Old Age Security pension, Federal Sales Tax Credit, Guaranteed Income Supplement (GIS) and Alberta Seniors Benefit (ASB) minus clawbacks of GIS/ASB due to taxable CPP income.

(4) For example, at 50,000, 13,388 = 35,426 - (11,903 + 10,135)

(5) Single-life annuity, no guarantee period, annuity purchase interest rate is 3.5 percent; indexing rate is 2 percent.

(6) Estimation based on the model developed in Dodge et al. (2010).

(7) Estimated using modelled taxes and benefit clawbacks on the last 6.7 percent of earnings saved every year at the \$50,000 income level and 2.1 percent at the \$33,300 invome level.

6.7 percent of income every year to accumulate a gross amount of about \$420,000 (or about \$215,000 taking out the effect of inflation) at retirement, enough to purchase a life annuity bridging the gap between a target 60 percent of final-year earnings and the sum of CPP income and government

income-tested benefits (GIS, Alberta Seniors Benefit and federal sales tax credit).

In this example, earnings saved each year in a TFSA are reduced by income taxes and government benefit clawbacks, thus reducing the total amount of money available for consumption in retirement - and the life annuity – by an estimated 32 percent. In a RRSP or pension plan, annual contributions are sheltered from tax leading to larger annuity payments in retirement before taxes. However, these retirement annuities reduce GIS and other benefit entitlements, and attract income taxes, reducing the annuity available for consumption by an estimated 46 percent (Table 2). Thus, in this example, substantial tax savings (14 percent of gross accumulated investments) would be available by saving tax-prepaid as opposed to tax-deferred (Table 2). Put differently, this worker would enjoy 26 percent more consumable annuity income from his 6.7 percent annual contribution by saving in a TFSA instead of an RRSP (Table 2).

The same simulations can be made for a lowerincome 30-year-old single individual with earnings, for example, of \$33,300 (Table 2). In this case, pension income from government sources fulfills almost all of his/her target income in retirement, leaving a small gap to be filled with savings of about 2 percent of income per year. Saved in a traditional tax-deferred vehicle, the entire amount of annuity income in retirement would be subject to very high senior's benefits clawbacks, eating away most of the savings (67 percent). For low-income individuals, tax-prepaid savings such as TFSAs are preferable by a large margin (Table 2 and Figure 1).

Similar tax calculations can be performed assuming various levels of income, family situations and province of residence (Figure 1). On average, for the four most populous provinces (Quebec, Ontario, Alberta and British Columbia), 30-yearold single individuals earning \$33,300 and retiring at 65 could achieve tax savings equivalent to 23 percent of gross accumulated assets by investing in a TFSA (as opposed to a RRSP). For midincome single earners (\$50,000 earnings), average tax savings are estimated at about 10 percent of gross accumulated assets (Figure 1).

Investing in tax-prepaid vehicles can also reduce significantly taxes and benefit clawbacks for lowto mid-income dual-earner couples. For instance, young couples without children earning \$50,000 or \$75,000 of family income could save 31 percent and 6 percent, respectively, of gross accumulated assets on average. For couples with children, average tax savings from investing for retirement in a TFSA are relatively less, due to higher clawbacks on childrelated government benefits while working.

The figures presented above demonstrate that many lower-income and middle-income workers who save for retirement should not do so in taxdeferred accounts because if they do, they will pay effective taxes on withdrawals at rates that are significantly higher than the refundable rates that apply to contributions. With this in mind, and given that PRPPs are apparently targeted at lower- and middle-income workers, there is a real question as to the federal government's real purpose in introducing tax-deferred PRPPs: is it to improve future retirees' living standards? Or is it to increase their effective tax rates by encouraging them to save in a way that that will reduce their entitlement to the GIS, thus relieving financial stress on the public pension system? Note that this criticism would apply equally to the proposed CPP enhancements put forward by Ontario and other provinces - in fact, CPP enhancement could actually be worse than tax-deferred saving in a pension plan or RRSP because individuals' CPP contributions do not enjoy the same tax preference as pension and RRSP contributions.

Unless changes are made to PRPPs, lower- and middle-income workers over a lifetime will be much better off financially to save for retirement in TFSAs. Proposed tax rules for PRPPs should therefore be amended to create new Tax-Free Pension Accounts (TFPA) and allow PRPP members to contribute to them. Analogous to a TFSA, which allows tax-free accumulations and withdrawals, a TFPA should be available to all members but designed primarily for the needs of low- to mid-income workers.

Many workers don't have steady career paths with constant earnings growth throughout their lifetime, as modelled in our examples above. Therefore, it is entirely possible that the best

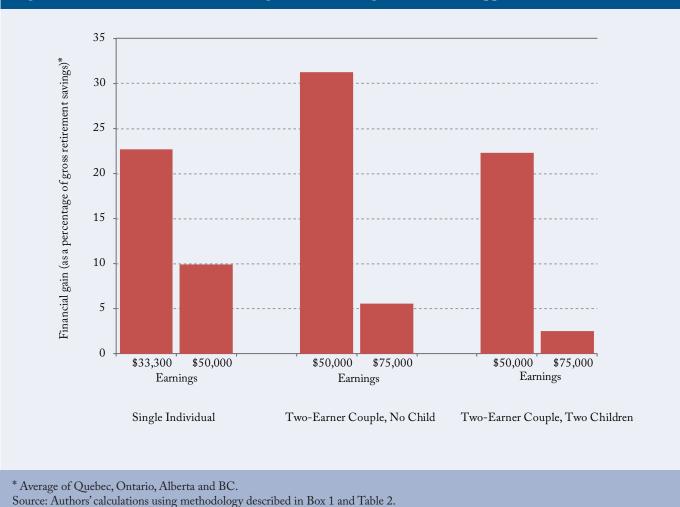


Figure 1: Modelled Lifetime Tax Savings from Investing in a TFSA (as opposed to a RRSP)

outcome for many would involve switching between a tax-deferred account and TFPA at some points in their career. It is impossible to model all possible scenarios, but the new regime should allow participants to freely choose at any time how their savings are allocated between both types of accounts. This being said, it should be noted that most participants are likely to need assistance in determining which type of tax-preferred account will be optimal at a particular time. This presents

an opportunity for PRPP administrators to develop guiding tools and assistance procedures to help participants make informed choices.

Under current TFSA rules, younger workers have a much greater opportunity to accumulate TFSA savings than older workers. For example, an individual aged 25 in 2012 who makes maximum contributions could accumulate TFSA savings of about \$865,000 by age 65, or about \$515,000 in real terms.⁴ By comparison, a 55-year-old in 2012

4 Assuming 2.5 percent inflation and a 5 percent nominal compound annual return.

could not accumulate more than about \$69,000 of TFSA savings by age 65, or \$61,000 in real terms.⁵ To ensure that older and younger workers have the same opportunity to save in a TFPA, and to allow older workers to contribute more to catch up, TFPA contributions should not be subject to the current annual TFSA limits. Instead, unlimited contributions should be permitted until an indexed TFPA accumulation allowance is reached.

Bearing in mind that the TFPA would be primarily intended for lower-income workers, the suggested starting amount for the TFPA accumulation allowance is \$250,000, indexed to wage inflation thereafter. This is likely the maximum amount a low- or lower-middle income worker could reasonably accumulate during a working life. A TFPA accumulation of \$250,000 would provide a tax-free pension of about \$11,000 to a 60-year-old retiree, or \$12,700 to a 65-year old retiree.⁶ Although not a rich pension, this is enough to substantially improve a low-income retiree's post-retirement standard of living.

To ensure consistency between TFSAs and TFPAs, annual TFSA contribution limits should also be eliminated and the \$250,000 accumulation allowance should be applied to the aggregate of TFSA and TFPA accumulations.

Current TFSA contribution rules effectively discriminate on the basis of age because the indexed, \$5,000 accumulation limit provides an opportunity for younger, wealthier individuals to accumulate considerably more in a TFSA than the recommended limit of \$250,000 over a lifetime, while restricting older Canadians to accumulations of considerably less. While it can be expected that wealthier Canadians will contribute more to TFSAs in the short term if a \$250,000 accumulation limit is implemented, the income-sheltering benefit available to them will be subject to a hard cap, which is not the case with current TFSA contribution limits.

2. Protecting Lower-Income Retirees

The difference between effective tax and clawback rates during work and in retirement is an important consideration in choosing how to save. As demonstrated above, saving on a tax-prepaid basis will be more advantageous for many. This raises the issue of the fiduciary duties of PRPP administrators. Section 22 of Bill C-25 requires a PRPP administrator "to act as a trustee for the members" with "the diligence and skill that it possesses, or ought to possess." This is similar to most pension legislation, which generally requires plan administrators to act in members' interests.

It is expected that most PRPP administrators will be financial institutions that will earn revenue from managing invested PRPP contributions. Consequently, PRPP administrators' interest will be to maximize participants and contributions, even though it is unwise for many lower-income workers to contribute to tax-deferred PRPP accounts – especially those who are years away from retirement, as demonstrated above, or those who are very close to retirement and/or live in lower-tax jurisdictions (Laurin/Poschman 2010). This situation creates a *prima facie* conflict of interest. Some approaches to resolving it and protecting the interests of lowerincome workers are suggested below:

• If PRPP tax rules are amended to allow taxfree accounts, PRPP administrators should be required to develop screening and education protocols to help members select the type of account (tax-free or tax-deferred) in which they should participate; and

5 Idem.

^{6 60} percent spousal survivor benefit (spouse three years younger); interest rate is 3.5 percent; indexed at 2 percent; no guarantee period.

• PRPP administrators should be required to develop financial planning tools to help members determine whether saving in a tax-deferred account is in their best interest.

3. Target Pensions for PRPP Members

Career federal government workers earn pensions that cost 30 percent to 40 percent of pay and are worth \$1 million to \$2 million (Laurin/Robson 2011 and Pierlot/Siddiqi 2011). It is proposed that PRPP contributions will be subject to much lower contribution limits – i.e., the contribution limits that apply to RRSPs. What does this double standard mean for PRPP members?

- PRPP members will not be able to accumulate even half the pension income of a federal government worker (Pierlot 2008; Pierlot and Siddiqi 2011).
- Unlike pension plan members and sponsoring employers, PRPPs members will not be able to increase their contributions to compensate for investment losses.
- PRPP members will not be able to accumulate DB-style "target" pensions.
- Many late-career workers, immigrants, professionals and small business owners will not be able to save enough for their retirement in PRPPs.
- Unlike pension plan members, no PRPP member will be able to accumulate pension income for periods of workforce absence with low or no earnings – e.g., parental leave, retraining, sabbaticals, periods of salary-deferral leave, etc.

There are two approaches the federal government could take to make PRPPs work better and level the playing field between its own workers and those in the private sector for whom PRPPs are intended:

- Allow PRPP members to accumulate pensions using the same defined-benefit rules that apply to pension plans offered by federal and other government levels and by a few private-sector employers; or
- Implement a lifetime accumulation allowance for PRPP members.

Each of these options is discussed below:

a. Allow Self-funded DB Pensions

The federal government can allow PRPP members to accumulate the same pensions as its own workers accumulate. These pensions are close to the maximum permitted under current tax rules.

Under the *Income Tax Act*, members of a DB pension plan can accumulate a pension of 2 percent of the average of the highest three consecutive 12-month periods of earnings, to a maximum of \$2,647 in 2012, for each year of service. For a member with 30 years of service and three-year best average earnings of \$60,000, this translates into a pension of \$36,000. The value of this pension is about \$900,000 at age 60, including other rights and benefits that DB pensions are allowed to offer. Some of these include bridge benefits to replace CPP/OAS benefits until they become payable at age 65, inflation indexing and pension accumulation for periods of leave, reduced pay or disability.

Perhaps most importantly, federal tax rules for DB pension plans do not limit contributions directly – all contributions necessary to fund benefits are permitted. This means that adverse experience – e.g., investment losses or lower-thanexpected investment returns – can be offset with increased contributions to ensure that benefits are secure.

At a minimum, the federal government should amend the proposed tax rules for PRPPs to allow members to accumulate the same DB pensions its own workers receive, with contributions made personally, by their employers, or both. In effect, this would allow PRPP members to accumulate selffunded, "target" pension benefits providing the same advantages enjoyed by federal government workers and other DB pension plans that are not available in RRSPs, DC plans and will not be available in PRPPs. These advantages are as follows:

• substantially greater contribution/accumulation room;

- contribution/accumulation room based on highest-average earnings, rather than careeraverage earnings;
- catch-up contribution/accumulation room for periods of low earnings due to periods of lay-off, illness or parental leave;
- ability to increase contributions to offset investment losses or lower-than-expected investment returns; and
- the opportunity to receive benefits as a lifetime pension annuity.

Whether individuals accumulate benefits on a tax-deferred basis - or on a tax-paid basis, as we recommend above – these features would greatly help PRPP members accumulate adequate pensions. However, and subject to limited exceptions, current tax rules make these features available only in plans sponsored by employers who underwrite pensionfunding risk. One such exception includes multiemployer union plans in which contributions are fixed as a percentage of pay or amount per hour worked. Another is the "member-funded" DB pension plan, which Quebec made available to accommodate some employers' "unwillingness to assume the financial risk of a defined-benefit plan" and labour organizations' desire for membership in a defined-benefit plan "to build up a retirement pension, even if an employer is unwilling to assume the financial risk" (Quebec 2008).

PRPP members should have the option of accumulating DB-style pensions in individual accounts or in a structure with other members that pools longevity risk. In either case, retirement benefits would necessarily be contingent on the aggregate of contributions made by, or on behalf of, a member and investment returns realized.⁷

b. Implement a Lifetime Accumulation Allowance

The introduction of PRPPs affords the federal

government an opportunity to do something truly innovative to provide all Canadians an equal and sufficient opportunity to save for retirement: allow PRPP members to contribute any amount to their PRPP accounts up to a uniform lifetime accumulation allowance. Discussed in a previous paper of this series (Pierlot and Siddiqi 2011), a lifetime accumulation allowance would allow PRPP members to fund a target pension, as and when they can. This would benefit workers at particular risk of not having enough RRSP room to accumulate adequate pensions: mid-career immigrants, professionals with long periods of post-secondary education, small business owners and those who have experienced periods of low or no earnings.

For tax-paid pension saving within a PRPP, the lifetime accumulation allowance should be \$250,000 or less, as proposed above. For taxdeferred PRPP saving, the allowance should be \$1 million to \$2 million (Pierlot and Siddiqi 2011). Each allowance should be indexed to wage inflation.

4. Allow Pensions to be Paid from PRPPs

It seems almost too obvious to state that a pension plan should pay pensions or – at the very least – be able to pay them. But under the proposed PRPP rules, "pooled registered pension plans" won't be allowed to pay pensions. This is because federal tax rules generally prohibit any pension plan from paying a pension unless it is a DB plan, subject to grandfathered exceptions (Canada Revenue Agency 2002).

A 65-year-old retiree will live, on average, about 20 more years. Retired PRPP members will have to manage their retirement savings for this period – or longer. Unfortunately, due to financial illiteracy, especially lack of financial planning ability, many PRPP members will not manage their savings effectively in retirement, which has negative

7 See also Pierlot 2008, pp. 17-19, for a more expanded discussion of self-funded DB-style pensions.

implications both for individuals' retirement income security and for efficient operation of financial markets (Broadbent et al. 2006). This argues that the default option for receiving PRPP benefits should be a pension annuity.

However, and notwithstanding research that demonstrates individuals don't manage money well, one study found that about one-third of workers who had retirement plans expressed a strong preference for having the option of receiving a lump-sum amount to manage through retirement, even though the preference for a lumpsum settlement declines with age (SOA/AAA 2004). This suggests that if PRPPs do not offer the option of a lump-sum amount at retirement, individuals may be less likely to participate in them, even though they may ultimately prefer to receive benefits in annuity form. Therefore, and in the interests of maximizing PRPP participation, PRPP members should have some flexibility to choose how to receive their retirement benefits.

To the extent PRPP members can choose between a lump sum and a life pension, an adverse-selection issue arises because members who expect to live longer will be more likely to choose a pension. This would increase the actuarial cost of life annuities, making it less likely that PRPP members will choose to receive a pension. Some approaches for providing retirement income security to PRPP members, while addressing adverse-selection risk include the following:

• PRPP legislation could incorporate rules in current pension standards laws that partially reduce adverse selection by allowing pension plans to bar members from receiving benefits in a lump-sum form unless they terminate membership and are more than 10 years away from normal retirement or "pensionable" age – usually 65.8

- PRPPs could be allowed to pay term-certain pension annuities, with fixed payment periods determined by reference to standard mortality tables. To address situations of increased longevity, retirees could be given the option to convert benefits at a future date to a lump sum or to a life annuity.
- PRPP members who elect to receive benefits in the form of a lump sum or term-certain annuity could be offered the option of purchasing longevity insurance through an insurer.⁹

CONCLUSION

As currently proposed, PRPPs present only the appearance of reform because they are for the most part a re-release of an existing retirement savings vehicle – RRSPs – with a new coat of paint. To the extent that PRPPs increase tax-deferred savings by workers with low and low-middle incomes, they risk being harmful because they will amount to a regressive tax increase. For middle- to uppermiddle income workers, PRPPs will be of little help because they do not address the gap between DB pension plans and RRSPs in terms of accumulation room. Finally – and irrespective of working-life income – PRPPs will not pay "real" pensions to their members.

The federal government should carefully rethink its PRPP project. Fortunately, and as this report proposes, there is much the federal government can do to make PRPPs a truly new and innovative retirement savings vehicle that can help all Canadians of all ages and income classes to enjoy secure and comfortable retirements. Let's not miss this opportunity.

⁸ See, for example, Ontario 2011 Sections 41 and 42 and Canada 2011g Sections 16 and 26.

⁹ Longevity insurance has recently become available to pension plans. See, for example, Sun Life Financial 2011.

REFERENCES

- Broadbent, John, Michael Palumbo and Elizabeth Woodman. 2006. "The Shift from Defined Benefit to Defined Contribution Pension Plans – Implications for Asset Allocation and Risk Management." Prepared for a Working Group on Institutional Investors, Global Savings and Asset Allocation established by the Committee on the Global Financial System. December. Available at: http://www.bis.org/publ/wgpapers/ cgfs27broadbent3.pdf.
- Canada 2011a. House of Commons. An Act relating to pooled registered pension plans and making related amendments to other Acts. November. Available at: http://www.parl.gc.ca/HousePublications/ Publication.aspx?Docid=5250468&file=4.
 - 2011b. Department of Finance. "Backgrounder: The Retirement Income Landscape in Canada." November. Available at: http://www.fin.gc.ca/n11/ data/11-119_1-eng.asp.
 - 2011c. Department of Finance. "Backgrounder: How Pooled Registered Pension Plans Will Address Gaps in Canada's Retirement Income System." November. Available at: http://www.fin.gc.ca/n11/ data/11-119_2-eng.asp.
 - 2011d. Department of Finance. "Backgrounder: Key Measures Included in Income Tax Legislative Proposals in Respect of Pooled Registered Pension Plans." December. Available at: http://www.fin. gc.ca/n11/data/11-134_1-eng.asp.
 - 2011e. Treasury Board of Canada. "2011-12 Estimates: Parts I and II The Government Expenditure Plan and The Main Estimates." Available at: http://www.tbs-sct.gc.ca/estpre/20112012/me-bpd/docs/me-bpd-eng.pdf.
 - 2010f. Department of Finance. "Framework for Pooled Registered Pension Plans." December. Available at: http://www.fin.gc.ca/activty/pubs/ pension/prpp-irpac-eng.asp.
 - 2011g. Pension Benefits Standards Act, 1985, RSC 1985, c 32 (2nd Supp).

- 2002. Canada Revenue Agency. "RPP Consultation Session – Questions from the Industry – Question 4 – Self-annuitized money purchase plans." November. Available at: http://www.cra-arc. gc.ca/tx/rgstrd/cnslttns/rpp_cq02-eng.html#q4.
- —— 1984. Department of Finance. Building Better Pensions for Canadians. Ottawa. February.
- Canada Pension Plan Investment Board. 2011. *Annual Report 2011*. Available at: http://www.cppib.ca/files/ PDF/CPPIB_AR_2011_EN_Online.pdf.
- Dodge, David, Alexandre Laurin and Colin Busby. 2010. "The Piggy Bank Index: Matching Canadians' Saving Rates to Their Retirement Dreams." E-Brief. Toronto: C.D Howe Institute.
- Golombek, Jamie. 2011. "Just do it! The case for tax-free investing." Canadian Imperial Bank of Commerce Report. February. Available at: http://www.cibc. com/ca/features/rrsp-versus-tfsa.html.
- Healthcare of Ontario Pension Plan. 2011. Annual Report 2010. Accessed at: http://www.hoopp.com/ annualreport/2010_AnnualReport.pdf.
- Hurst, Greg. 2011. "Feds miss the mark in PRPP Act." Benefits Canada. November. Available at: http:// www.benefitscanada.com/pensions/governance-law/ federal-government-misses-the-mark-in-the-prppact-23156.
- Kesselman, Jonathan R., and Finn Poschmann. 2001. "Expanding the Recognition of Personal Savings in the Canadian Tax System." *Canadian Tax Journal*. Vol. 49, No, 1. pp. 40-101.
- Laurin, Alexandre, and Finn Poschmann. 2010. "Saver's Choice: Comparing the Marginal Effective Tax Burdens on RRSPs and TFSAs." E-Brief. Toronto: C.D. Howe Institute. January.
 - 2011a. "What's My METR? Marginal Effective Tax Rates Are Down – But Not for Everyone: The Ontario Case." E-Brief. Toronto: C.D. Howe Institute. April.

— 2011b. "What Has Happened to Quebecers' Marginal Effective Tax Rates?" E-Brief. Toronto: C.D. Howe Institute. May.

— 2011c. "Western METRics: Marginal Effective Tax Rates in the Western Provinces" E-Brief. Toronto: C.D. Howe Institute. August.

Milligan, Kevin. 2005. *Making It Pay to Work: Improving the Work Incentives in Canada's Public Pension System*. Commentary 218. Toronto: C.D. Howe Institute.

Mintz, Jack M. 2009. "Summary Report on Retirement Income Adequacy Research." Department of Finance. Available at: http://www.fin.gc.ca/activty/ pubs/pension/pdf/riar-narr-BD-eng.pdf

Ivison, John. 2011. "Canada's old-age security showing signs of aging." National Post. December 21. Available at: http://fullcomment.nationalpost. com/2011/12/21/john-ivison-canadas-old-agesecurity-showing-signs-of-aging.

Ontario Teachers Pension Plan. 2011. 2010 Annual Report. Available at: http://docs.otpp.com/ AnnualReport2010.pdf.

Pierlot, James. 2008. A Pension in Every Pot: Better Pensions for More Canadians. Commentary 275. Toronto: C.D. Howe Institute. November.

Ontario. 2011. *Pension Benefits Act*, R.S.O. 1990, Chapter P.8.

Pierlot, James, and Faisal Siddiqi. 2011. *Legal for Life: Why Canadians Need a Lifetime Retirement Saving Limit*. Commentary 336. Toronto: C.D. Howe Institute. October.

Poschmann, Finn, and William B.P. Robson. 2004. "Saving's Grace: A Framework to Promote Financial Independence for Low-Income Canadians." Backgrounder 86. Toronto: C.D. Howe Institute.

Quebec. 2012. "Budget 2012-2013: Quebecers and Their Retirement – Accessible Plans for All." Finances Québec.

 2008. "The Member-Funded Pension Plan." Newsletter. Régie des Rentes du Québec. Number
23. May. Available at: http://www.rrq.gouv.qc.ca/ SiteCollectionDocuments/www.rrq.gouv.qc/ Anglais/publications/rcr/lettre/newsletterno23.pdf. Shillington, Richard. 2003. "New Poverty Traps: Means Testing and Modest-Income Seniors." Backgrounder 65. Toronto: C.D. Howe Institute. April.

Society of Actuaries and the American Academy Of Actuaries. 2004. "Retirement Plan Preferences Survey: Report Of Findings." Mathew Greenwald & Associates, Inc. January.

Sun Life Financial. 2011. "Sun Life Financial announces an industry first in Canada with the introduction of longevity insurance." December. Available at: http:// www.sunlife.ca/Canada/sunlifeCA/About+us/ Media+centre/News+releases/2011/Sun+Life+Finan cial+announces+an+industry+first+in+Canada+with +the+introduction+of+longevity+insurance?vgnLoca le=en_CA.

Townson, Monica. 2011. "Pension Breakdown: How The Finance Ministers Bungled Pension Reform." Canadian Centre for Policy Alternatives. December. Available at: http://www.policyalternatives.ca/sites/ default/files/uploads/publications/National%20 Office/2011/12/Pension%20Breakdown.pdf.

Van Riesen, Gretchen. 2009. The Pension Tangle: Achieving Greater Uniformity of Pension Legislation and Regulation in Canada. Commentary 294. Toronto: C.D. Howe Institute. August.

Statistics Canada Tables (http://www.statcan.gc.ca)

The following tables, or their updated versions, are available online:

Table 1: Registered pension plan membership by sector and type of plan. *The Daily*. Monday, May 9, 2011.

Table 2: Employment by age, sex, type of work, class of worker and province (monthly), 2009. Sources: Statistics Canada, tables 282-0087 and 282-0089. Last modified: 2010-05-07.

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