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The Association of Canadian Pension Management
L'Association canadienne des administrateurs de régimes de retraite

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# Decumulation, The Next Critical Frontier:

# Improvements for Defined Contribution and Capital Accumulation Plans

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## FOREWORD

### ACPM (THE ASSOCIATION OF CANADIAN PENSION MANAGEMENT)

ACPM (The Association of Canadian Pension Management) is a national, non-profit organization acting as the informed voice of plan sponsors, administrators and their service providers in advocating for improvement to the Canadian retirement income system. Our membership represents over 400 companies and retirement income plans that cover more than 3 million plan members.

ACPM believes in the following principles as the basis for its policy development in support of an effective and sustainable Canadian retirement income system:

***Diversification through Voluntary / Mandatory and Public / Private Options***
Canada's retirement income system should be comprised of an appropriate mix of voluntary Third Pillar and mandatory First and Second Pillar components.

***Third Pillar Coverage***
Third Pillar retirement income plan coverage should be encouraged and play a meaningful ongoing role in Canada's retirement income system.

***Adequacy and Security***
The components of Canada's retirement income system should collectively enable Canadians to receive adequate and secure retirement incomes.

***Affordability***
The components of Canada's retirement income system should be affordable for both employers and employees.

***Innovation in Plan Design***
Canada's retirement income system should encourage and permit innovation in Third Pillar plan design.

***Adaptability***
Canada's retirement income system should be able to adapt to changing circumstances without the need for comprehensive legislative change.

***Harmonization***
Canada's pension legislation should be harmonized.

**Executive Summary**

The capital accumulation plan ("CAP") sector[1] is maturing in Canada and large numbers of Canadians will ultimately be entering retirement without the security of a defined benefit pension. There is a concern that the decumulation products and services currently available to individuals may not produce optimal outcomes, while group decumulation options are not broadly available.[2]

Most retired Canadians roll their tax-sheltered CAP savings into individually registered decumulation products such as Life Income Funds ("LIFs") and Registered Retirement Income Funds ("RRIFs"), within which assets are invested in mutual and segregated funds and GICs. While these plans offer broad investment choice, may come with advice, and permit spending flexibility, they also present certain challenges for CAP retirees which were either not present or were managed for them during the accumulation of their benefits. Many individually registered decumulation products:

- do not pool investment and longevity risk[3],
- do not realize economies of scale to reduce administrative and investment costs, and
- do not offer simple investment menus with limited choice and appropriate defaults.

For retirees wishing to maximize investment choice, enjoy flexibility and maintain a personal relationship with an advisor, individual plans will continue to work well. For retirees who wish to maintain continued access to familiar funds, enjoy lower costs, and benefit from the guidance of auto features and defaults, more group retirement income options offered within or in conjunction with CAPs should be encouraged.

ACPM (The Association of Canadian Pension Management) recommends that multi-component, multi-employer, risk-pooled default decumulation options should be developed in Canada to be offered through individual and group plans. These could be similar to the products implemented or under discussion in Australia and the U.K. They should include components that offer managed withdrawals, provide limited access to lump sums and permit longevity pooling through deferred annuities. They should include an opportunity to elect inflation protection. Group self-annuitization products (e.g., uninsured variable annuities) should also be encouraged. It is important to note that, before such products can be offered, accommodative changes will be required to pension and tax legislation. These changes should be made at an early date to enable discussions and innovation to proceed.[4]

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1 Including registered defined contribution ("DC") plans, Group Registered Retirement Savings Plans (RRSPs) and Deferred Profit Sharing Plans (DPSPs) as well as various non-registered CAP arrangements

2 This paper is not suggesting that individuals do not have other savings for retirement, e.g. house assets, inheritances, and private savings.

3 While many retail savings products offer professionally managed pooled investments, the choice of which of these options to select is left to the investor. Any losses incurred by the investor are not offset by gains from another investor.

4 ACPM consulted with hundreds of individuals in 8 cities through the Fall 2016 National sessions – "State of the Pension Nation: Today and Tomorrow" and received helpful insights regarding decumulation that have been incorporated into this paper.

## Introduction

Many private sector employers in Canada are freezing or closing defined benefit (DB) pension plans and replacing them with Capital Accumulation Plans (CAPs)[5]. Over the past 20 years, a considerable effort has been made by the pension, insurance and financial sectors to promote successful outcomes for CAP savers. These efforts have included:

- Best practice guidelines designed to improve plan administration and governance,
- Strategies to improve member engagement and decision-making,
- Auto-features for those who choose not to make active decisions,
- Simpler and more understandable investment menus,
- Default investment options likely to earn reasonable returns at acceptable risk levels, and
- Transparent disclosure of costs.

The CAP sector in Canada is now maturing. A growing number of Canadian retirees will be exposed to investment and longevity risk as employers abandon indexing and freeze or close DB pension plans. While the CAP market in Canada is not yet as large as in some other countries, there is an increasing proportion of these plans. They include registered DC pension plans as well as other group retirement savings arrangements in the form of CAPs with assistance from the financial and insurance sectors. Finally, a new form of CAP is just getting out of the gate – the Pooled Registered Pension Plan or PRPP.

Plan providers, sponsors and regulators are therefore starting to consider what might be necessary to promote successful outcomes after retirement. This is proving to be a difficult exercise. The decisions facing CAP retirees as they decumulate their retirement savings are even more complex than those they faced during the accumulation of their balances, and many individuals would have relied on default options when they were working and accumulating CAP assets. During decumulation, retirees must manage longevity risk as well as investment risk. They must also reconcile conflicting retirement income needs such as a desire for flexibility, the need for a secure and predictable retirement income, and protection against the risk of exhausting their funds. Some even hope to leave funds behind as an inheritance. In addition, level income is not appropriate for many retirees who also then need to figure out how to create an appropriate stream of income which matches their expense needs.

A policy discussion about the decumulation of CAP balances is now starting in Canada and continues around the world. The ACPM National Policy Committee (NPC) has developed this paper to contribute to this discussion on behalf of its members – Canada's workplace retirement savings plan sponsors and their service providers.

[5] Including registered defined contribution ("DC") plans, Group Registered Retirement Savings Plans (RRSPs) and Deferred Profit Sharing Plans (DPSPs) as well as various non-registered CAP arrangements

This paper begins by outlining the challenges faced by CAP sponsors when considering decumulation options, before reviewing the decumulation products and services available in Canada today. It next looks at the decumulation products and services offered at three large Canadian DC pension plans, and then examines new default decumulation options under discussion in three other countries. It then goes on to set out CAP decumulation design principles and suggested changes to improve outcomes for CAP retirees together with listing the regulatory changes that would be required to achieve these outcomes.

## 1. Setting the Stage

According to "*The Retirement Plan Solution: The re-invention of Defined Contribution*", a book co-authored by Don Ezra, a pension consultant and past chair of global consulting at Russell Investments, 60 cents of every retirement dollar is funded by returns earned **after** retirement – twice as much as the combined impact of all returns before retirement (the remaining 10 cents is the combined employer and employee contributions).[6] This tells us that retirement is not the finish line.

ACPM believes insufficient attention has been paid to the issues and risks involved in decumulating CAP balances. Three reasons have been suggested:

A. The tax rules since 1991 and the minimum standards in pension legislation did not encourage, and in some cases did not permit, employers to provide variable benefits[7] within their employer sponsored retirement savings plans.

B. For employers, legal advice due to litigation concerns, and their own view of employment, has generally suggested their responsibility ends at retirement and therefore plans were not designed for the retirement phase.

C. The popularity of CAPs, and specifically DC plans, began during a period of higher expected returns and much higher long-term interest rates. Asking untrained individuals to manage the risks associated with converting retirement savings into future retirement income seemed much less risky in the late 1980s and 1990s than it does today.

The products most commonly used by retirees to convert their CAP balances into retirement income include RRIFs, LIFs and annuities.[8] But these are not the only options. Group retirement income arrangements offered within or in conjunction with CAPs are also available, although less common, and will be discussed later in this paper.

Finally, in several Canadian pension jurisdictions, DC pension plans are permitted to pay retirement income directly to members in the form of variable benefits.[9] PRPPs may also pay variable benefits. Although variable benefits have been permitted in some jurisdictions for several years, most plans do not

[6] The Retirement Plan Solution: The Reinvention of Defined Contribution, Wiley Finance, 2009, Ezra, Collie & Smith.

[7] Variable benefits as described in detail on p.7.

[8] More information on these products is included in Appendix A at page 27.

[9] A variable benefit is a LIF-like option paid directly from a DC pension plan or PRPP. Variable benefits are permitted under the pension legislation of British Columbia, Alberta, Saskatchewan, Manitoba, Nova Scotia, Quebec and under federal pension legislation. Variable benefit payments are also permitted from PRPPs.

offer them, while PRPPs, due to their small balances in the few jurisdictions in which they have been enabled, do not yet need them.

There is a concern that CAP retirees left to deal with complex retirement decisions and risks individually will experience sub-optimal outcomes. Comparing the investment returns of CAP savers to the returns of DB pension provides an interesting example. Pension record keepers estimate that about 80% to 90% of all Canadian retirement savings held outside of DB pension plans will be turned into retirement income through individual plans. It has been suggested that high costs, poor decisions and conflicted advice will produce CAP retirement incomes about 20% to 30% less than they could be if institutional fees, smart defaults and fiduciary oversight were applied.[10]

## 2. Individual Decumulation Options[11]

The individual decumulation vehicles currently available to CAP retirees offer wide variety, from annuities that guarantee income for life but are generally inflexible, to LIFs that permit flexibility but do not guarantee income for life. This section of the paper examines the characteristics of the individual choices available in Canada today.

### Annuities

An annuity contract issued by an insurer is the individual option most like a DB pension. It guarantees an income for life. Benefits to surviving spouses and guarantee periods can be added. The advantage of an annuity is that it transfers investment and longevity risk to the annuity issuer – usually an insurer. However, few retirees are purchasing annuities and this is not expected to change. What is making annuities unattractive to retirees?

#### Cost

Insurance companies invest annuity premiums mostly in long bonds to generate cash flows that will support guaranteed payments. When bond yields fall so do payment amounts, making annuity contracts more expensive. Recent mortality improvements have also increased costs. Lastly, the insurance company must receive a reasonable rate of return for its assumption of this risk.

In today's interest rate environment, annuities appear expensive to retirees who tend to underestimate their life expectancy and the true cost of guaranteed income.

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[10] A study released by the White House in 2015 estimated that conflicted advice costs U.S. retirement savers about 1% per year. http://www.acpm.com/ACPM/media/media/Decumulation2017/Cea-Coi-Report-Final.pdf

[11] For purposes of the discussion that follows, we include in this category annuities, life income funds, and prescribed registered retirement income funds. Although variable benefits leave individual retirees exposed to investment risk, they are discussed with other internal group options below because they permit retirees to remain in their DC pension plan.

Inflexibility

The terms of an annuity contract are set when payments start. The funds used are “spent” and there is no going back. This creates a risk of regret if, for example, interest rates rise. It also prevents access to lump sums to meet unanticipated expenses, to assist family members, or for special purchases. It is difficult for most retirees to make an irrevocable decision turning their savings into an income stream with no possibility of future changes.

Limited Market

The number of annuity issuers in Canada is limited. This produces variable pricing depending on market conditions and the desire of individual insurers to write new business. The group annuity market has grown substantially in recent years as more DB plans are using them to transfer longevity risk to insurers. It is not clear whether this growth may have influenced the individual market; for example, some insurance companies may be less interested in providing individual annuities when they can obtain new business more efficiently by de-risking DB pension plans.

Interest Rate Risk

As noted above, when a fixed annuity is purchased, its payment is based on the long-term interest rate available at retirement. The lower the rate, the lower the payment. The long-term rate of interest available on the date the annuity starts therefore determines the retiree’s income for life. One way to mitigate this risk would be to purchase a series of annuities at different dates before or after retirement.

Inflation Risk

Most life annuities do not protect retirees against inflation risk. While it is possible to obtain inflation protection by purchasing an indexed annuity, this adds cost. Indexed annuities must be supported by real-return investments that pay lower, inflation-adjusted returns. When presented with a lower starting payment that will rise, or a higher starting payment that will lose purchasing power, most retirees seem to prefer the latter.

Leaving Unspent Funds

Annuities guarantee income for life by pooling mortality. Payment amounts are calculated based on average life expectancy. This creates a risk that funds will remain unspent in the event of an early death. Although joint annuities and guarantee periods can reduce this risk, there is still no assurance that all of a retiree’s savings will be paid out to him or her. This is because unspent funds left behind by retirees who die sooner than expected are used to pay retirees who live longer than expected. While this is a feature, not a “bug”, from a longevity risk perspective, many retirees are uncomfortable with the thought that they might leave unspent funds behind when they die.

For the above reasons, retirees have historically been reluctant to use individual annuities to provide secure income streams when they retire.

LIFs/RRIFs

Rather than purchase annuities, most retirees prefer to transfer their accumulated benefits into individually registered decumulation products offered by financial service providers and insurers. These vehicles offer some spending flexibility and broad investment choice. They can come with "advice". They retain ownership of unspent capital. Yet they have some common shortcomings. They can leave individual retirees to make investment decisions (unless an investment advisor is engaged), they are exposed to longevity risk, and they are typically more expensive than group arrangements.

Investment Risk

With an individually registered plan, retired members select their own investment options. They then receive the investment income earned by those funds. The level of choice available to individual retirees is so broad as to be confusing. Failing to achieve expected returns can reduce retirement income, or even result in fund exhaustion, while short-term losses produce volatility that complicates spending decisions.

Longevity Risk

The holder of an individually registered plan takes the risk that their funds will run out before they die. This is called longevity risk. This risk is partially mitigated by the maximum withdrawal limits applied to LIFs under pension legislation.[12] However, there are no maximum withdrawal limits for non-locked in funds.[13]

Sequencing Risk

Most retirement planning tools use average return assumptions. They do not demonstrate the uncertainty or risk produced by the random nature of the annual returns that make up the average. This is called sequencing risk. Where regular withdrawals are taken, below average or negative returns early in the sequence have a reverse compounding effect. Unless spending is reduced or stopped, this can cause the CAP balance to become depleted more quickly than projections based on the average return would suggest.

Agency Issues

Most funds transferred into individual plans are invested in mutual and segregated funds. The services of regulated advisors are readily available and are included in the cost of these products. Notwithstanding existing "know your client" and "suitability" rules, some remain concerned that the

[12] All provinces but Saskatchewan have legislated maximum annual withdrawal limits that increase with age. These limits are designed to ensure that some funds will remain to age 90 or later in some jurisdictions.

[13] Alberta, Manitoba, Ontario and the federal government permit 50% of locked-in pension funds to be unlocked at retirement. In Manitoba, unlocked funds must be transferred out of the pension plan to a prescribed RRIF, while in Ontario and federally, the entire DC balance must be transferred out of the plan before funds can be unlocked.

existing regulatory regime does not adequately align the interests of the advisor and the investor. Further, most fund advisors are compensated by the fund issuer, which creates a potential conflict.

Costs

The investment fees charged within mutual and segregated funds held within individually registered plans are generally higher than fees paid within a CAP.

### 3. Group Decumulation Options[14]

Not all retirement savings are transferred to individual plans. Some retirees have the option of using group options set up by their employer or the group plan's service provider, either within or in conjunction with their CAP. However, smaller plans may not have the necessary scale to efficiently provide internal decumulation options and associated support.

Within Plans[15]

Some DC pension plans offer internal retirement income options. The most common is a variable benefit. Due to regulatory restrictions, variable benefits are not available in some jurisdictions or in CAPs other than DC Plans, but can be paid from a Pooled Registered Pension Plan (PRPP). The policy reason behind the creation of variable benefits in 2006 was to permit plan members to remain in their plans after retirement, preserving their access to lower costs and familiar investment options.

How does a variable benefit work?

- When the plan member reaches retirement, his/her accumulated balance is transferred into a variable benefit account. Funds in the account remain invested in the plan's funds and the retiree receives periodic payments from the account.

- The payments are not guaranteed but are subject to the same maximum annual withdrawal limit as a LIF. A variable benefit has no minimum withdrawal requirement until age 71.

- Variable benefits may also be paid from non-locked-in funds, in which case, no maximum annual withdrawal limit applies.

Less common, due to restrictions in tax and insurance legislation, are internal annuities paid directly from DC plans. Internal annuity programs typically predate pension legislation and tax reform. For plans that cannot establish internal annuities, annuities must be purchased from life insurance companies.

The administration of 'in-plan options' is typically carried out by the plan's internal administration team. More recently, some sponsors have partnered with service providers under co-administration

[14] A group decumulation option is defined as a vehicle arranged by a CAP sponsor or service provider for use by retiring plan members.

[15] For more information on how decumulation options are currently offered within some DC pension plans, see Appendix C

arrangements. A co-administration arrangement will always involve administration services, but can also include the management of investments.

For all of these internal decumulation options, independent governance, lower costs and the familiarity of retirees with the plan's design, communications and investment options make them a convenient and efficient method of converting retirement savings into retirement income.

In Conjunction with Plans

Some DC plans and other CAPs offer their retirees a Group RRIF/LIF through the plan service provider, but independent from the plan. Based on CRA approved specimen plan terms, these plans (often referred to as 'rollover plans') will be included in a CAP information package as one of the options available to retirees.

- A Group RRIF/LIF typically offers most of the same lower cost investment options that were available within the plan. Offering the same fund menu, website and call centre services provides familiarity to the retiree.

- This familiarity, along with the convenience of staying with the same service provider rather than transferring funds to another plan or financial institution, is perhaps the greatest strength of a Group RRIF/LIF.

- Some plan sponsors may want to maintain a relationship with their retirees and therefore choose to customize a Group RRIF/LIF for their members. In these cases, the plan sponsor will also sponsor the Group RRIF/LIF and will work with their service provider to design the plan's features.[16]

- The group decumulation option will often closely resemble the accumulation plan in terms of investment offerings and related services, although it would be appropriate for it to contain certain investment and income options specifically designed for retirees.

- When acting as sponsor of the Group RRIF/LIF, the plan sponsor maintains oversight of the decumulation component of their plan, just as it did with the accumulation component, while the service provider provides administration and investment services for which the sponsor continues to negotiate lower costs on behalf of plan retirees.

Another external group option available is a group annuity. This option must be made available to all prospective pension plan retirees. If selected, all or a portion of their accumulated balance is transferred to a life insurance company that issues the annuity. Payroll administration and member contact may be retained by the plan sponsor or handled by the insurer.

[16] Pension plans at the University of British Columbia and the University of Western Ontario both offer group RRIF/LIFs (one in-plan and one separate) to their retirees. These are just two of many such arrangements.

## 4. Employer Reluctance

The retirement savings of ***most*** CAP members are transferred into individual plans at retirement. Why is this? Why don't more employers offer group decumulation options?

CAP sponsors may have concerns about continued liability after termination or retirement. Some discharge of liability or safe harbour–type protection might be helpful in this regard. The choices facing retirees during decumulation of their savings are even more complicated than during accumulation, and their need for assistance to make informed decisions is greater.

The administration of benefits on behalf of retired members requires additional oversight. Investment and longevity risk become more acute because of the shorter time horizon. Also, communication with retirees generally becomes more difficult with age. It is also complicated by the loss of the employer's electronic and personal communication channels within the workplace after retirement.

What issues might require special attention or create increased liability after retirement?

- A person's risk tolerance changes after retirement. If retirees stay in their employer-sponsored plan, it becomes necessary to determine whether the risk/return profiles of the investment options offered before retirement are still appropriate for retirees. Changes to investment menus may also be necessary to encourage risk reduction as retirees age.

- Additional administrative responsibilities arise after retirement. For example, retirees might need assistance setting withdrawal amounts, while plan administrators must perform new tasks such as annually calculating the legislated payment maximums and minimums. And when the retired plan member inevitably dies, the plan administrator must determine entitlement to and then pay out post-retirement death benefits where applicable.

- Plan members who overspend and exhaust their funds may be disappointed, resulting in litigation risk. Helping retirees with spending decisions creates new risks not present during accumulation. Where investments perform poorly but spending is not reduced, a retiree's future income may end up being reduced. Further, without longevity protection, spending must be managed to an unknown date. To what extent should the plan administrator be expected to explain spending risk to a retiree? When a member selects a payment amount, how often should this be reviewed? When should payment amounts be changed?

It is likely that concern about such risks is contributing to employer reluctance to offer internal decumulation options.

## 5. Three Case Studies

There are a very few large, mature, self-administered (or co-administered) DC plans in Canada that have considerable experience assisting members with decumulation in retirement. These tend to be university or non-collectively bargained multi-employer plans. As we consider how we might improve outcomes for CAP retirees in Canada, it might be useful to see what can be learned from their experience.

The summaries below relate to two large, multi-employer DC plans registered in Saskatchewan and one university plan registered in British Columbia.[17] What do these plans have in common? What has allowed them to venture where others fear to tread?

An important factor for the Saskatchewan plans may be that they are not single employer plans – they are independent pension administrators and fund holders. Their multi-employer structure may reduce the concern that a single employer might otherwise have about continuing a relationship with retired employees. There are other factors, however, that all three plans have in common that may be just as important. These could be summarized as the impacts on plan design and decision-making of independent governance, balanced control and fiduciary standards.

The Saskatchewan Public Employees' Pension Plan (PEPP)

PEPP has been offering its members decumulation products and services for almost 40 years. Originally the only option was an annuity via the Saskatchewan Pension Annuity Fund (SPAF), created on June 17, 1985. From July 1, 1977, to June 17, 1985, annuities were issued within the plan.

SPAF conducts an annual actuarial valuation to ensure that its annuities are adequately funded. Mortality factors are reviewed annually and adjusted as appropriate. The fund has always employed a conservative investment strategy, focusing on matching assets to liabilities to ensure payment security and value for members. SPAF's annuity rates are typically lower than the marketplace.

For members who are not interested in an annuity, PEPP offers variable benefits. PEPP was one of the first pension plans to permit variable benefits when the *Income Tax Act* was changed to permit them in 2006. This option has been revised on several occasions over the last 10 years.

PEPP's default fund is a life cycle fund called PEPP Steps. It has 12 steps that reduce risk every five years beginning at age 20 and ending at age 80. Plan members may stay in this fund, even when drawing retirement income. Because they are familiar with the fund, most members do so, which continues their exposure to growth assets (equities and alternatives) after retirement.

To assist plan members who are using the variable benefit, PEPP conducted a study to determine their average withdrawal rate. Upon realizing that individuals needed spending assistance, a new tool called PEPP Guidance was created. PEPP Guidance provides individuals with an indication as to how much they can withdraw each year and still maintain an account balance until later in life. In order to do these projections, it is necessary to make assumptions regarding the fund being used, so it is assumed that members remain in PEPP Steps. Individuals opting to go into a more conservative fund, i.e., Money Market, are warned that excessive risk aversion can reduce retirement income.

[17] The Public Employees' Pension Plan (PEPP) is a multi-employer plan for Saskatchewan government employers. The Co-operative Superannuation Society Pension Plan (CSS) is a multi-employer plan for co-operatives and credit unions. The University of British Columbia Faculty Pension Plan offers internal retirement income options as well as a variable payment life annuity option. University of Victoria, McGill University, and University of Western Ontario also offer group retirement income options. A summary of the three plans discussed here is provided in Appendix C.

Changes have also been made to PEPP's proprietary Retirement Planning tool, Retire@Ease, so that variable benefit recipients can continue to use the tool after retirement. PEPP has also recently introduced a statement for variable benefit recipients estimating how long their money might last if they continue spending at their current rate. On the statement, PEPP shows the current payment amount as well as the recommended payment amount calculated by PEPP Guidance. The projection also shows expected earnings based on their current investment selection.

Since PEPP offers annuities and variable benefits, it emphasizes the benefit of combining the two. It also encourages members to look at their total picture, i.e., federal programs, other pensions, individual savings, spousal assets etc. While not many retirees combine the two options when they retire, some members do annuitize part of their remaining balance at a later date.

PEPP believes that to help members in retirement, it must start while they are still active members of the plan. Ongoing communications, workshops and tools are important in helping members produce better outcomes. Finally, PEPP has salaried financial planners on staff who don't provide member-specific advice, but do conduct the plan's workshops and meet individually with members. Their focus is to provide members with the information needed to understand their options and meet their personal retirement goals.

The Co-operative Superannuation Society (CSS) Pension Plan

Like PEPP, CSS began to offer internal annuities in the 1970s. By that time, the Plan was already mature, having been formed in December, 1939. The CSS annuity program was created in response to the elimination of Government of Canada annuities. Because the CSS annuity program predates tax reform, it is grandparented under the *Income Tax Act.* CSS has now issued more than 10,000 annuities, with more than 6,000 currently in payment.

Although the cost of annuities has increased substantially over the past 35 years as interest rates have declined, this option continues to be attractive to members without a bequest motive who wish to turn their accumulated balance into a monthly "pay cheque". Members considering this option are notified that they will "spend" their accumulated benefits to purchase a stream of payments. The irreversibility of the decision is stressed and has not posed a problem to date.

In 2006, like PEPP, CSS began to offer variable benefits. This option permits members to receive retirement income payments directly from their DC account. To date, CSS members have started more than 1,000 variable benefit payments.

The variable benefit option appears to be more attractive to members with larger account balances who don't expect to use their entire balance to provide retirement income.

Although CSS retirees are able to convert a portion of their accumulated benefits into an annuity and transfer the remainder into a variable benefit account, few make this choice. However, members do elect to receive variable benefit payments early in retirement and then annuitize their remaining balance later in retirement as their need for liquidity reduces and their risk tolerance declines.

Because investment and mortality risk are not pooled with a variable benefit, CSS has developed member information and communications encouraging risk reduction as retirement nears.[18] This includes a risk tolerance estimator, suggested asset mixes and retirement planning assistance from the Plan's certified financial planners. Information and communications have also been developed to deal with "sequencing" or spending risk.

Two risk management strategies have been developed, primarily to assist retirees who choose to receive variable benefits. The first focuses on reducing investment risk. The plan recommends that members segment their accumulated balance into a spending component and a growth component. This permits the member to withdraw funds from the spending component during a period when losses are experienced in the growth component, avoiding the need to sell fund units in a down market. The second focuses on spending risk. To help members set and adjust their payment amounts, the plan provides them with three decumulation scenarios: one assuming that the maximum payment permitted by pension legislation is withdrawn each year, one assuming that the minimum required by the ITA regulations is withdrawn each year, and one assuming that a specified payment amount selected by the member between these limits is withdrawn each year.[19]

Finally, members, and particularly Saskatchewan members because there are no spending maximums, are encouraged to monitor their progress and adjust their payment amounts annually to ensure that they do not overspend during a short-term market downturn. They are reminded that they have the ability to switch their withdrawals to the spending component of their account, or even to stop their payments altogether if they wish to spend from unaffected savings outside the plan or go back to work.[20] These strategies provide retirees with the information they need to avoid an unhappy surprise or unintended result. Those Saskatchewan members who have spent their entire balances early in retirement appear to have done so intentionally, and no complaints have been received since the launch of variable benefits in 2006.

CSS is interested in creating additional retirement income options for its retired members. One that shows promise is the uninsured variable annuity – a product offered by the University of British Columbia Faculty Pension Plan. Given today's very low interest rates, the CSS plan would like to offer its retirees a longevity-pooled option that will not lock in today's low, long-term interest rates for life. While the ITA permits annuity payments to be varied based on the performance of a segregated portfolio of supporting assets,

[18] Unlike PEPP and most DC plans, CSS does not offer a target date default. The CSS default option is a "balanced fund" with a target asset mix of 55% equities, 34% fixed income investments, 10% real estate and 1% short term investments. Various target date glide paths have been tested by the Plan using both stochastic scenarios and rolling 25-year historical returns. Results were judged to provide insufficient down side risk protection to justify the additional complexity, administration and cost of switching to a target date default. An additional consideration was that no single glide path would be appropriate for members intending to purchase an annuity or intending to take a variable benefit payment.

[19] Saskatchewan pension legislation does not provide a maximum withdrawal limit for variable benefits. The maximum scenario we provide for Saskatchewan members therefore "suggests" the maximum withdrawal permitted for Albertans.

[20] Under the ITA, a minimum required withdrawal from a variable benefit account, unlike a RRIF, does not begin until the year the member turns 72. This permits variable benefit payments to be stopped without transferring the member's accumulated benefits back out of the variable benefit account.

this option would only be available to DC plans already offering internal annuities in 1988. For most DC plans, therefore, offering an uninsured variable annuity is currently prevented by legislation.

Another desirable option would be to use part of the member's accumulated balance to purchase a deferred annuity starting at age 80 or 85. In addition to providing longevity protection, this would permit members receiving variable benefit payments to manage their balances to last until a known date rather than an unknown life expectancy. Changes to legislation to permit such a deferred annuity would also be required.

<u>The University of British Columbia Faculty Pension Plan (UBC FPP)</u>

Another interesting example of a large DC plan offering internal retirement income options is the UBC FPP with its Variable Pay Life Annuity (VPLA) as well as an internal LIF-like payment option and a RIF-like payment option. More than 400 UBC retirees have used their accumulated funds to purchase a VPLA.

To use the VPLA, FPP members move all or a portion of their accumulated account balance into a segregated 'pool', which forms part of the UBC FPP Balanced Fund. They may choose to have their initial payment amount based on a 7% return (which is expected to generate a relatively level or slowly decreasing income over the member's lifetime) or 4% (which is expected to generate a slowly increasing income over the member's lifetime).

At the end of the first calendar year after a member starts a VPLA, a unit factor is assigned. The mortality and investment experience of the VPLA pool is assessed each year and a new unit value is set such that the present value of expected cash flows will equal the market value of the remaining supporting assets. Through this process, each annuitant receives either an increase or decrease in their monthly payment. Although there may also be slight adjustments due to mortality experience, most of the annual payment change is determined by whether the supporting assets earned more or less than the VPLA's starting assumption. [21]

In the VPLA, members are subject to investment risk which is mitigated somewhat by the low fees and professional investment management of the underlying balanced fund, and mortality risk is pooled among all members receiving payments. No risk is underwritten by the plan since VPLA payment amounts are adjusted as necessary to equate the pool's liability to its assets. Solvency for the VPLA pool is always "one", so no additional funding is ever required nor can an unfunded liability or solvency deficiency arise. As a result, annuitants receive a variable cash flow determined by returns on the supporting assets that will continue for life. In Australia, Mercer offers a product like the VPLA known as "group self-annuitization" which pools both investment and mortality risk.

Why don't more DC plans offer this type of decumulation product? Only the few DC plans who already offered internal annuities as at March 27, 1988, can offer this type of product inside the plan. Most DC plans are effectively blocked from following University of British Columbia's example by Section 8506(2)

[21] ITA Section 146(3) (b) notes that the Minister "may accept a plan that provides for periodic amounts payable by way of an annuity, to be increased or reduced depending on the increase or reduction in the value of a specified group of assets".

(g) of the ITA Regulations which requires that retirement benefits payable under a money purchase provision must be provided either through annuities purchased from a licensed issuer or "under an arrangement acceptable to the Minister".[22] No new arrangements have been approved by the Minister since 1988.

## 6. International Experience[23]

This section of the paper reviews decumulation products and services either offered or under development in three countries – two with a mature CAP sector, and one with a new state sponsored multi-employer DC plan. These are:

- Australia, where DC contributions have been mandated for 24 years,
- the United Kingdom where a new government sponsored multi-employer DC plan is just getting underway, and
- the United States, where six in ten private sector employees have access to an employer-sponsored DC plan.

### Australia

DC pension coverage was made compulsory in Australia 24 years ago. Australian employers are required to contribute 9.5% of salary. Over the past quarter century, over AUD 2 trillion DC accounts have accumulated. As a result, the needs of DC plan members in retirement have recently taken centre stage.

Many large DC plans in Australia are self-administered on an industry basis by independently governed organizations called Superannuations. Some very large companies have their own Superannuation fund. Some fairly large companies use Superannuation funds offered by banks or insurance companies. Smaller group plans are administered by the financial sector. Because most Superannuation plans are independent from employers, members are generally encouraged to remain when employment ends. At retirement, individuals can take a lump sum or roll their DC accumulation into an account-based pension (ABP) with flexible drawdown.[24] Annuities are available, but only attract about 5% of funds.

Interestingly, contributions are not deductible and investment income is taxed, while retirement income payments are tax-free. Accumulated benefits are also not locked in which means that there are no maximum spending controls like there are in most of Canada. There is a minimum required annual drawdown from an ABP of 4% under age 65, which gradually increases each year.

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[22] There is a technical note related to s. 146 (3) (b) of the ITA that states it is expected that the Minister will accept a self-insured arrangement for paying retirement benefits where the arrangement is, in substance, similar to the purchase of annuities from an issuer of annuities (i.e., a life insurance company). HOWEVER, CRA's formal position regarding self-insured money purchase provisions is that such arrangements are not acceptable, except where they were established prior to March 27, 1988.

[23] A chart comparing the retirement income systems of seven countries is attached as Appendix B.

[24] An ABP allows a retiree to select a payment amount and choose investments like a RRIF.

The choices made by retired Australians tend to vary by account size. Those with less than $202,000 in assets qualify for a full Age Pension, which is income tested like OAS.[25] A full Age Pension provides approximately 27% of the average wage. Individuals with "smaller" accounts tend to withdraw their Super benefits as a lump sum. Favorable tax treatment is a contributing factor.

At the opposite end of the spectrum, Australians with seven figure Superannuation accounts will not get the Age Pension due to means testing. These individuals tend to use a financial advisor and may have other assets as well. They tend to transfer their Superannuation benefits into an ABP and are generally considered to be well served by the financial sector.

Most Australians retire with balances between these two extremes. Their Age Pension tends to be minimal, due to means testing. They are looking for a draw down option that will earn good returns and want some control over their investment mix. They generally access 20% to 40% of their Superannuation benefit as a lump sum for a variety of reasons – to pay off credit cards and mortgages, for renovations, vacations etc., as this is easier than getting a bank loan after retirement. They also tend to be risk adverse and concerned about exhausting their funds although, as noted above, less than 5% take annuities. Most take a combination of a lump sum withdrawal and an ABP.

In Australia employees rather than employers may select their Superannuation. Members are free to contribute to any Superannuation while working and may transfer their accumulated balances to any Superannuation at retirement. This change to the original rules was made to lower fees through open competition. While it has plan providers working hard to preserve assets as members hit their 50s and 60s, it has not reduced fees as much as predicted. Another recent change intended to reduce fees is the creation of investment defaults known as MySuper funds. Commissions are prohibited within MySuper funds.

Recently the government of Australia commissioned a financial services inquiry. One part of this inquiry involved "the retirement phase of superannuation".[26] One of the outcomes resulting from the inquiry was a recommendation that superannuation trustees should select a comprehensive income product for members' retirement (CIPR). A second recommendation was to remove impediments to product development.

The trustees of each Superannuation have been tasked with developing a CIPR default option suitable for their plan members. Specific features have not been mandated, but at a high level, it is recommended that a CIPR include strategies to manage market risk, longevity risk, concentration risk and inflation risk. It is also suggested that a CIPR could combine multiple products that will provide regular adequate income, flexibility to access capital and longevity risk management.

[25] The maximum Age Pension for a single person in 2015 in Australian dollars was $22,212 per year, while for a couple was $33,488.

[26] The Financial System Inquiry's final report is dated December of 2014. The recommendations on retirement income products appear in chapter two of the final report found here: http://www.acpm.com/ACPM/media/media/Decumulation2017/FSI_Final_Report_Consolidated20141210.pdf

<u>The United Kingdom</u>

In 2014, the UK budget announced changes designed to provide DC retirees with more "freedom and choice". These changes, effective in April of 2015, removed a previous requirement that DC balances be annuitized.[27] The changes permit retirees to transfer their DC accumulations into "draw down" products and to take a portion of their balance as a cash lump sum.

Since their announcement, a broad consultation has been conducted by NEST – the United Kingdom's National Employment Savings Trust.[28] NEST is a mandatory, government sponsored, multi-employer DC scheme with automatic enrolment for employers who offer no other workplace retirement benefit. It is also open to the self-employed. The purpose of the NEST consultation was to assess the needs of its members in retirement, and to develop decumulation options to meet these needs.[29]

As part of this consultation, a limited survey was conducted to determine retirees' preferences with respect to retirement income. The survey indicated that DC retirees would prefer options that provide:

- a retirement income that will grow with inflation
- the security of a guaranteed income for life
- protection from investment losses, but access to investment gains
- access to lump sums
- the ability to pass on money to dependents, and
- the flexibility to make changes in response to unexpected life events after retirement.

As noted in the NEST consultation document, some of these objectives conflict with each other. They are a "wish list". Further, individuals frequently fail to select options that match their stated preferences. And finally, lack of engagement and inertia result in inaction. Taken together, these factors suggest a need for a default option that includes multiple components and auto features.

According to the document, DC members begin to consider their retirement income options at age 57 – too late to effectively restructure investments to support their retirement income choices. NEST's report therefore also proposes an auto-restructure feature, breaking the member's account into "draw down" and "near cash" components as retirement nears.

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[27] In 2012, annuities comprised 87% of all new retirement income products sold in the UK.

[28] NEST, formed in 2012, is a government sponsored DC scheme designed to help UK employers meet the duties set out in the *Pensions Act* of 2008. It is similar to a VRSP in Québec, although administered and invested through a public body rather than an insurer. NEST's 2015 Annual Report states that it serves more than 14,000 employers and more than 2M members.

[29] A consultation paper titled "The future of retirement: A consultation on investing for NEST's members in a new regulatory landscape", was released in November 2014.

After completing this consultation, a second paper was released in June of 2015 proposing the development of a risk-pooled, multi-component decumulation default for NEST retirees.[30] It is suggested that this "core retirement income strategy" should include three components: (i) an individually invested drawdown account, (ii) a short-term account and (iii) a deferred annuity. The recommendation is that all three should be combined into one product intended to carry a retiree through early, middle, and late retirement – the cash component to permit access to lump sums, the draw down component to provide reliable income to age 85, and the deferred annuity to protect against longevity risk beyond age 85. [31]

By dividing the member's account into three pools with different purposes, NEST's core retirement income strategy attempts to provide a sustainable retirement income without removing all flexibility and freedom. However, retirees would still be exposed to investment and inflation risk during early and middle retirement. Another potential problem might be a lack of appetite by insurers to offer deferred annuities.

Since the release of its core retirement income strategy, it has been suggested that NEST could offer a government sponsored decumulation scheme, should suitable products not be offered by the private sector at reasonable cost. It has been suggested that a public scheme could provide:

- A low cost, risk-managed product available to the owners of large and small DC accounts
- High standards of governance through NEST's independent board of trustees, and
- A decumulation option for savers who did not participate in NEST during accumulation.

It will be some time, however, before such a product is needed. Given NEST's recent creation, most balances will be small enough to withdraw as cash. This will allow further discussions as the scheme matures. The urgency level could change after 2017, however, when NEST will be permitted to accept transfers of outside funds.

<u>The United States</u>

In 2016, two thirds of Americans were saving for retirement in a DC-type plan.[32] The most common plan design is the 401(k) plan – first created by an inadvertent change to the U.S. Internal Revenue Code in 1978[33]. 401(k) plans generally operate like Group RRSPs, with investments and administration provided by an outside partner.

Contributions are tax-deductible and investment growth is tax deferred (until receipt). Minimum withdrawals are required beginning at age 70½. 401(k) plans are typically voluntary, providing matching

[30] The final report titled "The future of retirement: A retirement Income blueprint for NEST's members" can be read here: http://www.acpm.com/ACPM/media/media/Decumulation2017/The-future-of-retirement.pdf

[31] Details on this concept, and much more relating to retirement income in the U.K., are covered in a comprehensive report issued in March of 2016 by the Pensions Institute at the Cass Business School, University of London. This report is available here: http://www.acpm.com/ACPM/media/media/Decumulation2017/IRRIReport.pdf

[32] Plansponsor 2016 Record Keeping Survey.

[33] https://www.learnvest.com/knowledge-center/your-401k-when-it-was-invented-and-why/

contributions by the employer based on a formula. Contributions are not sufficient to replace the pre-retirement standard of living for most workers.[34] In addition, loans and withdrawals can erode projected retirement income.

Most U.S. DC plans offer broad investment choice. Fund management fees in 401(k) plans are typically lower than for individual investors. Costs have been a significant focus in recent years as legislation has been introduced or amended to strengthen disclosure requirements to plan participants. U.S. DC plan sponsors typically experience higher incidence of litigation when compared to their Canadian counterparts.

Litigation regarding U.S. DC plans has tended to focus on fees and governance, especially regarding fund changes and employer stock (stock of the plan sponsor) in the plans.

Automatic features such as automatic enrollment and automatic contribution escalation have been much touted over the past decade since the *Pension Protection Act* of 2006. More recently, growth of these options has slowed as many plan sponsors have already automated their retirement plans, and also due to cost concerns.

According to a recent survey, investment advice is often provided, but usually through outside vendors.[35] Funds usually roll out to individual retirement accounts (IRAs) on retirement. Some, but not many 401(k) plan sponsors currently offer, or are considering offering, annuity payout options in the plan.[36]

In response to high litigation risk, 401(k) sponsors can seek protection through Internal Revenue Code (IRC) protections, as well as by safe harbours in U.S. retirement legislation. IRC Section 404(c) can protect DC plan sponsors from the results associated with individual participant investment choices. And while safe harbours can reduce employer reluctance, they may also reduce innovation.

For example, one of the safe harbour provisions requires automatic contribution escalation starting with a default initial savings rate of at least 3%, and annual increases of 1% hereafter. The WorldatWork survey noted above shows that 97% of respondents with automatic contribution escalation followed this exact regime. This may be due to the strong suggestive impact of the safe harbour requirements, and/or the fact that the safe harbour is both intuitive and logical.

Like Australia and the U.K., deferred annuities known as Qualified Longevity Annuity Contracts (QLACs) are permitted in the U.S., but to control tax deferral, are subject to dollar limits and age restrictions. The lesser of 25% of a retiree's tax-qualified retirement account balance, or $125,000 (indexed annually for inflation) can be used to purchase a deferred annuity, and QLAC payouts must commence no later than age 85.

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[34] Aon Hewitt – The Real Deal – 2015 Retirement Income Adequacy at Large Companies.

[35] According to a recent survey no 401(k) trends conducted by WorldatWork and the American Benefits Institute, 53% of respondent sponsors indicated that they provide investment advice. 2/3rds of these reported doing so through an outside advisor independent from the plan's investments.

[36] According to the same survey, 12% of sponsors offered an annuity pay out option while 21% replied that they were considering such an option.

Current trends in the U.S. 401(k) and other tax-qualified retirement plans market include transparent fee disclosure, easier access to investment advice, and delivering technology assisted solutions (roboadvisors). According to a recent survey conducted by Aon, about one third of sponsors allow retirees to maintain and draw down their 401(k) accounts after retirement, while roughly three quarters of sponsors believe that fiduciary concerns are a barrier to developing internal decumulation products with systematic payments and longevity protection. 401(k) sponsors are also concerned about the operational, administrative and communication complications that would arise if they were to offer "in plan" retirement income options.[37]

It appears, therefore, that employer reluctance is a potential barrier to the development of internal decumulation options in the U.S. as it is in Canada.

## 7. CAP Decumulation - Suggested Principles

ACPM recommends certain principles that should guide plan sponsors, service providers, regulators and legislators as they consider how to improve outcomes for CAP retirees.

- Provide guidance through defaults: default decumulation options should be designed to meet the needs of retirees through multi-component designs that offer managed withdrawals, longevity protection, access to lump sums and inflation protection when desired. They should guide, but not mandate, retiree decisions.

- Allow choice: while group options offering multi-component defaults would produce better outcomes for many, they will still not meet the needs of all. Canadians are fortunate to have access to a well-developed system of individually registered decumulation products, and many sources of retirement income, including public benefits, employment plans, individual plans and private capital. Risk-pooled decumulation options offered within or in conjunction with CAPs should be available, but not mandatory.

- Reuse & Recycle: the governance and best practice guidelines developed for the accumulation of CAP balances are a solid foundation on which to build. The same features that help CAP members make better investment choices while growing their savings – features such as limited choice, low-cost, suitable defaults, auto-features and clear communications will still work after retirement. Adjusting these to focus on the investment and other risks facing retirees while adding spending guidance is a reasonable objective.

- Disclose Agency Issues & Costs: while the existing model for distributing retirement income options to retirees through advisors provides individual service, freedom and flexibility, it is expensive compared to costs in other countries and may be conflicted. Discussions are already under way to extend a fiduciary or best interest standard in the U.S. and the U.K. While we do not advocate for a fiduciary standard per se, better disclosure of costs and conflicts would allow retirees to make better choices.

[37] Mythbusters: The Case for Retirement Income in DC Plans, Benefits Quarterly, first quarter 2016.

- Provide Regulatory Support to Sponsors: Most sponsors will not offer default decumulation options or assistance to retirees until they have a clearer picture of the expectations on them. Group plans could permit retirees to retain access to familiar funds and tools, pool retirement risks and capture the benefits of scale. Reassuring employers on liability, and encouraging the development of multi-component, risk-pooled defaults within CAPs would improve outcomes for retirees.

- Permit Flexibility: product designs and regulatory frameworks should recognize that many retirees will have other assets beyond government and employer-sponsored retirement savings such as houses, inheritances, personal savings.

## 8. Improving Outcomes

This section examines various changes that might improve outcomes for CAP retirees or encourage employers to offer group decumulation options

### Encourage Multi-employer Retirement Plan Designs

Many private sector employers are shying away from offering an employment retirement savings arrangement. Commonly cited reasons include:

- Competitive pressures domestically and internationally.

- Potential liability for unsatisfactory outcomes.

- The regulatory burden and administrative requirements placed on plan sponsors and administrators.

Of those who do sponsor retirement savings plans, most are reluctant to offer internal group retirement income options. They may have little desire to maintain a relationship with their employees after retirement. They may see little benefit in the continued expense, increased complexity and risk of liability that would result. How might this reluctance be reduced?

Establishing a separate entity to serve as plan administrator and fund holder of a multi-employer retirement plan is a solution that has succeeded in the past.

Examples of successful multi-employer retirement plans (although the design of the plans varies significantly) include:

- The industry-based multi-employer plans operating in Australia and the Netherlands

- The Thrift Savings Plan in the U.S. (armed services, reserves and federal employees)

- TIAA-CREF (U.S. colleges and universities)

- PEPP and the CSSPP (discussed above)

- Service provider rollover plans (Group RRIFs/LIFs)
- VRSP/PRPP
- The Saskatchewan Pension Plan.[38]

An example of a public multi-employer DC plan that is now more or less in full operation is the National Employment Savings Trust in the United Kingdom (discussed above). An example of a multi-employer proposal that failed to become operational is the ABC Plan proposed by Alberta and British Columbia's Joint Expert Panel on Pensions. Rather, PRPPs were developed as a private sector solution to the coverage issue. At this date, it is not clear whether PRPPs will promote internal decumulation options. Although current legislation enables them to be implemented in 5 jurisdictions in Canada, they are only operational in Québec where balances are small and retirement income options are not yet required.

Finally, multi-employer arrangements could help to address the concern that, where an employee works for a number of employers during their career, the last employer may not wish to be solely responsible for the decumulation phase.

<u>Develop Multi-component, Risk-pooled Decumulation Defaults</u>

Canadian CAP members, as well as DC savers in other countries, are now approaching retirement with significant account balances. Regulators, legislators and plan administrators are therefore discussing whether products can be designed to help retirees manage or pool longevity and investment risk while still providing them with flexibility and accommodating a bequest motive.

The comprehensive income product for retirement (CIPRs) being developed in Australia and the core retirement income strategy being developed in the United Kingdom are examples of products designed to meet and reconcile members' desires with their needs. To date, the financial marketplace in Canada does not appear to be actively developing such products.

An example that would be simple to implement (although it does require minimal changes to tax legislation) would be the uninsured variable annuities already offered by the UBC Faculty Pension Plan.

Multi-component, risk-pooled defaults like those under discussion in Australia and the U.K. might take a little longer to implement. Including a managed withdrawal component to help retirees with investment

[38] The Saskatchewan Pension Plan, not to be confused with the Saskatchewan Public Employees' Pension Plan (PEPP), operates a plan open to the general public and to small employers who wish to participate in a simple DC plan with limited choice, low costs, internal decumulation options and independent governance. The Plan, created in 1986 has 33,000 members across Canada and holds $440 million on their behalf.

and spending risk, a flexibility component to permit access to lump sums and a deferred annuity to hedge longevity, they would involve more complicated changes to legislation.[39]

Although legislation currently prevents the creation of multi-component, risk-pooled decumulation options in Canada, like those under discussion in Australia and the United Kingdom, there are some steps that could be taken now to improve decumulation outcomes by combining options already permitted. For example, combining managed withdrawals from a variable benefit account or LIF with a deferred annuity starting at 71 (currently the maximum age of deferral) could offer flexibility and longevity protection, although at higher cost than if the annuity could be deferred to a later age.

Annuitizing a plan member's entire remaining balance at age 71 would still leave them facing point-in-time risk. Their lifetime payment would be based on the value of their remaining funds and prevailing long bond yields on a single date.

One way to mitigate this risk would be to gradually de-risk their investments over a number of years before annuitizing at age 71. Another would be to gradually annuitize smaller portions of their CAP funds over a number of years. Transferring gradually a portion of the funds from risky investments to insured annuities between ages 60 and 71 could reduce point in time risk.

In addition, some individuals may wish to take advantage of separate rules regarding Tax Free Savings Accounts (TFSAs). Those accounts are significantly different from most other vehicles such as DC pension plans and RRSPs because they do not involve the tax sheltering of savings, but, on the other hand, withdrawals from TFSAs (including all investment income) are not subject to taxation. Another special feature of TFSAs is that withdrawals are not counted as income either for the purpose of determining eligibility for the Guaranteed Income Supplement (GIS), which can be a very important factor for some individuals since income amounts (other than OAS) can produce a "clawback" of 50% for GIS recipients. Since GIS is directed to low earners, this vehicle is especially attractive to those who have earnings below average. Depending on other sources of retirement income, the YMPE under the CPP/QPP can be considered as representative of the average worker's earnings before retirement. It should be noted that the amounts that may be deposited into a TFSA are not very substantial, while TFSA balances are relatively low due to the relative infancy of TFSAs.[40]

Provide Longevity Protection through Public Benefits

CPP/QPP and OAS include risk protections very useful for pensioners but difficult and expensive to provide within or in conjunction with DC plans and other CAPs. The benefits they pay continue for life and are

[39] The maximum spending controls on locked in funds, which prevent managed withdrawals to an age younger than 90, and the maximum age of deferral in the ITA, discouraging the sale of deferred annuities with payments that start later than age 71 are two examples.

[40] Some low earners could benefit from arranging withdrawals from registered plans in certain years and utilization of TFSA for holding savings that will not be subject to GIS claw back when withdrawn – especially for those who retire before age 65, when OAS and GIS become available (or 60 for the spouse of a GIS recipient).

adjusted for inflation. Could these be used to reduce longevity risk in combination with a managed drawdown option designed to preserve flexibility and provide limited access to lump sums?

Retirees are allowed to defer starting their public pensions, resulting in increased benefits. The CPP/QPP rules were changed recently to increase the adjustment from 0.5% per month to 0.7% per month. The additional benefit that results from delaying payment start from 65 to 70 years was increased from 30% to 42%. The new adjustment factor was intended to be more neutral on an actuarial basis.

Changing the rules to apply an adjustment factor even more favourable than an actuarial equivalent, e.g., 0.8% instead of 0.7%, or permitting postponement to age 75 or 80 could produce a result more like the deferred annuity in a multi-component decumulation default and would not require changes to the maximum age of deferral in the *Income Tax Act*. This would allow retirees to manage the drawdown of their balances to a fixed age, relying on public benefits to protect against longevity risk and reduce inflation risk.[41] Such an approach, however, could be fairly criticized for not treating all CPP recipients equitably. For OAS, the first improvement that could be made would be to change the adjustment factor after age 65 from 0.6% to 0.7% per month, as was already done for CPP/QPP.

Use Auto-features

It has been recognized for some time that auto-features can produce better results for the average CAP member during the accumulation of their benefits. Auto-enrolment, auto-escalation of contributions and suitable investment defaults (with opt-outs as appropriate) are common examples.

There is some research suggesting that behavioural biases and misunderstandings might impact the decumulation of retirement savings as well.

These include underestimating longevity (particularly for a couple), excessive risk aversion, and not understanding uncertainty. Default options designed to counter these behavioural biases could significantly improve decumulation outcomes.

Create safe harbours

One approach to encourage employers to offer decumulation options to CAP members could be to incentivize them to do so through the availability of legislative safe harbours.

In the past, many in Canada, including ACPM, have argued that Canadian legislators should enact safe harbours to provide more certainty and protection for employers/plan sponsors who offer and administer CAPs. The rationale is that uncertainty over what constitutes prudent practices for a plan administrator in relation to a CAP creates legal risk and thus a disincentive to offer and maintain such plans. A safe harbour, it is argued, would provide sponsors and administrators with certainty and relief from liability, thereby incenting them to offer/continue to offer retirement plans to employees.

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[41] Such an approach is similar to the proposals made by the D'Amours Commission in Québec for an innovative "longevity pension" instead of an improvement in the QPP.

But what exactly is meant by the term "safe harbour"? Black's Law Dictionary defines a safe harbour as "a provision (as in a statute or regulation) that affords protection from liability or penalty". Currently, no safe harbours exist for CAPs in Canadian pension legislation, including in respect of any decumulation options made available. Some have argued that the *Pension Benefits Standards Act* (Canada) (PBSA) provides DC pension plan administrators with a limited form of safe harbour from liability related to member-directed plan investments. This is due to the fact that the PBSA deems an administrator to have complied with its standard of care, with respect to pension investments, where the plan administrator offers investment options of varying degrees of risk and expected return that would allow a reasonable and prudent person to create a portfolio of investments that is well adapted to their retirement needs.[42] However, the intent and scope of this provision has not yet been tested, and there is no indication by legislators or regulators of an intention to create a statutory safe harbour with this wording.

By contrast, safe harbours exist in the U.S. Employment Retirement Income Security Act (ERISA) with respect to 401(k) plans (generally speaking, the equivalent of CAP plans in Canada). There are a number of distinct safe harbours available to plan fiduciaries in the U.S. for the purposes of plans where members are able to direct the investment of their accounts. One of the important safe harbours is IRC Section 404(c). At a high level, this safe harbour for ERISA plans allows plan fiduciaries to not be held liable for claims relating to a participant's selection of investments (although they remain liable for selecting and monitoring the plan's underlying investment options).

One critique of the safe harbour regime is that plan sponsors misunderstand the nature of safe harbours, or their obligations in order to benefit from safe harbours, leading to circumstances where they erroneously believe that they are immune from liability. Another critique is that compliance with safe harbours is overly confusing to implement or too costly for certain plan sponsors.

And, admittedly, there is no evidence that the prevalence of safe harbour provisions in ERISA have resulted in less liability, risk or litigation over DC plans, particularly when compared to the experience in Canada. There are also concerns that safe harbours stifle innovation, are unlikely to improve results, and that governments are reluctant to provide such protections.

<u>Equalize the Taxation of DC and DB Pension Income</u>

When variable benefits were created, a new form of retirement income was created. The *Income Tax Regulations* define variable benefits as "lifetime retirement benefits". Lifetime retirement benefits, whether paid from a DB or DC pension plan, must be periodic and cannot start until retirement. Taxes on variable benefits are calculated, withheld, and remitted to CRA in the same manner as DB pension payments.

Two years later, the *Income Tax Act* (ITA) was amended to permit pension income splitting between spouses. As part of this change, the Act was amended to add variable benefit payments to the definition of "pension income" but not to the definition of "qualified pension income". DB pension payments,

42 PBSA, ss. 8(4.1), (4.3) and (4.4).

however, were included under both definitions. As a result, DB pension plan members can claim the pension income deduction and split payments with a spouse immediately on retirement, whereas DC pension plan members must wait until they reach age 65.

The only difference between a variable benefit payment and a DB pension payment is that one is flexible and the other is not. Both are periodic payments of retirement income that cannot start until the member qualifies for retirement and terminates employment. An “age 65” limit is therefore not required to ensure that the taxpayer is retired. There is no reason to characterize the payment of periodic retirement income from DC and DB pension plans differently.

If one accepts that decumulation outcomes could be improved by encouraging DC Plan sponsors to offer group retirement income options, then the payment of retirement income directly from a DC plan to its retirees in the form of variable benefits should be encouraged. Removing the disparity in taxation that currently exists between DB and DC retirees receiving retirement income directly from their plans would support this result.

<u>Mandate Employee Contributions</u>

Increasing CAP accumulations to a level sufficient to produce meaningful retirement incomes is, of course, fundamental to improving outcomes for CAP retirees during the decumulation phase. Mandatory employee contributions with a right for the employee to opt out, similar to the Québec VRSP, would be a method to increase savings and potentially increase employee engagement.

<u>Harmonization</u>

Harmonization of decumulation guidelines and legislation across all the provinces will play an important role in the development of multi-employer plans with internal retirement income options, or the development of multi-component group products within or in conjunction with CAP plans. One set of guidelines will both reduce costs and encourage plan sponsors, administrators and the financial sector to develop innovative products.

## 9. A Call to Action!

As CAP retirees start to approach and enter retirement, ACPM believes that there is both an opportunity and need to develop decumulation products and services that will produce better outcomes. Guidelines similar to those that already govern the accumulation phase of CAP balances will play an important part. Changes in both plan design and the regulatory framework are recommended.

To improve outcomes for CAP retirees, ACPM challenges plan sponsors, providers, plan regulators and governments to take the following actions:

A. Develop national, best-practice guidelines for the decumulation of CAP balances. These guidelines should include, but not be limited to provisions that:

- Require CAP retirement advisors to meet a harmonized standard of care[43] including duties to:
  - Avoid or control conflicts of interest in a manner that prioritizes the retiree's interest
  - Provide full, clear, meaningful and timely disclosure
  - Interpret law and agreements in a manner favourable to the retiree's interest where reasonably conflicting interpretations arise
  - Act with care

- Describe the characteristics of appropriate default decumulation options as noted below.

- Require that retirees be provided with information and or tools explaining or demonstrating relevant risks such as sequence of returns risk.

- Require that retirees be provided transparent disclosure of fees and costs, demonstrating the impact of cost differentials when compounded over time.

B. Amend pension and tax legislation to both permit and encourage:

- Cost-effective longevity risk protection through deferred annuitization. The Income Tax Act should be amended to permit deferred annuitization after age 71, subject to age and capital limits similar to those applicable to U.S. 401(k) plans as described above. Funds used to purchase the deferred annuity should be excluded from the minimum withdrawal requirements otherwise applicable.

- Longevity pooling through group self-annuitization arrangements. Pension and tax legislation should be amended to permit uninsured variable annuities to be offered either within CAPs, or as related or unrelated group retirement income options. With an uninsured variable annuity, longevity risk is pooled, but not insured. Provided that adequate disclosure is provided to retirees, this option has the potential to significantly reduce the longevity risk currently faced by CAP retirees without creating a funding risk for the plan sponsor or provider.

- Equitable taxation of DC and DB pension income. Presently, DC retirees, although receiving periodic retirement income directly from a registered pension plan are not permitted to claim the pension income credit or split pension income until age 65. This age-based test, is neither

[43] For a brief discussion of the creation and application of a "best interest" standard for retirement advisors in Australia, Europe and North America, please refer to Parts 8 – 10 of Canadian Securities Administrators Consultation Paper 33-404, entitled: "Proposals to Enhance the Obligations of Adviser, Dealers and Representatives Toward Their Clients, released on April 28, 2016.

necessary nor justified where a taxpayer must both qualify for retirement and then terminate employment before retirement income payments can commence.

- Multi-component, risk-pooled decumulation defaults that include:
    - Investment choices with risk/return profiles suitable to provide long term growth and regular retirement income
    - Managed withdrawals based on remaining funds and expected returns
    - Annual depletion date estimates based on current payment levels and expected returns
    - Deferred annuitization or longevity pooling to reduce the risk of exhausting available funds before death
    - Transparent, unbundled disclosure of all fees and cost
    - Controlled access to liquidity (cash lump sums)
    - The opportunity for partial inflation protection where desired
    - Portability of funds during the decumulation phase

With CAP membership growing and CAP plans maturing, there will soon be an urgent need for more and better decumulation products and services. Whether offered individually or as group arrangements, either within or in conjunction with CAP plans, retirees will need decumulation solutions designed to guide them to better outcomes – decumulation solutions that will help them manage investment, spending and longevity risk.

ACPM believes that the time for sponsors, providers, regulators and legislators to take action is before this urgent need arrives.

## Appendix A

Individual and group decumulation products broadly available in Canada include:

### Registered retirement income fund (RRIF):

A RRIF can be used to convert RRSP's and non-locked in DC balances into retirement income.

- The capital transferred into a RRIF, and future earnings, remain tax-sheltered, only becoming taxable as they are withdrawn.
- Minimum withdrawals are required beginning the year after the RRIF is funded, although remaining funds can be transferred back to an RRSP until age 71 if further withdrawals are not required.
- Funds in a RRIF are exposed to investment risk, but can be invested in any manner permitted for RRSPs. This permits retirees to match their own risk tolerance.
- After death, funds remaining can be rolled over to a spouse, or become taxable to the deceased.
- No maximum withdrawal restrictions apply so the retiree has access to lump sums. However, this means that the retiree is exposed to longevity risk.
- RRIF's are offered by the financial sector.

### Life Income Fund (LIF):

A LIF is similar to a RRIF but is used to convert locked-in DC balances as well as Locked-In Retirement Accounts (LIRA) into retirement income.

- It has the same characteristics as a RRIF.
- Provincial pension legislation limits the amount that can be withdrawn each year to ensure that some funds will remain to age 90. This reduces, but does not eliminate, longevity risk.
- For a locked-in fund governed by the pension legislation of Manitoba, Alberta, Ontario and Canada, with spousal consent, up to 50% of the balanced transferred into a LIF can be unlocked and then withdrawn or transferred out of the LIF.
- This removes the annual withdrawal limit on these funds, increasing longevity risk, but permitting access to lump sums.
- LIF's are offered by the financial sector.

**Annuity:** Annuities are financial contracts.

- Annuities can be purchased with locked-in or non-locked-in DC balances as well as RRSP, LIRA, RRIF and LIF.
- A fixed annuity guarantees an income for life. Both investment and longevity risk are transferred to the issuer of the annuity.
- The funds used to buy the annuity roll over without tax consequences. Funds become taxable as they are received by the annuitant(s).
- Joint annuities can be purchased which continue to pay a surviving spouse.

- The pricing of fixed annuities is based on long term bond yields at the date of purchase. Lower yields therefore mean a lower retirement income is locked-in.
- Payments can be guaranteed for up to 15 years. If the annuitant or both joint annuitants die before the guarantee expires, this can provide a commuted value payout to named beneficiaries or the retiree's estate.
- A commuted value of an annuity is taxable to the recipient and not to the deceased's estate.
- Annuities are typically offered by insurers.

Another option that is possible within DC plans but little used is:

**Variable Benefits:**

DC balances can be paid directly from a DC pension plan to a retiree as variable benefits.[44]

- Spousal consent is required to transfer funds into a variable benefit account.
- Remaining funds can roll over to a surviving spouse or be left to a non-spousal beneficiary with consent.
- Separate variable benefit accounts must be established for locked-in and non-locked-in funds.
- An account holding locked-in funds has similar characteristics to a LIF.
- An account holding non-locked-in funds has similar characteristics to a RRIF
- LIF maximum withdrawal limits apply to a locked-in variable benefit account, but there are no minimum withdrawals required from locked-in or non-locked-in accounts until age 71.
- A retiree electing to receive variable benefits continues to be exposed to investment and longevity risk.
- Variable benefits are paid directly from a DC pension plan or PRPP.

[44] In British Columbia, Alberta, Saskatchewan, Manitoba, Nova Scotia, Quebec and at the federal level, provisions have been added to pension legislation permitting DC plans to pay variable benefits. In Ontario, provisions have been passed, but not proclaimed.

## Appendix B

**GLOBAL RETIREMENT INCOME SYSTEMS**

| Country | First Pillar | Second Pillar | Third Pillar |
|---|---|---|---|
| **Netherlands** | • Name: AOW.<br>• Financed: Pay-as-you-go (PAYG).<br>• Standard retirement age: 65 and 3 months (2016; will gradually increase to 66 by 2018, 67 by 2021, then linked to life expectancy in 2022).<br>• Contribution scheme: employees contribute 17.9% of gross income.<br>• Maximum contribution base: $48,585.57 (2016).<br>• Eligibility: persons who have worked or resided in the Netherlands for at least 1 year.<br>• Calculation of pension: 2% of the full AOW accrues for each year of insurance, over a maximum period of 50 years. The full AOW is 70% of the minimum wage for individuals or 50% for a person living with a "partner" (a spouse, sibling, adult grandchild, or friend).<br>• AOW top-up: an additional amount that depends on the number of years in which | • Quasi-mandatory occupational pension funds. There is no overarching mandate, but government can pass legislation making a pension scheme mandatory for an entire industry or profession.<br>• Coverage: 95% of employees are covered by a pension fund; of these employees, 93% have a DB plan (2010).<br>• Three types of pension funds: industry-wide, company-specific, and independent professionals.<br>• Retirement age: 67 (2016).<br>• Contribution scheme: employer-funded (DB), or employer- and employee-funded (DC).<br>• Minimum solvency ratio for DB plans: 105% (2016).<br>• Maximum accrual rate for DB plans (in 2016):<br>    • Final salary schemes: 1.657% of the pensionable base (resulting in 67% of final salary based on 40 years of accrual). | • Individual voluntary pension products, including: annuity insurance, endowment insurance (lump sum), and tax-efficient blocked savings accounts.<br>• Contributions to these products are tax-deductible up to a certain amount.<br>• Maximum tax-deductible contribution: 13.8% of pensionable base (2015).<br>• Maximum pensionable base: $146,323.72 (2016). |

| Country | First Pillar | Second Pillar | Third Pillar |
|---|---|---|---|
| | the person was insured (up to 50 years); the full top-up is $36.86/month.<br>• Maximum benefit (including top-up): $1,564.75/month (single); $1,078.24/month (living with a partner) (2016). | • Average salary schemes: 1.875% (resulting in 75% of career average salary based on 40 years of accrual).<br>• Maximum accrual is 100% of final salary (in both final salary and average salary schemes).<br>• Maximum pensionable base: $146,323.72 (2016).<br>• Payment of benefits: life annuity. | |
| **United States** | • Social Security.<br>• Functions on a pay-as-you-go basis.<br>• Social Security is financed by employment taxes shared equally between employer and employee.<br>• A single rate of 12.4% is applied to income.<br>• The maximum Social Security tax for employees and employers in 2016 is $9,347.<br>• Maximum wage base for 2016 is $152,468<br>• The maximum monthly Social Security benefit depends on the retirement age of the individual. For example, a person who | • Voluntary occupational plans.<br>• Majority of the plans are DC plans.<br>• There are no legislative or regulatory restrictions on how wealth accumulated in occupational plans, individual retirement accounts or other voluntary savings has to be decumulated.<br>• If the value of a DB or DC pension is less than $6,361, the plan sponsor can pay a lump sum regardless of retiree's desires. If the benefit is worth more than $6,361, the plan must provide the benefit as a monthly payment unless the worker (and the spouse, if the worker is married) consent to another benefit form. | • Voluntary tax-deferred and taxable private savings.<br>• The total amount an individual can contribute to either a Roth IRA or a Traditional IRA is $6,997 a year.<br>• An individual can only contribute to a Roth IRA, however, if their income is below a certain threshold. For single filers in 2016, that income threshold starts at $148,859 and ends at $169,215.<br>• With a Roth IRA, an individual can leave the money in the account for as long as they want letting it grow. With a Traditional IRA, by contrast, an individual must start withdrawing the money at the age of 70½. There is a required minimum distribution after the age of 70.5 that is |

| Country | First Pillar | Second Pillar | Third Pillar |
|---|---|---|---|
| | retires at full retirement age in 2016 would receive a maximum benefit of $3,357 per month. However, a person who retires at age 62 in 2016 would receive a maximum benefit of $2,674 per month. | • The limitation for DC plans in 2016 is $68,370.<br>• The limitation for DB plans in 2016 is $210,000<br>• Annuitization is the least used decumulation method among retirees. | calculated based on a variety of factors such as amount in the IRA etc. |
| **United Kingdom** | • Name: State Pension (persons who reached the state pension age before 6 April 2016 receive the old Basic State Pension).<br>• Financed: PAYG.<br>• State pension age: 65 for men; the age for women will gradually increase to 65 by 2018; the age for both men and women will gradually increase to 68 by 2046.<br>• Contribution scheme: depends on the person's National Insurance "class", which depends on employment status and earnings. The most common is Class 1: employees earning more than $259.43/week (approximately $13,490.36/year). For Class 1 employees, income up to $1,384.17/week (approximately $71,976.84/year) is taxed at 12%. Income above that is taxed at 2%. | • Quasi-mandatory occupational pension funds (DC or DB).<br>• Employees who earn more than $16,737.21/year must be automatically enrolled in a pension plan. They may choose to opt out.<br>• Contribution scheme in DC plans: employee contributes 0.8% of income (2016; rising to 4% by 2018), employer contributes 1% of income (2016; rising to 3% by 2018), and government contributes 0.2% in the form of tax relief (2016; rising to 1% by 2018).<br>• Taxation: tax-relief is available for contributions. Twenty-five percent of the assets can be withdrawn in retirement tax-free.<br>• Earliest retirement age: 55. | • Voluntary individual savings, such as Individual Savings Accounts (ISAs).<br>• Three types of ISAs:<br>  ◦ Cash: can include cash and some National Savings and Investments Products.<br>  ◦ Stocks/shares: can include shares, bonds, and investment funds.<br>  ◦ Innovative finance: can include peer-to-peer loans.<br>• It is possible to have up to 1 of each type of ISA.<br>• Taxation: earnings in ISAs are tax-free. The maximum amount that can be sheltered in ISAs is $25,507.50, across all 3 types of ISAs (will increase to $33,474.41 in 2017).<br>• No restrictions on withdrawals. |

| Country | First Pillar | Second Pillar | Third Pillar |
|---|---|---|---|
| | • Eligibility: persons who have 10 qualifying years on their National Insurance Record (i.e., either worked or received a credit for, e.g., sickness or job training).<br>• Calculation of benefit: dependent on the number of qualifying years. Thirty-five years is required for the maximum benefit.<br>• Maximum benefit: $260.51/week (approximately $1,128.88/month) (2016). | • Payment of benefits (DC): options include lump sum, annuities, flexi-access drawdown fund, and direct cash withdrawals in certain situations (called “uncrystallised funds pension lump sums”).<br>• Payment of benefits (DB): lump sum or life annuity. | |
| **Germany** | • Name: Retirement Insurance System.<br>• Financed: PAYG.<br>• Standard retirement age: 65 and 3 months (2015; will gradually rise to 67 by 2029)<br>• Earliest retirement age: 63 (only if the person has 35 qualifying years; benefit is reduced by 0.3% for each month of early retirement)<br>• Contribution scheme: 18.7% of income, split equally between employer and employee (2016).<br>• Maximum contribution base: $8,968.13/month or $107,617.56/year (West Germany); $7,810.95/month or $93,731.42/year (East Germany) (2016). | • Voluntary occupational pension plans. Only DB and hybrid schemes are considered to be occupational pensions by law.<br>• There are five different vehicles for structuring the plan. The most common is Direktzusage, or “direct pension promise”, which make up approximately half of the value of all assets invested in occupational pension plans. Direktzusage is a DB plan in which the employer does not legally separate out pension assets. Legislative protection is available in the event of employer insolvency. | • Voluntary individual products, including Riester plans and Rürup plans.<br>• Riester plans: minimum investment of $86.79/year. Government subsidy of $222.76/year is available if the person invests at least the lower of: 4% of his/her gross income, and $3,037.59.<br>• Rürup plans: 82% of contributions are tax-deductible. The maximum contribution is $28,929.45/year. Benefits must be paid out as an annuity upon reaching the age of 60 (at the earliest). |

| Country | First Pillar | Second Pillar | Third Pillar |
|---|---|---|---|
| | • Eligibility: persons who have 5 qualifying years (i.e., either worked or received a credit for, e.g., childcare or job training)<br>• Calculation of benefit: dependent on number of qualifying years and the person's average net income.<br>• Maximum benefit: 67% of average net income. | • Payment of benefit: almost any form is permissible, including annuity payments, lump sum payments, and instalments. A single lump-sum payment is not permitted. | |
| **Sweden** | • Name: National Pension.<br>• Three components: income-based, premium, and guaranteed.<br>• Income-based: a notional DC system financed on a PAYG basis. Contributions paid in a particular year are used to finance the benefits disbursed in that year. Benefits are calculated based on lifetime earnings.<br>• Premium: a DC system financed on a PAYG basis. Contributions are invested in for the contributing person according to his/her wishes.<br>• Guaranteed: a DB plan that constitutes a minimum floor for persons over age 65 with low income and at least 40 years of residency. Financed by general taxes. | • Mandatory occupational pension plans negotiated in collective labour agreements.<br>• Four large agreement-based plans:<br>  • SAF-LO: for privately employed wage earners (DC plan).<br>  • ITP-1: for privately employed salaried employees born in or after 1978 (DC plan); and ITP-2: for privately employed salaried employees born before 1978 (DB plan).<br>  • PA 03: for central government employees (DC and DB aspects).<br>  • KAP-KL: for municipal employees (DC and DB aspects). | • Voluntary individual savings plans.<br>• Taxation: contributions are no longer tax-deductible, as of 2016. Yields from private pension funds are taxed at 15% (as opposed to 30% on other investment income). |

| Country | First Pillar | Second Pillar | Third Pillar |
|---|---|---|---|
| | • Characteristics: income-based and premium pensions:<br>◦ Standard retirement age: 65 (flexible between 61 and 70).<br>◦ Contribution: 17.21% of gross income. The employee contributes 7% and the employer contributes 10.21%.<br>◦ Maximum pensionable income: $68,178.58 (2016).<br>• Characteristics: guaranteed pension:<br>◦ Retirement age: 65<br>◦ Maximum benefit: $1,205.41/month for a single person; $1,075.25/month for a married person (2016). | • Contribution scheme (in DC plans): all contributions are made by employers.<br>◦ SAF-LO and ITP-1: the rate is 4.5% of income up to an income of $68,178.58, plus 3% of income above that. Minimum employee age is 25 to participate in the plan.<br>◦ KAP-KL: the rate is 4.5% of income. Minimum employee age is 21.<br>◦ PA 03: the rate is 2.0-2.3% of income, up to an income of $119,417.91. Minimum employee age is 23.<br>• DB benefits:<br>◦ ITP-2: Benefits depend on age of employee, level of income, and retirement age. Minimum employee age is 28.<br>◦ PA 03: DB portion of the plan is available to employees whose average pensionable income in the 5 years prior to retirement was greater than $68,178.58 (2016). The maximum benefit is available after 30 years of employment. | |

| Country | First Pillar | Second Pillar | Third Pillar |
| --- | --- | --- | --- |
| | | • KAP-KL: DB portion of the plan is available to employees whose average pensionable income in the 5 highest years in the 7 years prior to retirement was greater than $68,178.58 (2016). The maximum benefit is available after 30 years of employment. | |
| **Switzerland** | • Name: Old Age and Survivor's Insurance (AHV) and Supplementary Pension (EL).<br>• Financed: PAYG.<br>• Standard retirement age: 64 (women); 65 (men).<br>• Earliest retirement age: 58 (the benefit amount is reduced by 6.8% per year).<br>• Eligibility: any person who paid contributions.<br>• Contribution scheme: 8.4% (AHV) plus 0.45% (EL) of gross income, split equally between employer and employee. Self-employed and unemployed persons must also pay contributions, at different rates.<br>• Supplementary pension (EL) is available for low-income Swiss citizens.<br>• Calculation of benefit: dependent on number of contribution years (including bonus years for education and childcare) | • Mandatory occupational plans (DC). Employers may voluntarily institute DB plans, but the majority have DC plans.<br>• All employees with income over $28,113.92 must be insured.<br>• Contribution scheme: employers must contribute at least as much as employees. The minimum contribution depends on the employee's age (7%, 10%, 15%, or 18% of income).<br>• Pensionable income: between $32,799.58 and $112,455.70 (thus, maximum pensionable income is $79,656.12) (2016).<br>• Calculation of benefit: annually, the benefit is calculated as: total retirement assets multiplied by the conversion rate. The minimum conversion rate is 6.8% (2016). Retirement assets equal contributions plus interest earned. The | • Voluntary individual savings plans. There are two types: tied pension and flexible pension.<br>• Tied pension:<br>    • Eligibility: persons who pay AHV contributions<br>    • Maximum contribution: $8,996.46 for employed persons with an occupational plan, and $44,982.28 for everyone else.<br>    • Taxation: contributions are tax-deductible; earnings are tax-free until the funds are withdrawn.<br>    • Withdrawal: funds may not be withdrawn until retirement.<br>• Flexible pension:<br>    • There are no statutory restrictions on contributions, |

| Country | First Pillar | Second Pillar | Third Pillar |
|---|---|---|---|
| | and the person's average employment income. To receive the full benefit, there must have been no interruptions in contributions from age 20 until retirement. Each interrupted year reduces benefits by 2.3%.<br>• Maximum full benefit (for persons with average income above $112,455.70): $3,123.77/month (2016).<br>• Minimum full benefit (for persons with average income below $18,742.62): $1,561.89/month (2016). | minimum interest rate on retirement assets is 1.25% (2016).<br>• Maximum benefits: $28,999.21 for men; $29,972.23 for women (2016). | payment of funds, eligible investments, or availability.<br>• Limited tax advantages. |
| **Australia** | • Name: Age Pension and Pension Supplement.<br>• Financed: general taxes.<br>• Retirement age: 65 (will increase to 65 and 6 months in July 2017, and thereafter will increase by 6 months every 2 years, reaching 67 by July 2023).<br>• Eligibility: there are 3 eligibility tests:<br>  • Residency test: the person must have been an Australian resident for at least 10 years (at least 5 year of which must have been a continuous period). | • Mandatory occupational pension funds called Superannuation Funds (DC plans). This is the main component of the Australian pension structure.<br>• Contribution scheme: employers must contribute 9.5% of employee's income (will increase to 10% in 2021, then gradually increase to 12% by 2025), up to a maximum contribution of $49,552.81. Employees may choose to voluntarily contribute (see Third Pillar). | • Voluntary individual contributions to Superannuation Funds.<br>• In addition to the mandatory funds, there are retail funds that are offered directly to individuals.<br>• Individuals can choose to contribute to retail funds or the fund his/her employer contributes to.<br>• The government matches individual contributions by a factor of 1.5 (up to a maximum subsidy of $991.06), for persons earning less than $58,452.49 (2016). |

| Country | First Pillar | Second Pillar | Third Pillar |
|---|---|---|---|
| | • Asset test: the maximum amount of assets permitted depends on whether the person is (1) married, (2) a homeowner, and (3) disabled. For example, the maximum assets permissible for a non-disabled, single homeowner is $207,130.73 (2016). Persons who do not meet this test may still receive a partial pension.<br>• Income test: persons who have an income above $4,225.78/year (couples: $7,592/year) in the year in question will have their Age Pension reduced by 50 cents per dollar of income above that threshold. The cut-off point is $49,262.20 (couples: $75,416.12), beyond which Age Pension is reduced to zero.<br>• Calculation of benefits: dependent on marital status, income, assets, and other circumstances.<br>• Maximum benefit: $1,575.38/month (couple: $2,374.96/month) (2016).<br>• Pension supplement: anyone who receives Age Pension is eligible. The Supplement is comprised of several | • Payment of benefits: benefits can be paid as a lump sum, an annuity, or both. Benefits are paid when the employee (1) reaches the preservation age and retires, or (2) reaches age 65, whichever is earlier. The preservation age ranges between 55 and 60, depending on date of birth. | |

| Country | First Pillar | Second Pillar | Third Pillar |
|---|---|---|---|
| | programs, including utilities allowance, GST supplement, telephone allowance, and pharmaceutical allowance.<br>• Maximum supplement: \$128.84/month (couple: \$194.24).<br>• Minimum supplement: \$69.18/month (couple: \$104.26). | | |

****All monetary amounts in Canadian dollars**

Conversion used: 1 Euro = 1.45 Canadian Dollar; 1 US Dollar = 1.30 Canadian Dollar; 1 British Pound = 1.67 Canadian Dollar; 1 Swedish Krona = 0.15 Canadian Dollar; 1 Swiss Franc = 1.33 Canadian Dollar; 1 Australian Dollar = 0.99 Canadian Dollar

# Appendix C

| | UBC Faculty Pension Plan | CSS Pension Plan | PEPP |
|---|---|---|---|
| Effective Date | April 1, 1967 | April 12, 1943 | Oct. 1, 1977 |
| Plan Type | Registered DC | Registered DC | Registered DC |
| Registration | BC PBSA | SK PBA, members in 7 provinces and two territories | SK PBA, members in 5 additional provinces and some federal PBSA. |
| Sponsor | UBC | Co-operative Superannuation Society | Government of Saskatchewan |
| Covered Employees | Faculty, Administrative Executive Staff, and High Earners | Multi-employer, serving about 340 member co-ops and credit unions | Multi-employer – primarily Public Sector employees, but some Private Sector as well. |
| # members: | 3,400 actives, 1,500 deferred, 960 retired | 21,000 actives, 18,000 deferred, 7,000 retired | 35,000 actives, 25,700 deferred, 3,700 variable benefit (retired) and 1,920 in Saskatchewan Pension Annuity Fund. |
| Eligibility | Mandatory for covered employees; optional for lecturers, research associates, etc. Immediate eligibility for full time; 2 years with earnings over 35% of YMPE for part-time. | Mandatory membership for all full time employees after a waiting period of up to 2 years | Mandatory membership for all full time employees. Part time can join immediately or complete waiting period. |
| Retirement | Normal retirement age 65. Early retirement age 55. | Normal retirement age 60. Early retirement age 50 or age + service 75. | Normal Retirement age 65. Early retirement age 50. |
| Governance Structure | Board of Trustees (4 elected by plan members, 4 appointed by UBC Board of Governors) | Incorporated pension society governed by a Board of six Directors (3 elected by employees and 3 elected by employers) | Public Employees' Pension Board – 9 members – 4 represent employee groups, 4 represent employer groups; independent chair selected by the rest of the board. |

| | UBC Faculty Pension Plan | CSS Pension Plan | PEPP |
|---|---|---|---|
| Administration | Co-sourced with third party recordkeeper; internal member services | Internal by a staff of 18 | Internal using a third party recordkeeper |
| Member Required Contributions | 3.2% of pay between YBE and YMPE plus 5% of pay below YBE and above YMPE | 1 to 9% of regular or total earnings at the employer's option – 6% recommended | Varies by employer and employee group – collectively bargained in many cases |
| Employer Contributions | 8.2% of pay between YBE and YMPE plus 10% of pay below YBE and above YMPE | 1 to 9% of regular or total earnings at the employer's option – 6% recommended | Varies by employer and employee group – collectively bargained in many cases |
| Member Voluntary Contributions | Up to money purchase limit | Up to money purchase limit | Up to money purchase limit |
| Investment Options | •Balanced Fund (default)<br>•Bond Fund<br>•Canadian Equity Fund<br>•Foreign Equity Fund<br>•Short Term Fund<br>•GICs (1-5 year terms) | •Balanced Fund (default)<br>•Bond Fund<br>•Equity Fund<br>•Money Market Fund | ASSET ALLOCATION FUNDS<br>•PEPP Steps lifecycle funds (default)<br>•Accelerated Growth<br>•Growth<br>•Balanced<br>•Moderate<br>•Conservative<br>SPECIALTY FUNDS<br>•Bond Fund<br>•Money Market Fund<br>*May select 1 Asset Allocation Fund and any of the Specialty Funds.* |

| | UBC Faculty Pension Plan | CSS Pension Plan | PEPP |
|---|---|---|---|
| Decumulation Options | **Internal Retirement Income Options** (immediate or defer up to max age in ITA; or combination)<br><br>•Variable Payment Life Annuity (VPLA)<br>•RRIF-Type Payment Account<br>•LIF-Type Payment Account<br><br>**Transfer out of the Plan:**<br><br>•External Life Annuity<br>•LIRA/LIF (locked-in funds)<br>•Cash / RRSP / RRIF (non-locked-in funds) | **Internal Retirement Income Options**<br><br>(immediate or defer up to max age in ITA; or combination)<br><br>•Internal Life Annuity<br>•Variable Benefit within Plan<br><br>**Transfer out of the Plan:**<br><br>•External Life Annuity<br>•Prescribed RRIF/LIRA/LIF/ (locked-in funds)<br>•Cash / RRSP / RRIF (non-locked-in funds) | **Internal Retirement Income Options**<br><br>(immediate or defer up to max age in ITA; or combination)<br><br>•Variable Benefit within Plan<br>•Life Annuity via SK Pension Annuity Fund<br><br>**Transfer out of the Plan:**<br><br>•External Life Annuity<br>•Prescribed RRIF/LIRA/LIF (locked-in funds)<br>•Cash/RRSP/RRIF (non-locked-in funds) |
| Member tools/support | •Online retirement income estimator – pension projections, variable benefit illustrations, VPLA illustrations<br>•Retirement planning workshops<br>•Individuals consultations<br>•Other online and in-person member services | •Pension projections<br>•Variable benefit illustrations (pre and post retirement)<br>•Risk tolerance estimator<br>•Retirement income workshops<br>•Individual consultations, retirement plans, recommended maximum withdrawals (SK) | •Online retirement calculator – available pre and post retirement<br>•PEPP Guidance – suggested drawdown rates for Variable Benefit<br>•Retirement Information Consultants – financial planners – available for one on one consultations<br>•Series of Workshops to help prepare for retirement<br>•Benefit Adequacy Statement pre and post retirement |