The Next 150

FORTIFYING RETIREMENT FOR THE FUTURE

2018 ACPM NATIONAL CONFERENCE

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Québec City, QC

Fairmont Le Château Frontenac

SEPTEMBER 11–13, 2018

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Plenary II

Inside Looking Out –

Risk from the Member Perspective

Speakers:

Bob Farmer, *Former President, Canadian Federation of Pensioners*

Martin McInnis, *Cooperative Superannuation Society Pension Plan*

Moderator:

Serge Charbonneau

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Plenary II
Inside Looking Out
Risk from the Member Perspective

Serge Charbonneau

Moderator

September 12, 2018

Introduction

- Risk for members of different types of plans
    - Winding-up DB plans of insolvent employers (Note: budget consultation)
    - On-going DB plans, DC plans, hybrid plans, MEPPs, target benefit plans
    - Non members : waived membership, saving outside plan (or not saving…)
- At different periods:
    - When hired, while employed
    - When terminating before or at retirement
    - After termination or retirement
- For different categories of members
    - Young, middle-aged, “experienced”
    - Low income, middle class, affluent
    - Risk averse, risk taker
- In combination with other sources of savings (or debts) and income (or support)

Introduction

- Who can influence risk
  - Plan sponsor (employer, union)
  - Plan administrator
  - Legislators
  - Regulatory authorities
  - Members themselves
  - Advisors (to members or to sponsors/administrators)
  - Financial institutions
- What to do about risks
  - Identify risks
  - Communicate risks (depending on financial literacy…)
  - Manage risks
  - Accept consequences… (good or bad)

PLENARY II

Inside Looking Out -
Risk from the Member Perspective

Defined Contribution Plans

Martin McInnis

Executive Director

Co-operative Superannuation Society Pension Plan

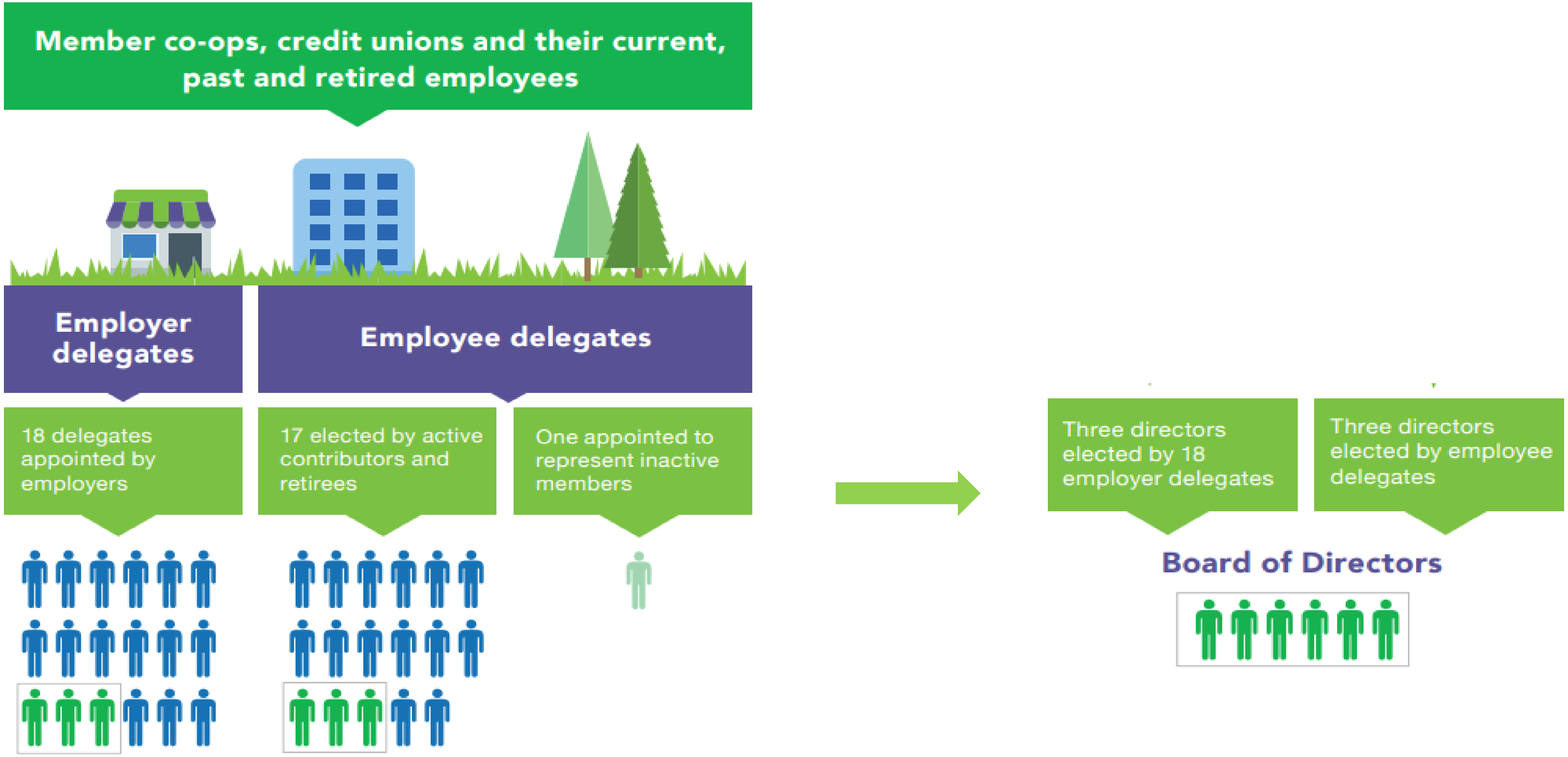
Introduction

- Who is Co-operative Superannuation Society Pension Plan (CSS)
- Defined Contribution Plan Risks – Overview
- Member Journey from Accumulation through Decumulation
- Wrap Up

Overview of CSS

- Multi-employer defined contribution pension plan
- Over 39,000 non-retired members
- Over 7,400 retired members drawing benefits
- 350+ Employers
- Membership is limited to Co-operatives, Credit Unions, and their employees / retirees
- Manage ~$4.6B

Governance


Member co-ops, credit unions and their current, past and retired employees
Employer delegates
Employee delegates
18 delegates appointed by employers
17 elected by active contributors and retirees
One appointed to represent inactive members
Three directors elected by 18 employer delegates
Three directors elected by employee delegates
Board of Directors

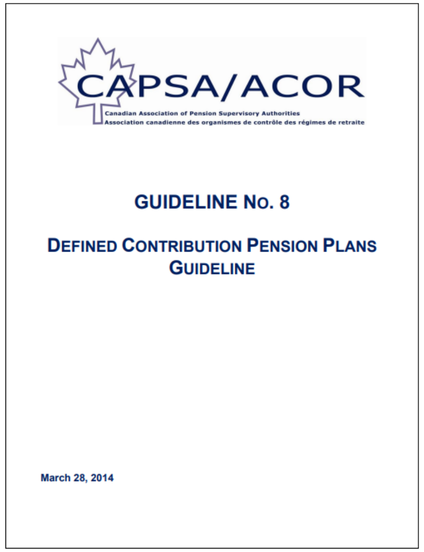
Overview - DC Pension Plan Risks

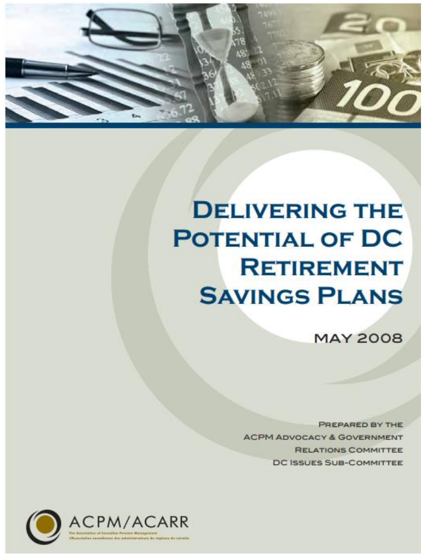
- Investment risk
- Longevity risk
- Inflation risk

- Individual members make own investment decisions
- Members subject to behavioural impacts

- Members may outlive their funds
- Members must understand how much retirement income they will require

- Investment horizon in retirement may still be long





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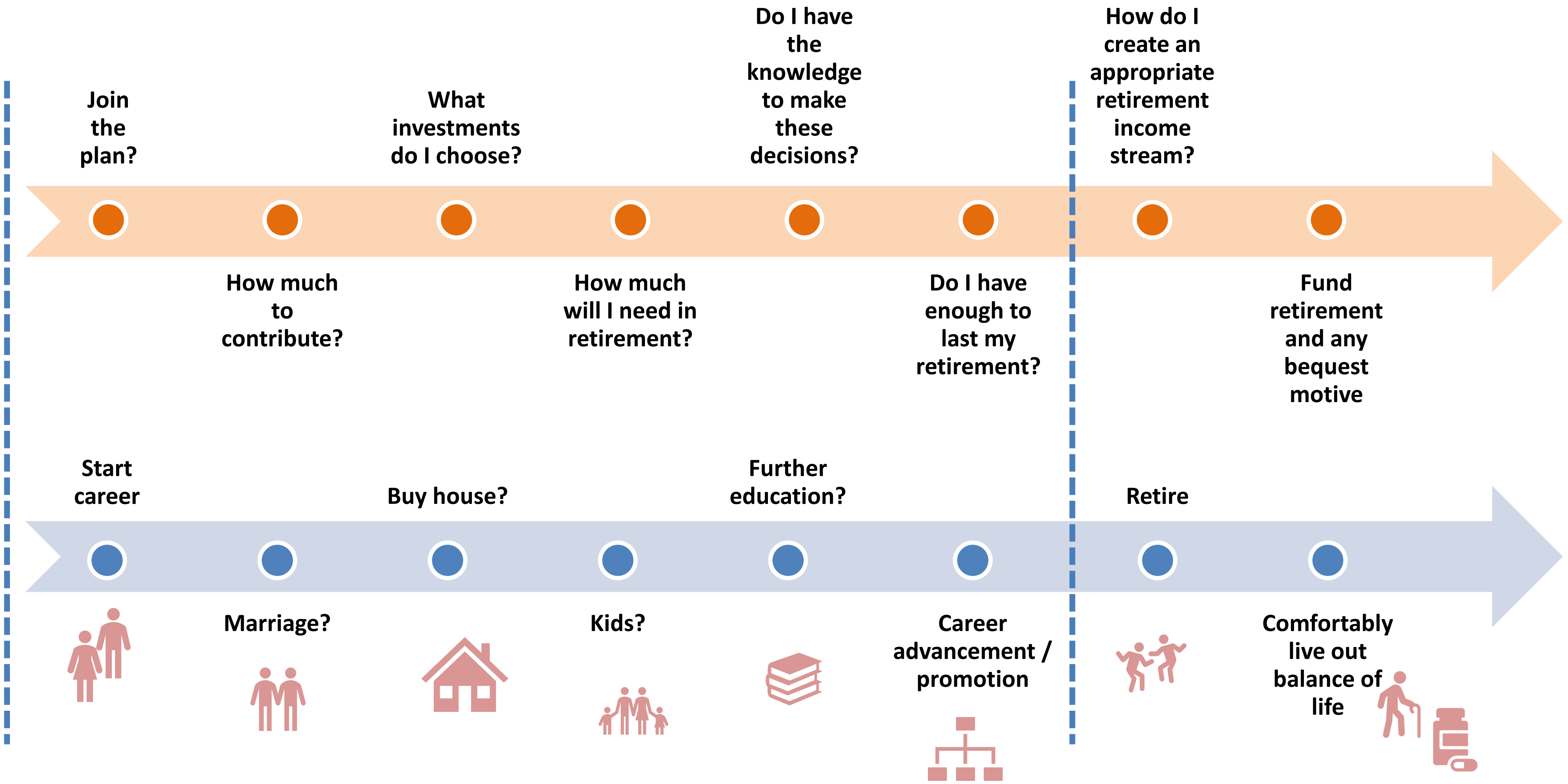
CSS PENSION PLAN

Member Journey



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CSS PENSION PLAN

Member Perspective – Initial Considerations

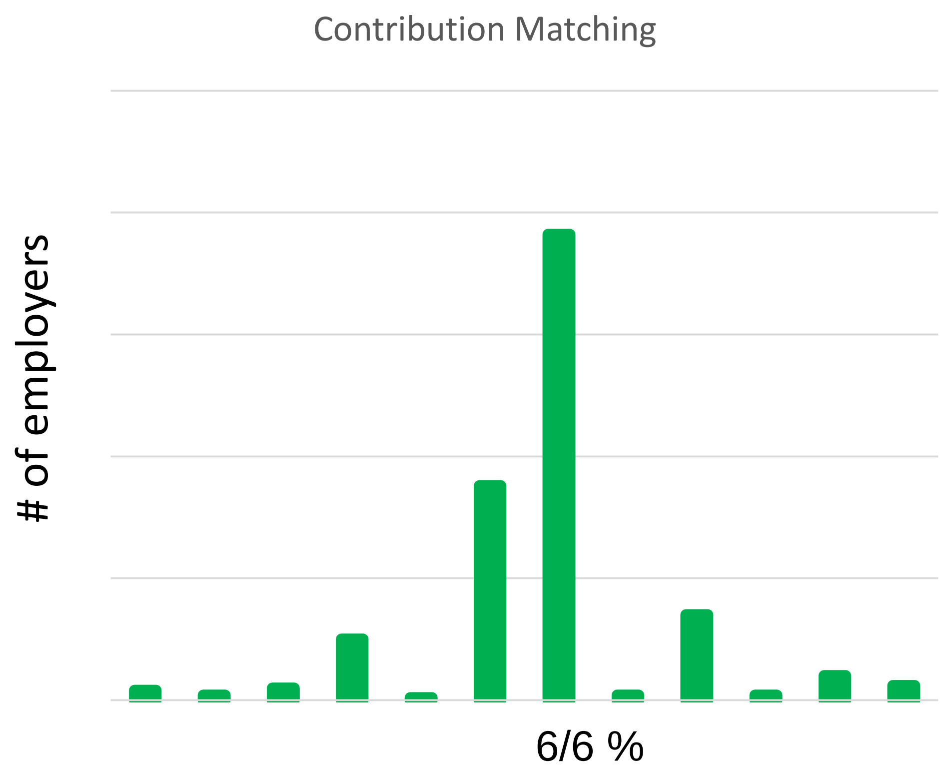
Consideration	Risk	CSS Approach
Should I join the DC / CAP plan offered by my employer?	Employees do not join and do not achieve retirement income objective / employer does not achieve wellness objective	Joining is a condition of employment.
How much should I contribute?	Employees "leave money on the table" and do not achieve retirement income objective / employer does not achieve wellness objective	Generally, employee contributes at matched rate set by employer.
What investment option should I choose?	Choice is mismatched to risk tolerance / retirement income objective	Balanced fund is the default if no choice made by member.
Can / should I make additional voluntary contributions?	Employee undershoots retirement income objective	Allowed and encouraged; planning tools and information provided to help with decision.

Plan Purpose

Is the plan intended to contribute significantly to plan member’s income in retirement?

Target income replacement articulated?

Support to Employer on plan design to achieve intended objective



CSS

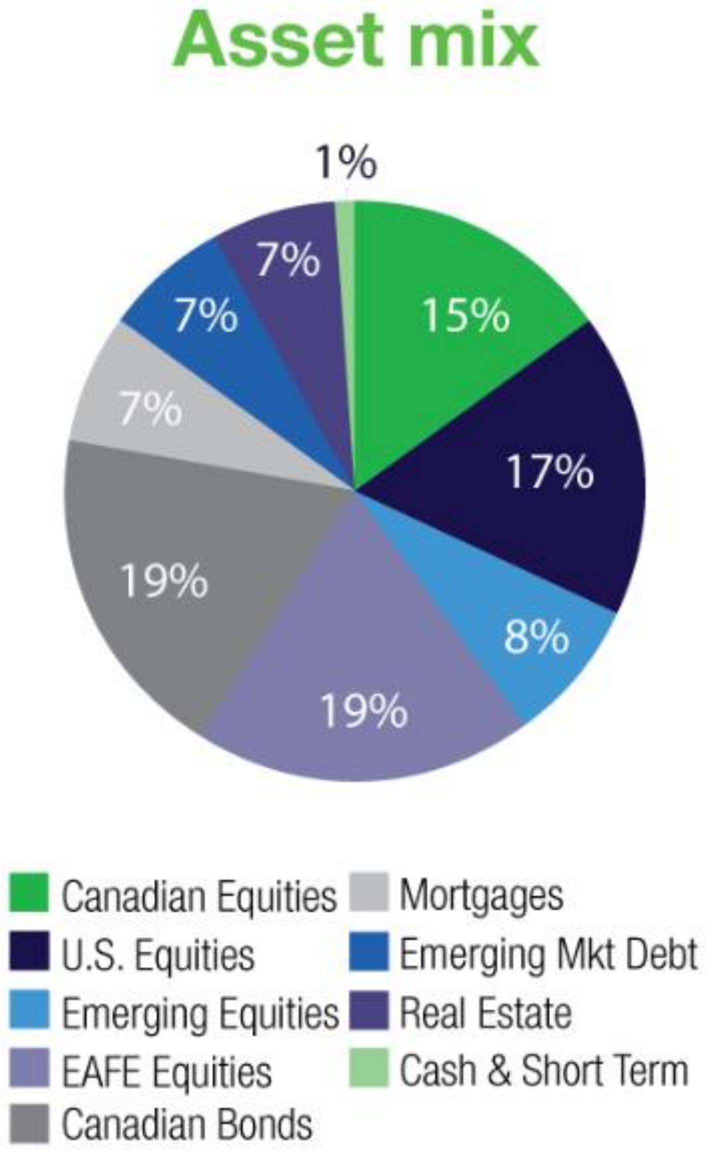
The principal purpose of the Co-operative Superannuation Society (CSS) Pension Plan (“the Plan”) is to provide retirement benefits in the form of periodic payments relating to service in Canada as an Employee or officer of one or more participating Employers.

Appropriate Default Investment

- Balanced Fund or Target Date Fund
  – Consider member demographic and plan purpose

CSS

- Balanced Fund
- Diversified (target 55/35/10)
- Multi-manager structure
- Active and passive management
- Seek moderate long-term growth
- Has evolved over time
- ~93% of member funds in Balanced Fund



Middle Years

<table>
<tr><th>Consideration</th><th>Risk</th><th>CSS Approach</th></tr>
<tr><td>Should I contribute more?</td><td>Employee undershoots retirement income objective / need</td><td rowspan="4">Online retirement income projection tools

Online basic retirement planning application

Ongoing communications via multiple channels

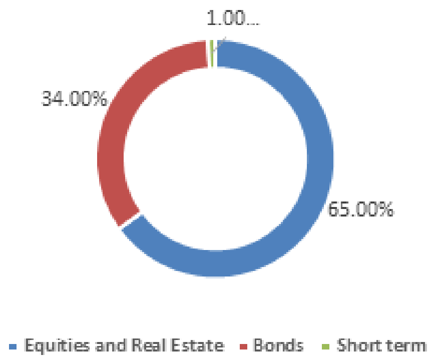
Free access to in-house CFPs

Evolving default fund</td></tr>
<tr><td>Am I invested in the right fund(s)?</td><td>Choice is mismatched to risk tolerance / retirement income objective

Risk tolerance incorrectly identified</td></tr>
<tr><td>What is my retirement income objective and when do I plan to retire?</td><td>Undefined objective, poor investment performance</td></tr>
<tr><td>Who can assist me?</td><td>Lack of financial literacy leads to sub-optimal choices</td></tr>
<tr><td>I’ve changed employment – what are my options?</td><td>Lose access to benefits of plan</td><td>Inactive / deferred members do not have to leave the plan</td></tr>
</table>

Balanced Investor

Asset Allocation (based on target)



Fund Allocation
(how to implement)

Balanced Fund	100%

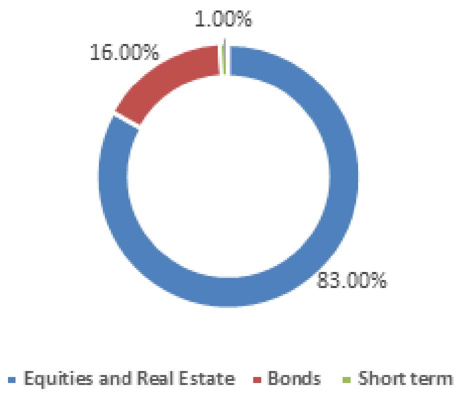
Suitability

This allocation might be suitable for a long-term investor who is looking for moderate growth with a moderate risk of short-term losses.

*For those members who are or nearing drawing benefits from the portfolio we recommend 1 to 2 years spending requirement be placed in the Money Market fund before allocating to the Balanced Fund.

Aggressive Investor

Asset Allocation (based on target)



Fund Allocation
(how to implement)

Balanced Fund	50%
Equity Fund	50%

Suitability

This allocation might be suitable for a younger member whose primary focus is on growth. Significant short-term losses are not a concern for this member since retirement is still many years in the future.

Decision Support

Making investment decisions

When it comes to choosing how to invest your pension funds, there is no right answer. Much depends on your age, your other assets, your planned retirement date and your comfort with risk.

We encourage you to review your personal circumstances with a CSS Pension Plan Consultant or a qualified financial advisor at your financial institution to make a decision that's right for you.

Investment risk/return | Investment choices | Market timing risk

Investment risk and return

What is investment risk? +

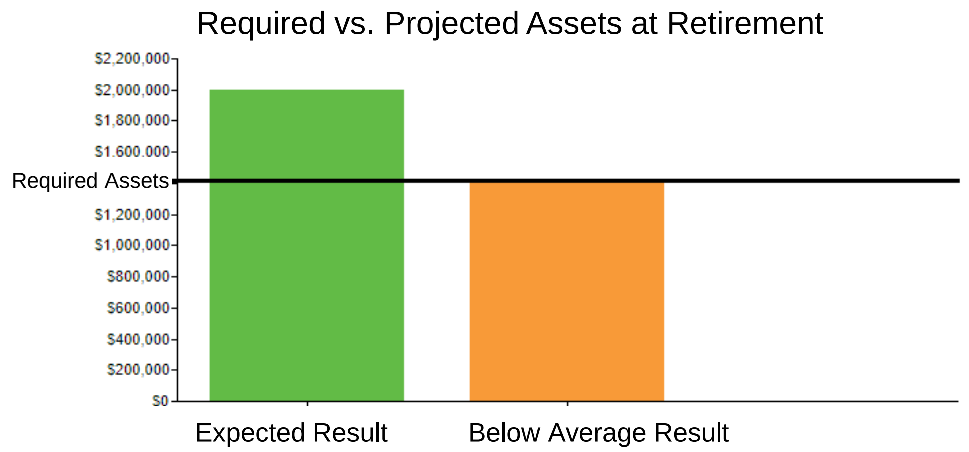
How are risk and return related? +

What can I do about risk? +

Why don't I just play it safe? +

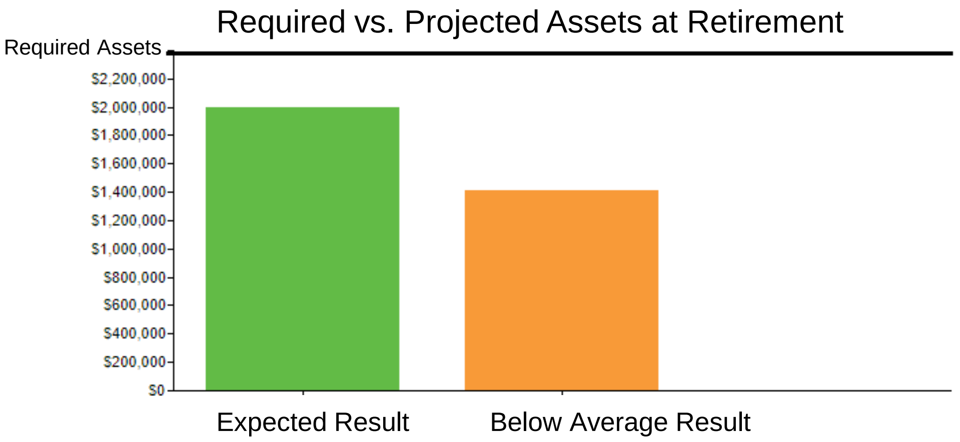
Am I on track?

It looks like you will have enough to retire with your current assets.



Am I on track?

Your projected assets and savings at retirement **are not going to be enough** to provide the income required for your retirement lifestyle.



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Monitoring Progress

- Annual Statement
  - Balances, transactions summary, and 1/3/5 year returns net of fees
  - How to access our member portal to view account details online
  - Retirement income projection

- Planners monitor investment directions

Approaching / In Retirement

<table>
<tr><th>Consideration</th><th>Risk</th><th>CSS Approach</th></tr>
<tr><td>What retirement income option(s) will I utilize and how do I prepare to transition?</td><td>De-risking path may differ depending on income option choice</td><td rowspan="4">Offer fixed pensions as well as variable benefits (where allowed)

Conduct in-person Retirement Income Option workshops each year in multiple locations

Free access to in-house CFPs

Regular communications, information and tools - highlight risks and provide decision support

Consolidate other registered plans at retirement</td></tr>
<tr><td>When should I transition to a retirement income product?</td><td>Sequence of returns</td></tr>
<tr><td>At what rate should I draw down my retirement funds?</td><td>Outlive retirement funds / spending risk</td></tr>
<tr><td>How do I ensure I stay on track in retirement?</td><td>Spending risk, investment risk, longevity risk</td></tr>
</table>

De-risking

- Information and communications developed to encourage risk reduction as retirement approaches
  – Risk tolerance estimator
  – Suggested asset mixes to match risk tolerance
  – Retirement planning assistance from the plan's accredited planners

- Information and communications have also been developed to educate members on sequencing and spending risk

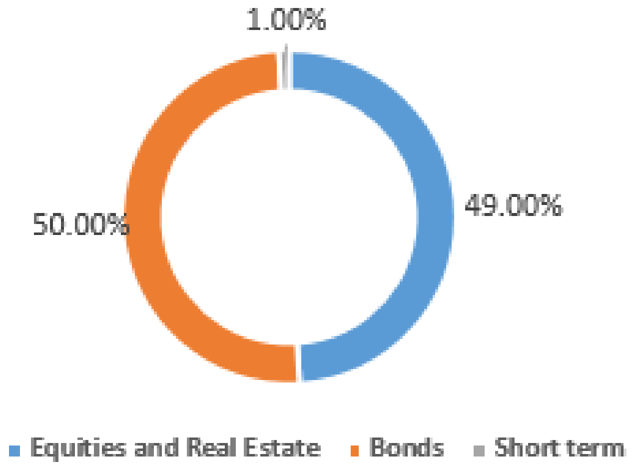
- Strategies for variable benefits recipients:
  1. Reducing investment risk – spending mandate and growth mandate
  2. Spending risk – provide members with three decumulation scenarios (maximum withdrawal, minimum withdrawal, member-choice withdrawal)

Nearing / In Retirement

Suitability

Moderate Investor

Asset Allocation (based on target)



This allocation might be suitable for a member who is about 5 years from retirement or is more comfortable with a lower level of risk than is inherent in the Balanced Fund.

*For those members who are or nearing drawing benefits from the portfolio we recommend 1 to 2 years spending requirement be placed in the Money Market fund before allocating to the Balanced Fund and Bond Fund.

Fund Allocation
(how to implement)

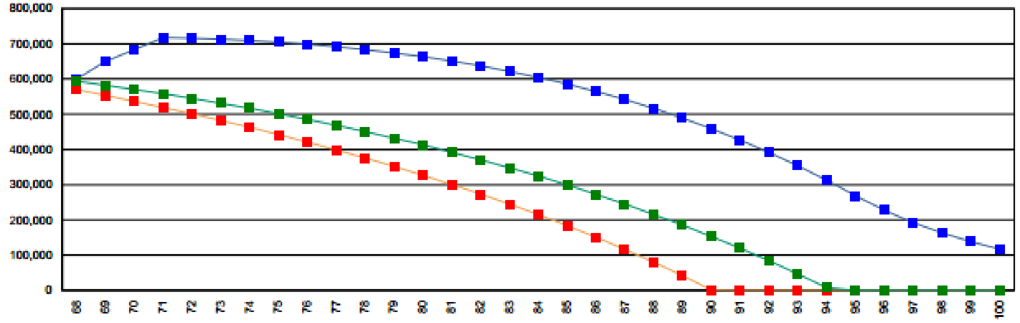
Balanced Fund	75%
Bond Fund	25%

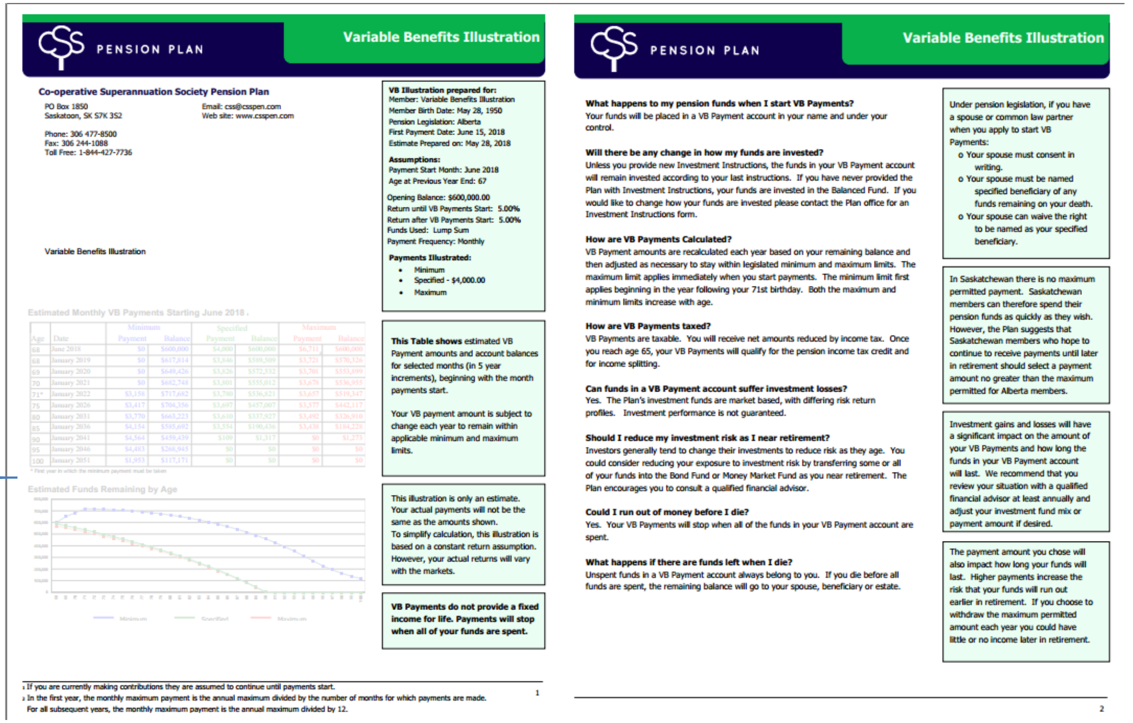
Retirement Income - Variable Benefits Illustrator

Estimated Monthly VB Payments Starting June 2018

Age	Date	Minimum Payment	Minimum Balance	Specified Payment	Specified Balance	Suggested Maximum Payment	Suggested Maximum Balance
68	June 2018	$0	$600,000	$3,400	$600,000	$6,711	$600,000
68	January 2019	$0	$617,814	$3,400	$593,755	$3,721	$570,326
69	January 2020	$0	$649,426	$3,400	$582,461	$3,701	$553,899
70	January 2021	$0	$682,748	$3,400	$570,673	$3,678	$536,955
71*	January 2022	$3,158	$717,682	$3,400	$558,198	$3,657	$519,347
75	January 2026	$3,417	$704,356	$3,400	$501,660	$3,577	$442,117
80	January 2031	$3,770	$663,223	$3,400	$413,085	$3,492	$326,910
85	January 2036	$4,154	$585,692	$3,400	$299,399	$3,438	$184,228
90	January 2041	$4,564	$459,439	$3,400	$153,510	$0	$1,273
95	January 2046	$4,483	$268,945	$0	$0	$0	$0
100	January 2051	$1,953	$117,171	$0	$0	$0	$0

Estimated Funds Remaining by Age





CSS PENSION PLAN — Variable Benefits Illustration

Co-operative Superannuation Society Pension Plan

PO Box 1850
Saskatoon, SK S7K 3S2

Email: css@csspen.com
Web site: www.csspen.com

Phone: 306 477-8500
Fax: 306 244-1088
Toll Free: 1-844-427-7736

Variable Benefits Illustration

VB Illustration prepared for:
Member: Variable Benefits Illustration
Member Birth Date: May 28, 1950
Pension Legislation: Alberta
First Payment Date: June 15, 2018
Estimate Prepared on: May 28, 2018

Assumptions:
Payment Start Month: June 2018
Age at Previous Year End: 67

Opening Balance: $600,000.00
Return until VB Payments Start: 5.00%
Return after VB Payments Start: 5.00%
Funds Used: Lump Sum
Payment Frequency: Monthly

Payments Illustrated:

- Minimum
- Specified - $4,000.00
- Maximum

Estimated Monthly VB Payments Starting June 2018

This Table shows estimated VB Payment amounts and account balances for selected months (in 5 year increments), beginning with the month payments start.

Your VB payment amount is subject to change each year to remain within applicable minimum and maximum limits.

Estimated Funds Remaining by Age

This illustration is only an estimate. Your actual payments will not be the same as the amounts shown. To simplify calculation, this illustration is based on a constant return assumption. However, your actual returns will vary with the markets.

VB Payments do not provide a fixed income for life. Payments will stop when all of your funds are spent.

[1] If you are currently making contributions they are assumed to continue until payments start.
[2] In the first year, the monthly maximum payment is the annual maximum divided by the number of months for which payments are made. For all subsequent years, the monthly maximum payment is the annual maximum divided by 12.

1

CSS PENSION PLAN — Variable Benefits Illustration

What happens to my pension funds when I start VB Payments?
Your funds will be placed in a VB Payment account in your name and under your control.

Will there be any change in how my funds are invested?
Unless you provide new Investment Instructions, the funds in your VB Payment account will remain invested according to your last instructions. If you have never provided the Plan with Investment Instructions, your funds are invested in the Balanced Fund. If you would like to change how your funds are invested please contact the Plan office for an Investment Instructions form.

How are VB Payments Calculated?
VB Payment amounts are recalculated each year based on your remaining balance and then adjusted as necessary to stay within legislated minimum and maximum limits. The maximum limit applies immediately when you start payments. The minimum limit first applies beginning in the year following your 71st birthday. Both the maximum and minimum limits increase with age.

How are VB Payments taxed?
VB Payments are taxable. You will receive net amounts reduced by income tax. Once you reach age 65, your VB Payments will qualify for the pension income tax credit and for income splitting.

Can funds in a VB Payment account suffer investment losses?
Yes. The Plan's investment funds are market based, with differing risk return profiles. Investment performance is not guaranteed.

Should I reduce my investment risk as I near retirement?
Investors generally tend to change their investments to reduce risk as they age. You could consider reducing your exposure to investment risk by transferring some or all of your funds into the Bond Fund or Money Market Fund as you near retirement. The Plan encourages you to consult a qualified financial advisor.

Could I run out of money before I die?
Yes. Your VB Payments will stop when all of the funds in your VB Payment account are spent.

What happens if there are funds left when I die?
Unspent funds in a VB Payment account always belong to you. If you die before all funds are spent, the remaining balance will go to your spouse, beneficiary or estate.

Under pension legislation, if you have a spouse or common law partner when you apply to start VB Payments:

- Your spouse must consent in writing.
- Your spouse must be named specified beneficiary of any funds remaining on your death.
- Your spouse can waive the right to be named as your specified beneficiary.

In Saskatchewan there is no maximum permitted payment. Saskatchewan members can therefore spend their pension funds as quickly as they wish. However, the Plan suggests that Saskatchewan members who hope to continue to receive payments until later in retirement should select a payment amount no greater than the maximum permitted for Alberta members.

Investment gains and losses will have a significant impact on the amount of your VB Payments and how long the funds in your VB Payment account will last. We recommend that you review your situation with a qualified financial advisor at least annually and adjust your investment fund mix or payment amount if desired.

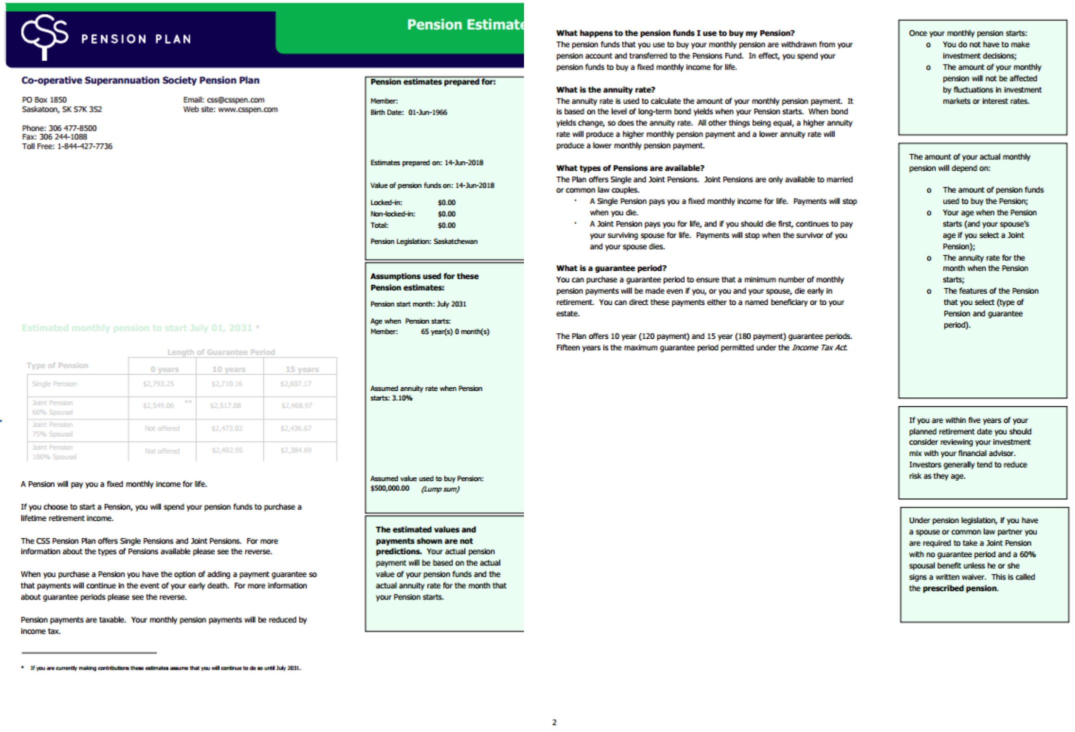
The payment amount you chose will also impact how long your funds will last. Higher payments increase the risk that your funds will run out earlier in retirement. If you choose to withdraw the maximum permitted amount each year you could have little or no income later in retirement.

2

Retirement Income – Pension Projection

Estimated monthly pension to start July 01, 2031

Type of Pension	Length of Guarantee Period: 0 years	10 years	15 years
Single Pension	$2,793.25	$2,710.16	$2,607.17
Joint Pension 60% Spousal	$2,549.06 **	$2,517.08	$2,468.97
Joint Pension 75% Spousal	Not offered	$2,473.02	$2,436.67
Joint Pension 100% Spousal	Not offered	$2,402.95	$2,384.69



PENSION PLAN

Pension Estimate

Co-operative Superannuation Society Pension Plan

PO Box 1850
Saskatoon, SK S7K 3S2

Email: css@csspen.com
Web site: www.csspen.com

Phone: 306 477-8500
Fax: 306 244-1088
Toll Free: 1-844-427-7736

Pension estimates prepared for:

Member:
Birth Date: 01-Jun-1966

Estimates prepared on: 14-Jun-2018

Value of pension funds on: 14-Jun-2018

Locked-in: $0.00
Non-locked-in: $0.00
Total: $0.00

Pension Legislation: Saskatchewan

Assumptions used for these Pension estimates:

Pension start month: July 2031

Age when Pension starts:
Member: 65 year(s) 0 month(s)

Assumed annuity rate when Pension starts: 3.10%

Assumed value used to buy Pension: $500,000.00 *(Lump sum)*

Estimated monthly pension to start July 01, 2031 *

Type of Pension	Length of Guarantee Period: 0 years	10 years	15 years
Single Pension	$2,793.25	$2,710.16	$2,607.17
Joint Pension 60% Spousal	$2,549.06 **	$2,517.08	$2,468.97
Joint Pension 75% Spousal	Not offered	$2,473.02	$2,436.67
Joint Pension 100% Spousal	Not offered	$2,402.95	$2,384.69

A Pension will pay you a fixed monthly income for life.

If you choose to start a Pension, you will spend your pension funds to purchase a lifetime retirement income.

The CSS Pension Plan offers Single Pensions and Joint Pensions. For more information about the types of Pensions available please see the reverse.

When you purchase a Pension you have the option of adding a payment guarantee so that payments will continue in the event of your early death. For more information about guarantee periods please see the reverse.

Pension payments are taxable. Your monthly pension payments will be reduced by income tax.

The estimated values and payments shown are not predictions. Your actual pension payment will be based on the actual value of your pension funds and the actual annuity rate for the month that your Pension starts.

* If you are currently making contributions these estimates assume that you will continue to do so until July 2031.

What happens to the pension funds I use to buy my Pension?
The pension funds that you use to buy your monthly pension are withdrawn from your pension account and transferred to the Pensions Fund. In effect, you spend your pension funds to buy a fixed monthly income for life.

What is the annuity rate?
The annuity rate is used to calculate the amount of your monthly pension payment. It is based on the level of long-term bond yields when your Pension starts. When bond yields change, so does the annuity rate. All other things being equal, a higher annuity rate will produce a higher monthly pension payment and a lower annuity rate will produce a lower monthly pension payment.

What types of Pensions are available?
The Plan offers Single and Joint Pensions. Joint Pensions are only available to married or common law couples.

- A Single Pension pays you a fixed monthly income for life. Payments will stop when you die.
- A Joint Pension pays you for life, and if you should die first, continues to pay your surviving spouse for life. Payments will stop when the survivor of you and your spouse dies.

What is a guarantee period?
You can purchase a guarantee period to ensure that a minimum number of monthly pension payments will be made even if you, or you and your spouse, die early in retirement. You can direct these payments either to a named beneficiary or to your estate.

The Plan offers 10 year (120 payment) and 15 year (180 payment) guarantee periods. Fifteen years is the maximum guarantee period permitted under the *Income Tax Act*.

Once your monthly pension starts:
- You do not have to make investment decisions;
- The amount of your monthly pension will not be affected by fluctuations in investment markets or interest rates.

The amount of your actual monthly pension will depend on:
- The amount of pension funds used to buy the Pension;
- Your age when the Pension starts (and your spouse's age if you select a Joint Pension);
- The annuity rate for the month when the Pension starts;
- The features of the Pension that you select (type of Pension and guarantee period).

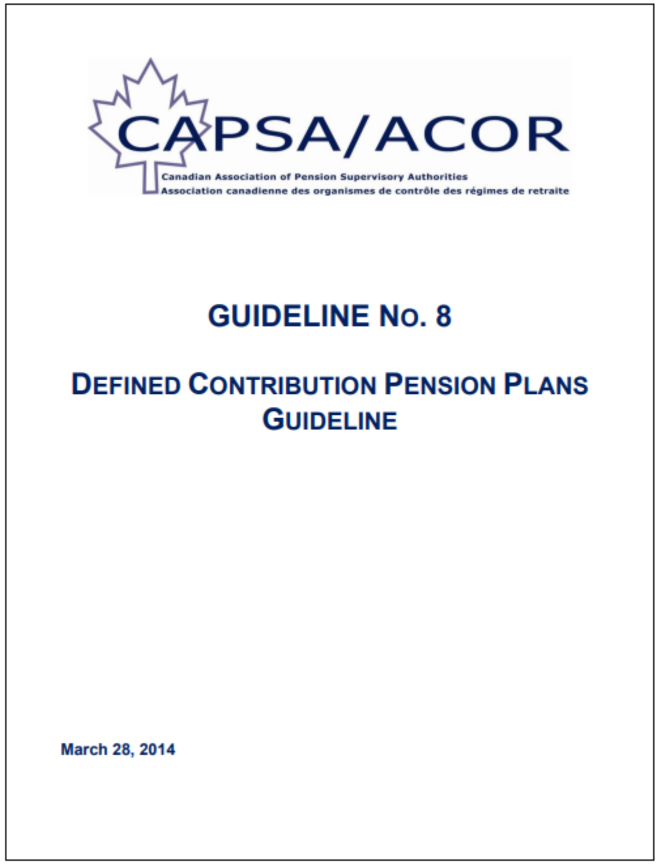
If you are within five years of your planned retirement date you should consider reviewing your investment mix with your financial advisor. Investors generally tend to reduce risk as they age.

Under pension legislation, if you have a spouse or common law partner you are required to take a Joint Pension with no guarantee period and a 60% spousal benefit unless he or she signs a written waiver. This is called the **prescribed pension**.

2

Evolving Best Practice - Decumulation

- Fees matter - disclosure and information
- Expanded retirement income options (variable benefits)
- Enhanced information and planning tools for members


CAPSA/ACOR
Canadian Association of Pension Supervisory Authorities
Association canadienne des organismes de contrôle des régimes de retraite

GUIDELINE No. 8

DEFINED CONTRIBUTION PENSION PLANS GUIDELINE

March 28, 2014

Wrap-up

- Where do we go from here?

DB Pensioner Risk

Bob Farmer
Past President
Canadian Federation of Pensioners
September 2018

Pensioner Risk:
that pensions will be reduced if employer fails

- Awareness of risk typically low among pensioners
- Pensioners implicitly assume commitments will be honoured:
  - employer will not fail; and/or
  - surely there are rules to make pensions secure even if the employer is not

Should Awareness be Increased?

- Yes, of course…
- … but goal should be to reduce or eliminate the risk

Sources of Risk

- The usual culprits
  - Market performance
  - Investment strategy
  - Governance practices
  - Interest rates
  - Longevity
  - Employer's health

Additional Sources of Risk

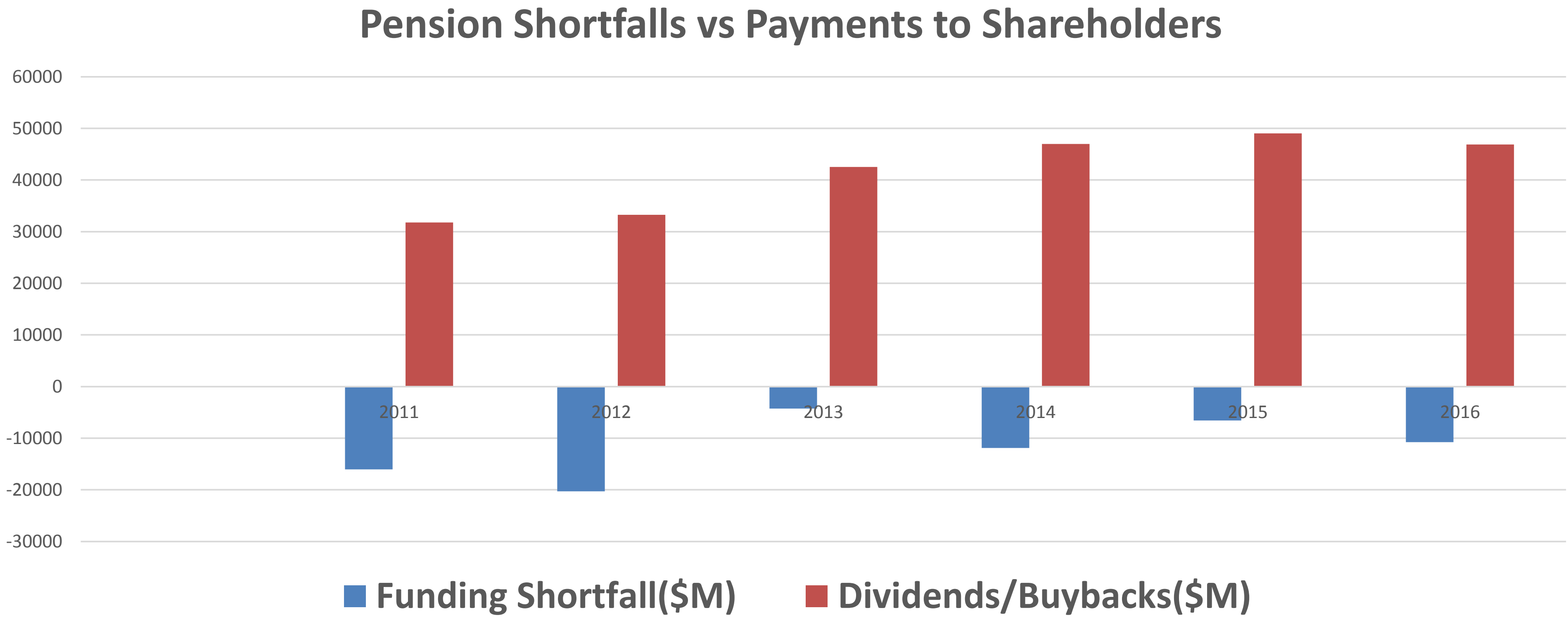
- Employers' Choices

- Governments' Policy Choices
  – the biggest risk of all

Employers' Choices

- exceed minimum standards set by law and regulations?
  - Plan funding
  - Plan governance
- de-risk the plan?
  - Investment strategy
  - Annuity buy-ins and annuity buy-outs
- dividends/buy-backs vs. plan contributions?

A small fraction of payments to shareholders would eliminate pension plan shortfalls (source: Canadian Centre for Policy Alternatives, Nov 2017)



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Canadian Federation of Pensioners
Advocating for Pensioners
Fédération Canadienne des Retraités
pour les retraités

Governments' Choices

Shifting Pension Risk

- from employers to active and retired members, by retroactively changing nature of pension plan
  - New Brunswick: "Shared Risk"
  - Quebec: putting indexing on hold
  - Federal: C-27 "Target Benefit Pension Plan" legislation
    - conversion of accrued benefits
    - the role of consent, and how defined

Governments’ Choices

Less Secure Funding Standards

- Quebec: elimination of Solvency Funding
- Ontario: reducing Solvency standard to 85%
- Ontario: three tranches of untargeted “funding relief”

Governments' Choices

Effective Backstop Measures Missing

- BIA and CCAA provide almost no support to pensioners when employer fails
- Insurance against plan failure (windup when underfunded)
  - Lower pensioner risk and employer costs through collective backstop of plans, rather than requiring each plan to self-insure against employer failure
    - only in Ontario, and only partial
- Alternatives to plan windup: a home for orphan plans

Conclusion

- DB pension security not assured by government rules or employer practices
- Some recent rule changes threaten security more
- Pension insurance fund(s) can
  - save employers money, and
  - provide pension security

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