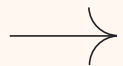


# **Income For Life: What your members really need**

Fraser Stark, President, Longevity Retirement Solutions

Pat Leo, VP, Longevity Retirement Solutions



# Decumulation

“...the nastiest, hardest problem in finance.”

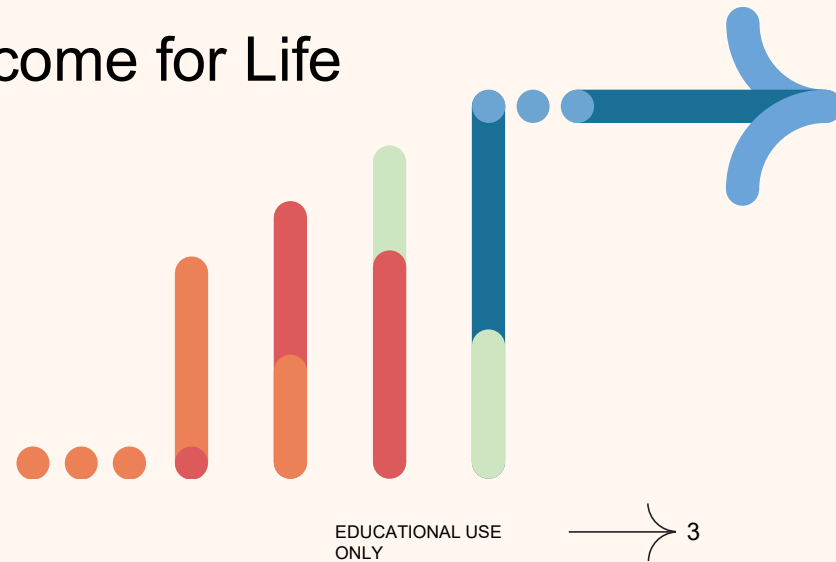
- William Sharpe,  
1990 Nobel prize winner in Economics

$y = a(x-b)^2 + c$   
 $V = \frac{4}{3}\pi r^3$   
 $SA = 4\pi r^2$   
 $AB = \sqrt{(x_2 - x_1)^2 + (y_2 - y_1)^2}$   
 $4^{\frac{3}{2}} = 2^3 \sqrt{4}$   
 $\pi \approx 3.14$   
 $\sin 30^\circ = \frac{1}{2}$   
 $\sin 45^\circ = \frac{1}{\sqrt{2}}$   
 $\sin 60^\circ = \frac{\sqrt{3}}{2}$   
 $SA = 2lw + 2lh + 2wh$   
 $k < 0$   
 $a^3 + b^3 = (a+b)(a^2 - ab + b^2)$

$\cos\left(\frac{\pi}{6}\right) = \frac{\sqrt{3}}{2}$   
 $\left(\frac{a}{b}\right)^c = \frac{a^c}{b^c}$   
 $a^2 + b^2$   
 $y = kx^2 \quad k > 0$   
 $2x^2 + 3x + 4 = y$   
 $\log_a 1 = 0$   
 $\sum_{k=1}^n k = \frac{1}{2}n(n+1)$   
 $f(-x) = a(-x) + b = -(ax - b)$   
 $a^b a^c = a^{b+c}$   
 $\sin^2 y + \cos^2 y = 1$   
 $y = \frac{k}{x}$   
 $n\sqrt{x} = x^{\frac{1}{n}}$   
 $(a-b-c)^2 = a^2 + b^2 + c^2 - 2ab + 2bc - 2ca$   
 $y = \sin x$   
 $y = ax^2 + bx + c$   
 $A = \frac{1}{2}ar + \frac{1}{2}br + \frac{1}{2}cr$   
 $\left(\frac{2}{3}\right)^{-3} = \left(\frac{3}{2}\right)^3$   
 $s = \frac{a+b+c}{2}$   
 $A = sr$

# Agenda

1. Decumulation & why it's so challenging
2. Demographic trends facing Canadians
3. Existing Strategies & Solutions
4. Longevity Risk Pooling & Income for Life
5. Insights for Plan Sponsors
6. Q&A



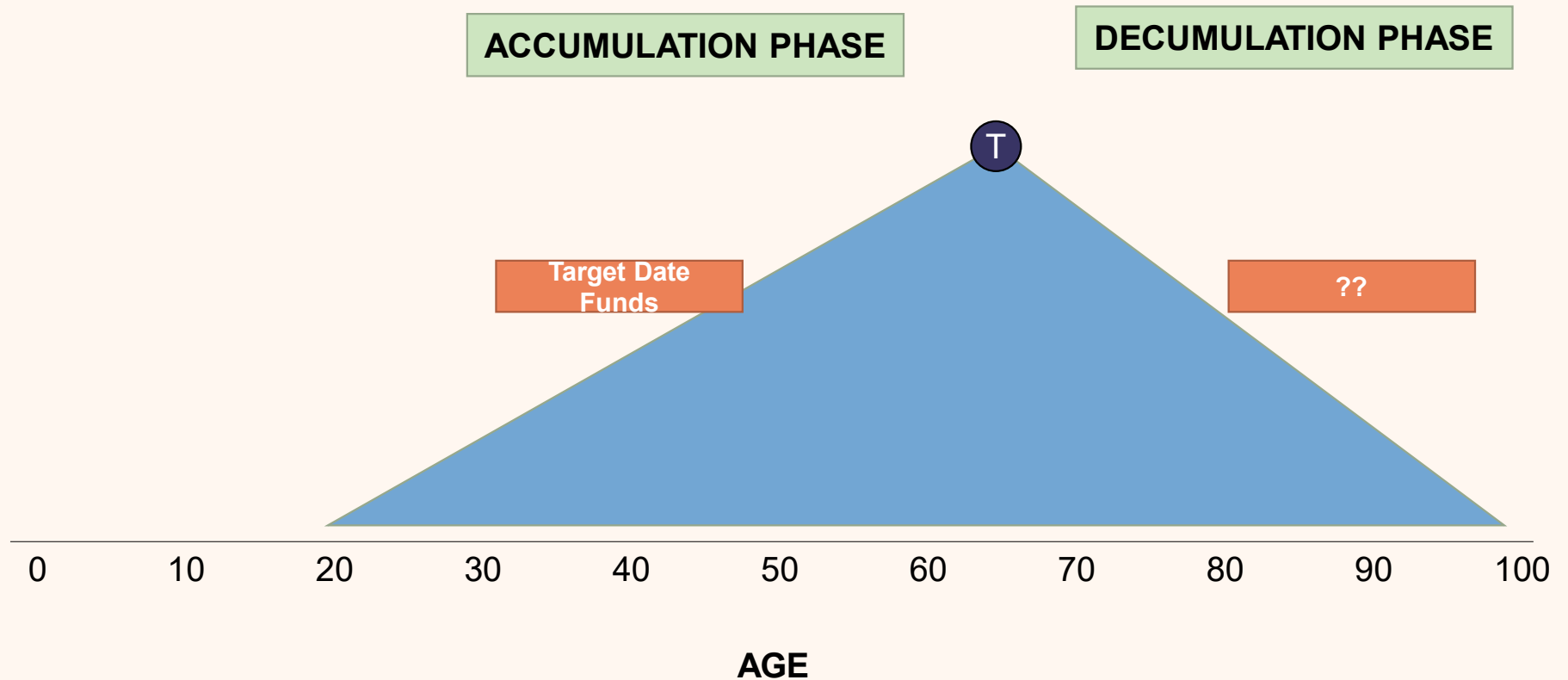


# Intro To Income for life (a.k.a. Decumulation)

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# An individual's financial lifecycle consists of two core phases



This example is for illustrative purposes only and are not indicative of expected or guaranteed performance by the Fund. In no circumstances should this be considered investment advice or professional guidance, and these scenarios should never be interpreted as predictive of the potential performance of their investment.

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**What makes  
Decumulation so  
challenging?**





## Poll question 1

Rounded to the nearest year, what is the average age that a 65-year-old Canadian female can expect to live to?



# Poll #1 Answers

A) 88

B) 87

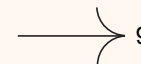
C) 86

D) 85

Source:

<https://www150.statcan.gc.ca/t1/tb1/en/tv.action?pid=1310083701&pickMembers%5B0%5D=1.1&pickMembers%5B1%5D=3.3&pickMembers%5B2%5D=4.8&cubeTimeFrame.startYear=2016&cubeTimeFrame.endYear=2020&referencePeriods=20160101%2C20200101>

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# Poll #1 Answers

A) 88

**B) 87**

C) 86

D) 85

Source:  
<https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=1310083701&pickMembers%5B0%5D=1.1&pickMembers%5B1%5D=3.3&pickMembers%5B2%5D=4.8&cubeTimeFrame.startYear=2016&cubeTimeFrame.endYear=2020&referencePeriods=20160101%2C20200101>

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## Poll question 2

If that 65-year-old Canadian female wants to be 90% confident she won't run out of money, what age would she have to plan to make her funds last to?

# Poll #2 Answers

A) 85

B) 90

C) 95

D) 100

# Poll #2 Answers

A) 85

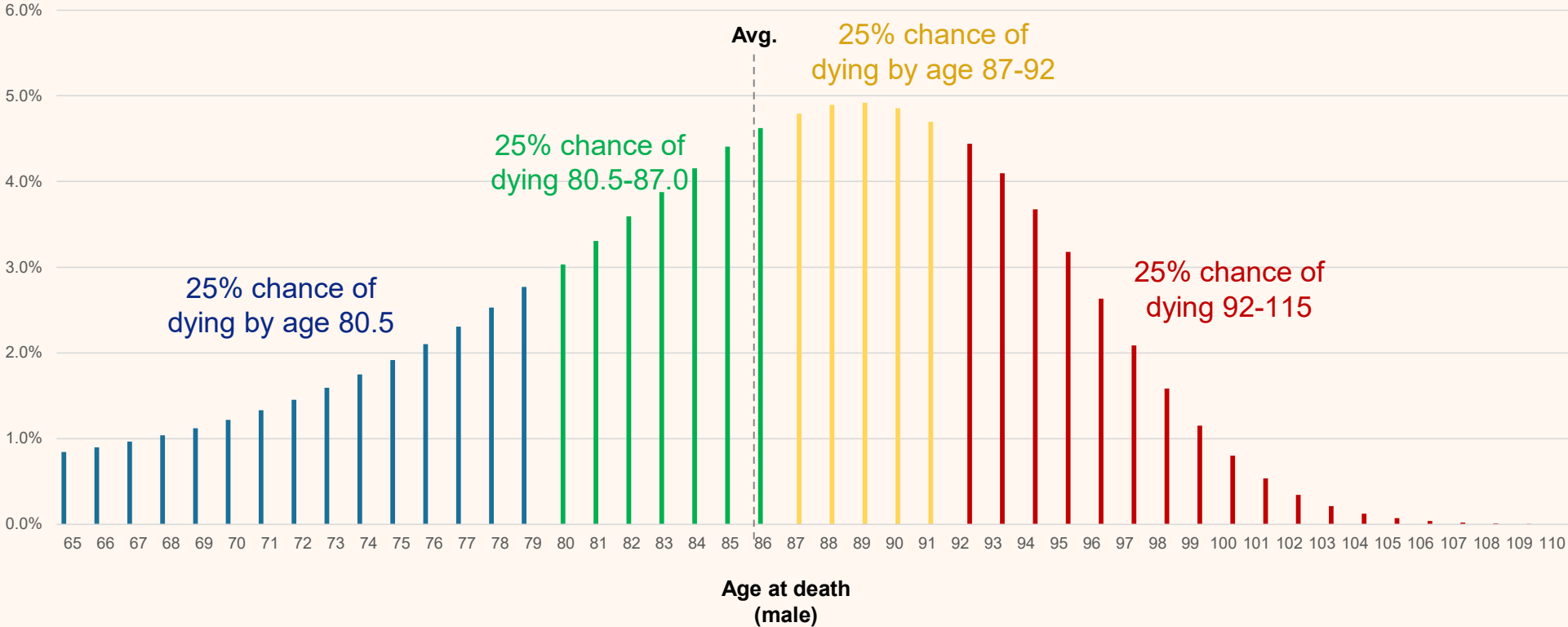
B) 90

C) 95

**D) 100**

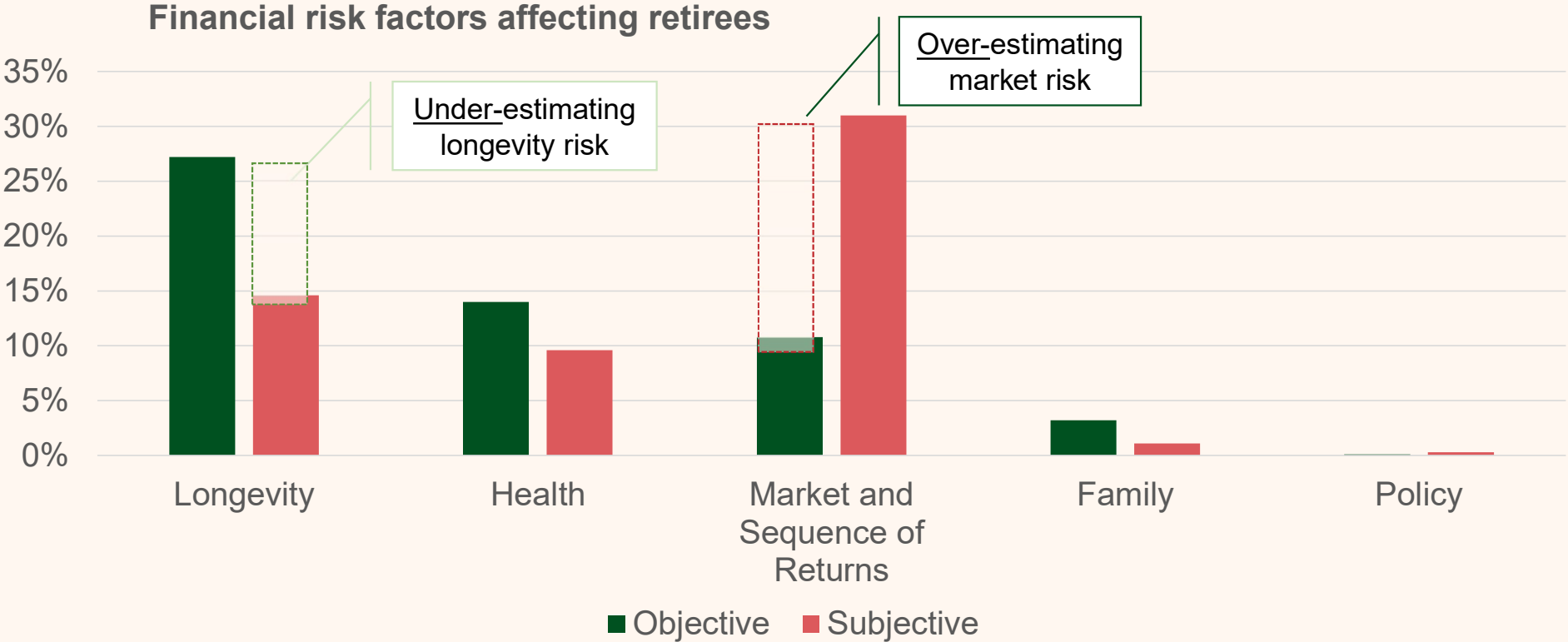
# Life Expectancy: Larry could live to 66....or 106

Likelihood of dying at each age



Source: CIA Canadian Pensioners' Mortality 2014; <https://www.cia-ica.ca/docs/default-source/2014/214013e.pdf>

# Retirees under-estimate *longevity risk*, and over-estimate *market risk*



Source: "How well do retirees assess the risks they face in retirement?" Center for Retirement Research at Boston College; [https://crr.bc.edu/wp-content/uploads/2022/06/IB\\_22-10.pdf](https://crr.bc.edu/wp-content/uploads/2022/06/IB_22-10.pdf)



# Demographic trends and the challenges facing Canadians



# A large demographic shift is occurring around the world as populations age and life expectancies rise



- In Canada, >40% chance that someone turning 65 will live past 90<sup>1</sup>
- At least half a million people will retire each year for the next 15 years<sup>1</sup>



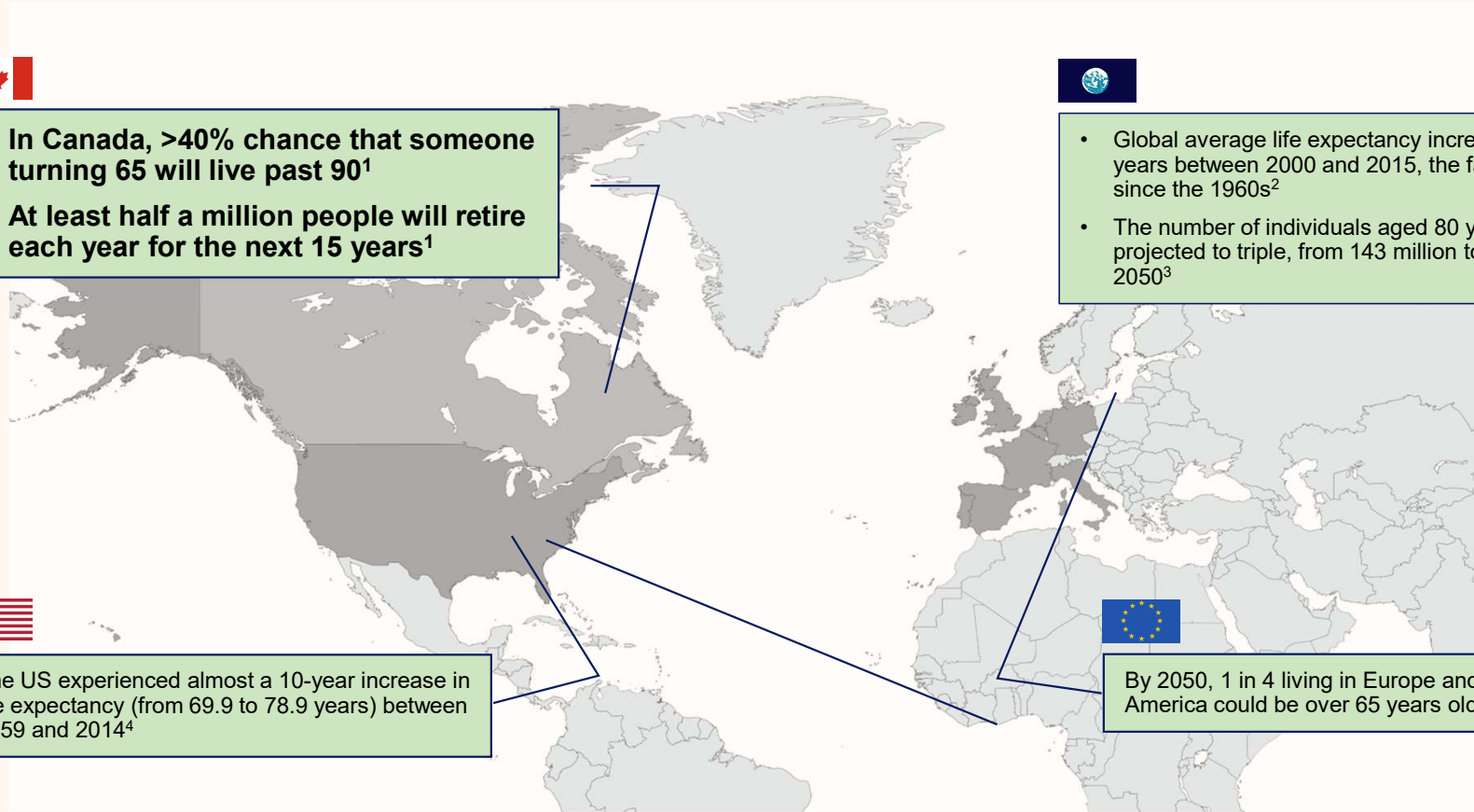
- Global average life expectancy increased by +5 years between 2000 and 2015, the fastest increase since the 1960s<sup>2</sup>
- The number of individuals aged 80 years or over is projected to triple, from 143 million to 426 million by 2050<sup>3</sup>



The US experienced almost a 10-year increase in life expectancy (from 69.9 to 78.9 years) between 1959 and 2014<sup>4</sup>



By 2050, 1 in 4 living in Europe and North America could be over 65 years old<sup>3</sup>



<sup>1</sup> "The Retirement Income Conundrum: How status quo may not be enough for the next generation of retirees," TD Asset Management, February 2018

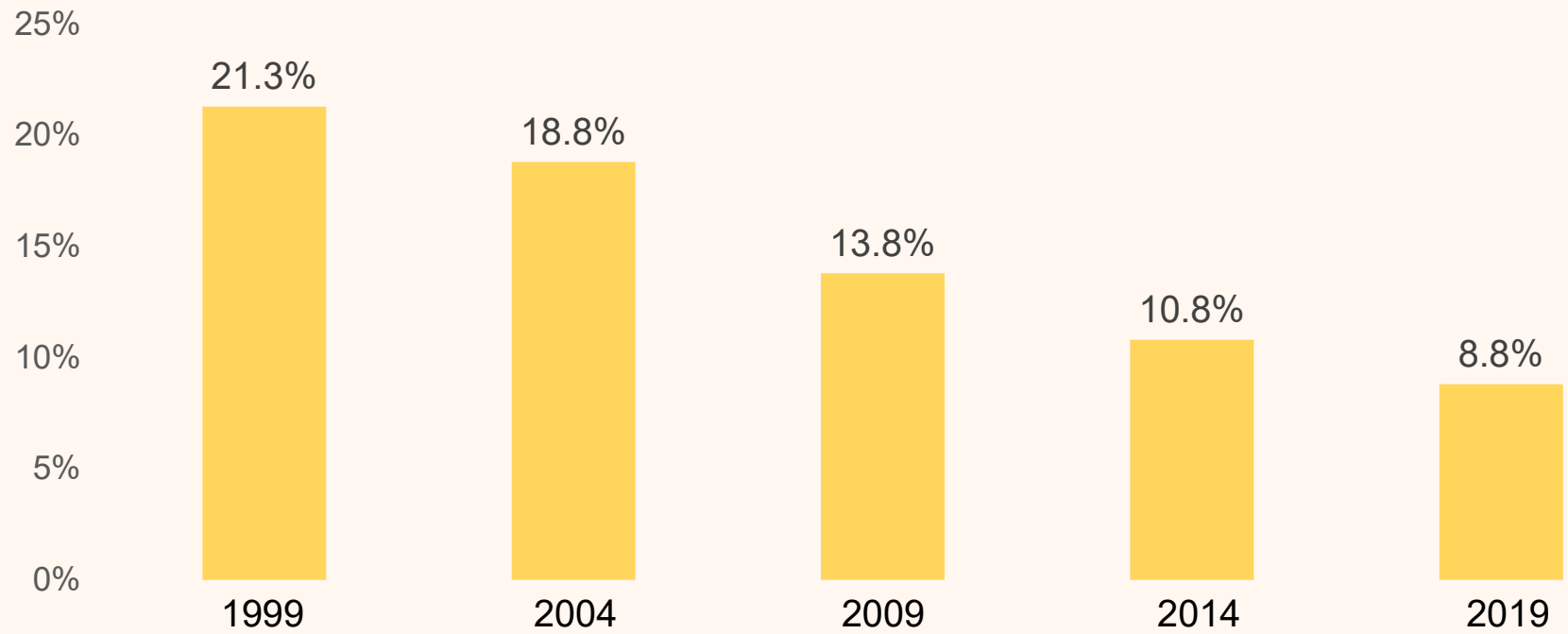
<sup>2</sup> "Life expectancy increased by 5 years since 2000, but health inequalities persist," World Health Organization, May 2016

<sup>3</sup> "Ageing," United Nations, 2019

<sup>4</sup> "What's in a number? Looking at life expectancy in the US," Harvard Health Publishing, February 2020

# Private sector workers covered by a defined benefit pension has decreased significantly over the past 20 years

% of private sector workers covered by a defined benefit pension



Source: [Statistics Canada](#); <sup>2</sup>Registered Pension Plans (RPP) and Other Types of Savings Plans – Coverage in Canada; OSFI 2018

# Strategies & products used for Decumulation



**Retirees can use one of the “rules of thumb” to determine how much income to draw from their savings each year**

**RRIF Minimum Strategy**

**“The 4% Rule”**

**Make it last  
to age \_\_\_**

**Without secure income, the above strategies may not work for most retirees....what would make sense for Larry?**

# A ranged of investment Products are used by members during Decumulation

## Traditional Investments

(Stocks, Mutual Funds & ETFs)

## Segregated Funds

## Lifetime Annuities

## Lifetime Variable Income Funds

## Each Decumulation Product category brings its own set of strengths

Investment product	Lifetime Income via Risk Pooling	Guarantees		Access to Capital / Flexibility
		Income Level	Value at Death	
Traditional Investments	○	○	○	●
Segregated Funds	○	○	●	●
Lifetime Annuities	●	●	○	○
Lifetime Variable Income Funds	●	○	○	◐

**A retirement plan should incorporate a mix of different products to enable the desired outcome**

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# Longevity Risk Pooling & Income for Life

## Poll question 3

What is longevity risk?



# Poll #3 Answers

- A) The risk of dying young
- B) The risk of outliving your savings
- C) The risk of over-spending in the early part of Retirement
- D) The financial planning challenges arising from the wide uncertainty of how long you will live

# Poll #3 Answers

A) The risk of dying young

B) The risk of outliving your savings

C) The risk of over-spending in the early part of Retirement

**D) The financial planning challenges arising from the wide uncertainty of how long you will live**

## Poll question 4

What is longevity risk pooling?

# Poll #4 Answers

- A) Taking money from younger people
- B) Taking money from older people
- C) Sharing individual lifespan uncertainty with other people to produce positive financial outcomes regardless how long you end up living
- D) Being able to accurately estimate how long you will live

# Poll #4 Answers

- A) Taking money from younger people
- B) Taking money from older people
- C) Sharing individual lifespan uncertainty with other people to produce positive financial outcomes regardless how long you end up living**
- D) Being able to accurately estimate how long you will live

# Example member outcomes, without longevity risk pooling



Age 65

\$35



\$35



\$35

# Example member outcomes, with longevity risk pooling



# Brief History of Lifetime Variable Income Funds



Lifetime income with opportunity to participate in the market

**1953**



Provides lifetime income starting at 6.8% for 65-year-olds

**2021**



**2021**  
**Longevity**<sup>®</sup>  
by Purpose

**Longevity Pension Fund**  
Democratizes a sustainable retirement solution so retail investors can access it.



**1967**

VPLA

Coalition of multiple orgs lobbying Federal government to make these solutions more broadly available



**Pension solutions (narrow availability)**

**Mutual Fund (wide availability)**

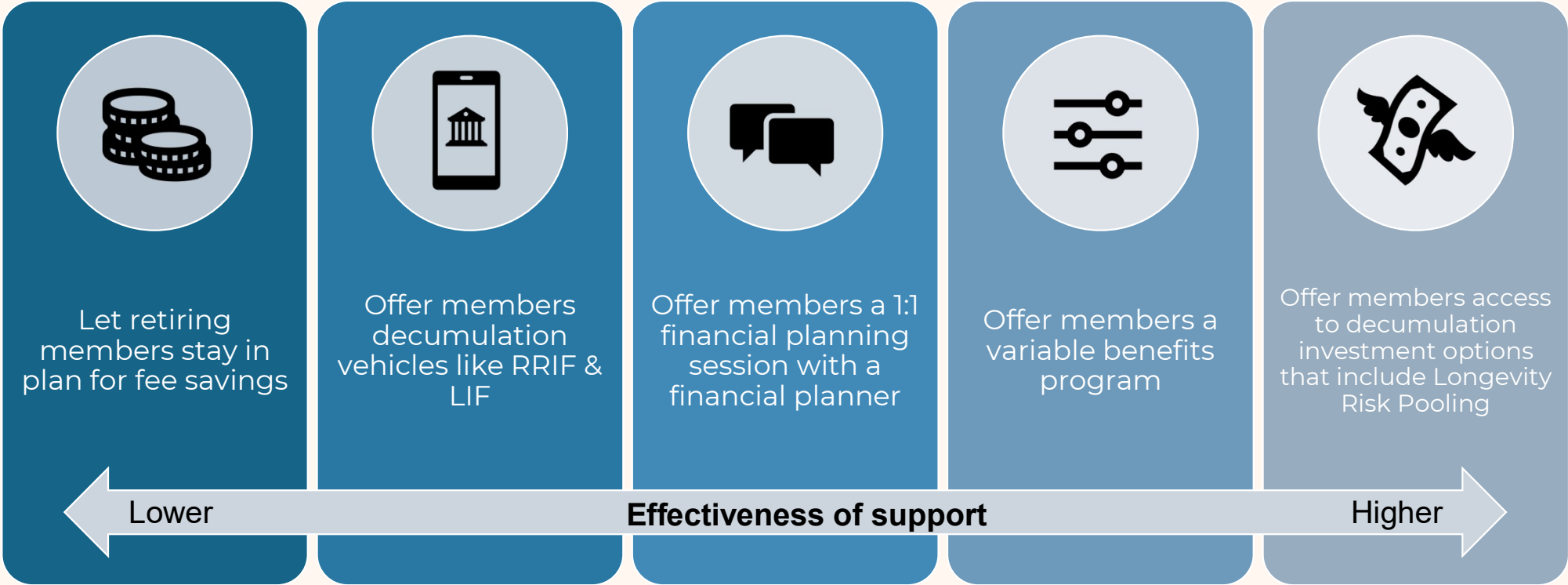
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# Insights for Plan Sponsors & Key Takeaways

# How can Plan Sponsors help members in decumulation?



# Closing Takeaways

1

Uncertain (+ rising) life expectancy, less access to DB plans, and growing inflation & market risk concerns, mean **plan members need access to solutions ensuring income for life**

Continued innovation has produced solutions that incorporate longevity risk pooling in more flexible structures

2

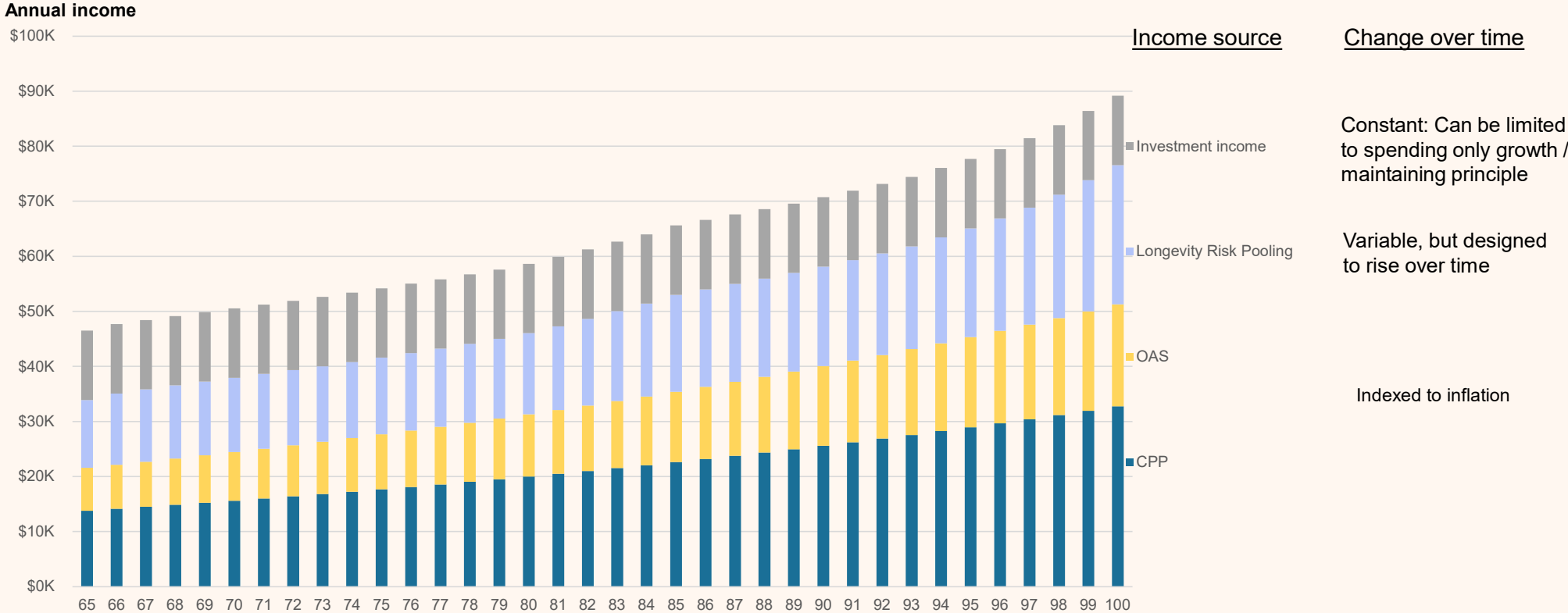
3

There are **simple steps sponsors can take to help retired members** without incurring financial risk or operational burden

**How  
about  
Larry?**



# Larry's retirement picture: he is able to create a sustainable income stream as long as he lives



This illustration assumes CPP and OAS are adjusted for inflation each by +2.5%; Longevity risk pooling represents the mean expected distributions in the Longevity Pension Fund, investment income is set as 3% of the balance, designed to conservatively preserve the capital base.

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Commissions, trailing commissions, management fees and expenses all may be associated with investment funds. Please read the prospectus before investing. The indicated rates of return are the historical annual compounded total returns including changes in share or unit values and reinvestment of all dividends or distributions and do not take into account sales, redemption, distribution or optional charges or income taxes payable by any securityholder that would have reduced returns. Investment funds are not guaranteed, their values change frequently and past performance may not be repeated.

Income in the form of Fund distributions is not guaranteed, and the frequency and amount of distributions may increase or decrease. The Fund has a unique mutual fund structure. Most mutual funds redeem at their associated Net Asset Value (NAV). In contrast, redemptions in the decumulation class of the Fund (whether voluntary or at death) will occur at the lesser of NAV or the initial investment amount less any distributions received

Certain statements in this document are forward-looking. Forward-looking statements ("FLS") are statements that are predictive in nature, depend on or refer to future events or conditions, or that include words such as "may," "will," "should," "could," "expect," "anticipate," "intend," "plan," "believe," "estimate" or other similar expressions. Statements that look forward in time or include anything other than historical information are subject to risks and uncertainties, and actual results, actions or events could differ materially from those set forth in the FLS. FLS are not guarantees of future performance and are by their nature based on numerous assumptions. Although the FLS contained in this document are based upon what Purpose Investments and the portfolio manager believe to be reasonable assumptions, Purpose Investments and the portfolio manager cannot assure that actual results will be consistent with these FLS. The reader is cautioned to consider the FLS carefully and not to place undue reliance on the FLS. Unless required by applicable law, it is not undertaken, and specifically disclaimed, that there is any intention or obligation to update or revise FLS, whether as a result of new information, future events or otherwise.

The Longevity Pension Fund is managed by Purpose Investments Inc. The Longevity Pension Fund contains several unique redemption features compared to other mutual funds - read the prospectus for more details.

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# Risks

For more details on the risks of the Fund, see Risk Factors section of the prospectus.

Asset class risk  
Capital depreciation risk  
Cease trading of constituent securities risk  
Changes in legislation risk  
Collateral risk  
Concentration risk  
Conflicts of interest risk  
Counterparty risk  
Credit risk  
Currency risk  
Cyber security risk  
Debt securities risk  
Delayed reporting risk  
Depository securities and receipts risk  
Derivative risk  
Distributions in specie  
Equity investment risk  
Fluctuations in NAV and Class NAV per unit  
Foreign investment risk

# Thank you

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