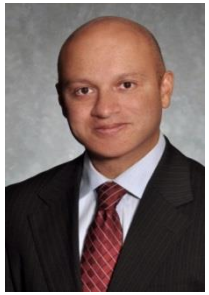
STREAMLINED LONGEVITY INSURANCE

A SOLUTION ACCESSIBLE TO ALL PLAN SPONSORS

December 5, 2016



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AGENDA

- Market context and background
- What is longevity risk and what can plan sponsors do about it?
- Canadian Bank Note case study
- What is to come next?
- Question & Answer period

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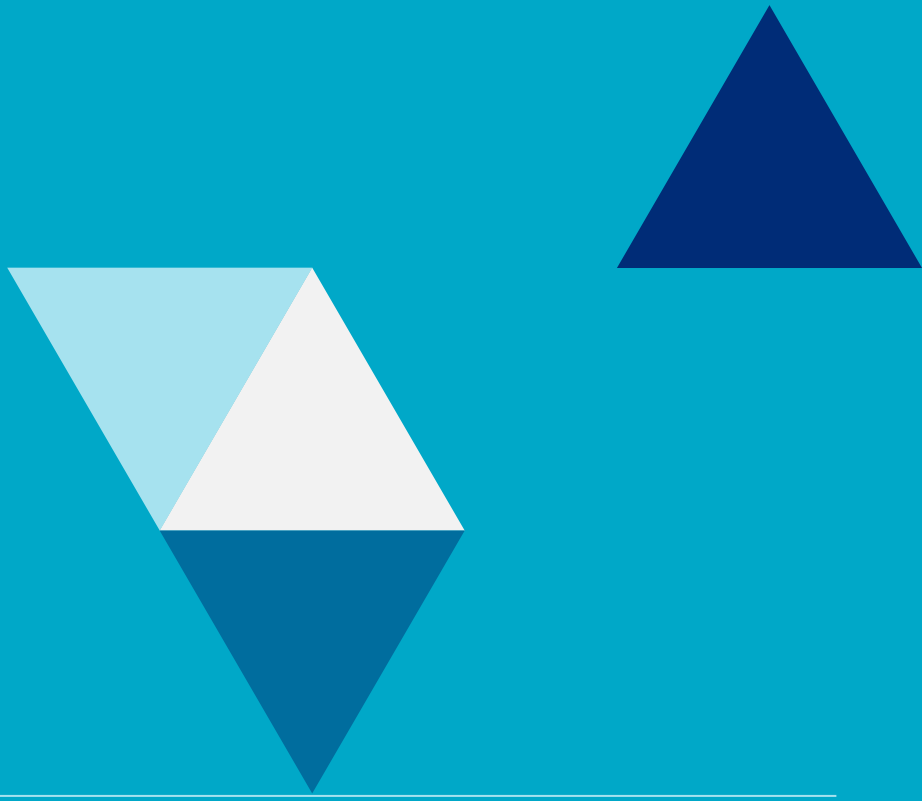
MARKET CONTEXT AND BACKGROUND



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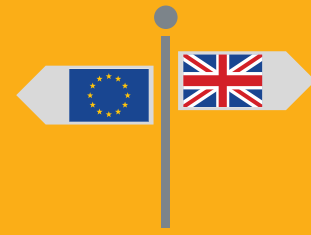
WE LIVE IN INTERESTING TIMES...

AGEING POPULATION

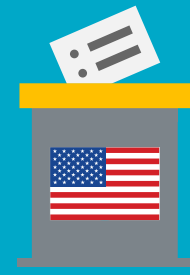
PUBLIC DEBT

BREXIT



FUTURE OF EUROZONE

U.S. ELECTION



ANTI (?) GLOBALIZATION

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AND THESE ARE ALL PUTTING PRESSURE ON THE ECONOMY… AS WELL AS ON PENSION PLANS

Interest rates

Equity risk

Currency

Longevity

Credit

Inflation

Regulatory

Accounting rules

Operational

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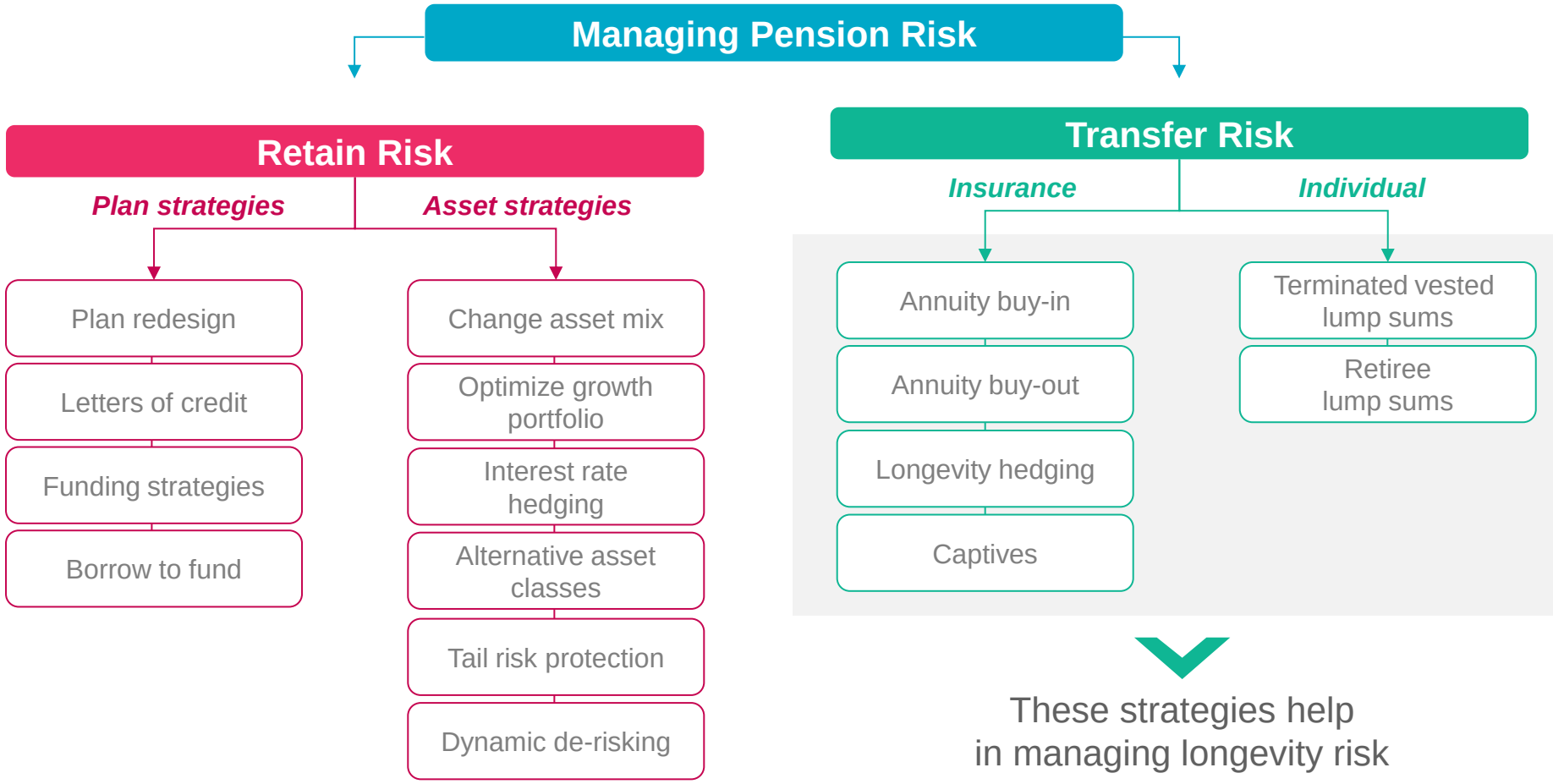
SPONSORS HAVE ACCESS TO A WHOLE SUITE OF RISK MANAGEMENT TOOLS



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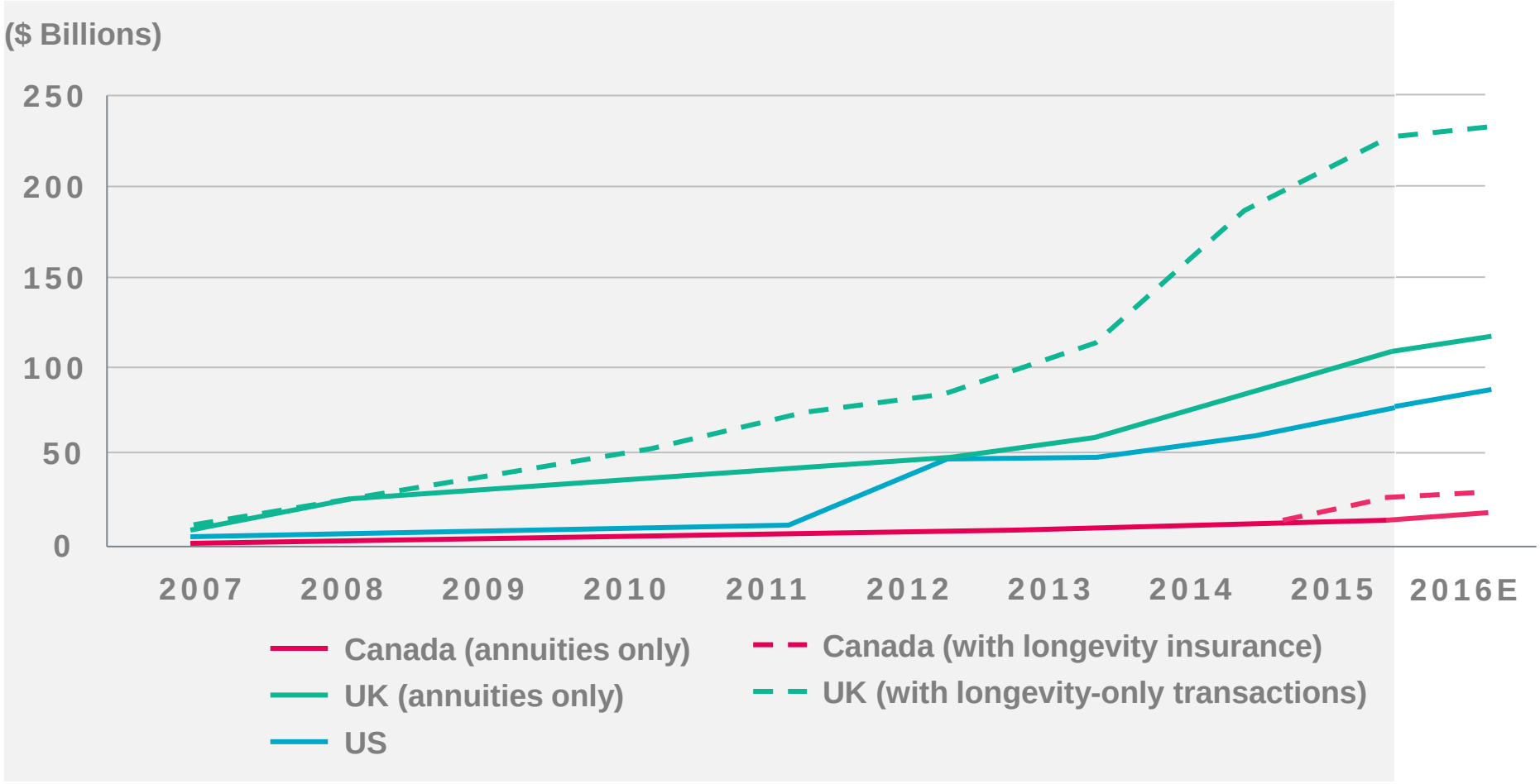
AND PENSION RISK TRANSFER TRANSACTIONS CONTINUE TO HAPPEN AROUND THE WORLD

CUMULATIVE PENSION RISK TRANSFER TRANSACTIONS SINCE 2007



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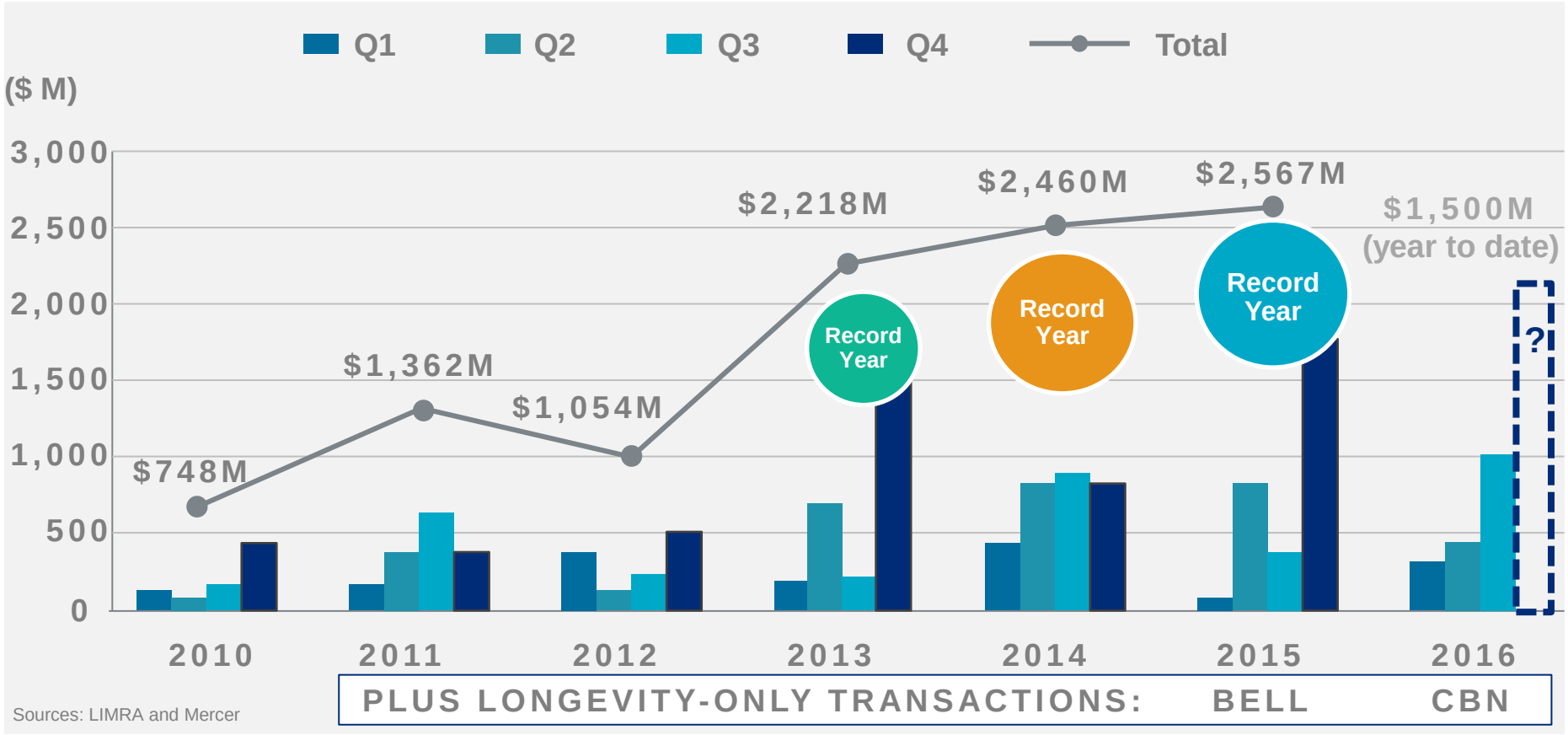
THIS TREND IS ALSO OBSERVED IN CANADA



Over **200** transactions in last two years alone

More than **50%** of transactions being done by ongoing plans

x2 average deal size increasing

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WHAT IS LONGEVITY RISK?
AND WHAT CAN PLAN SPONSORS DO ABOUT IT

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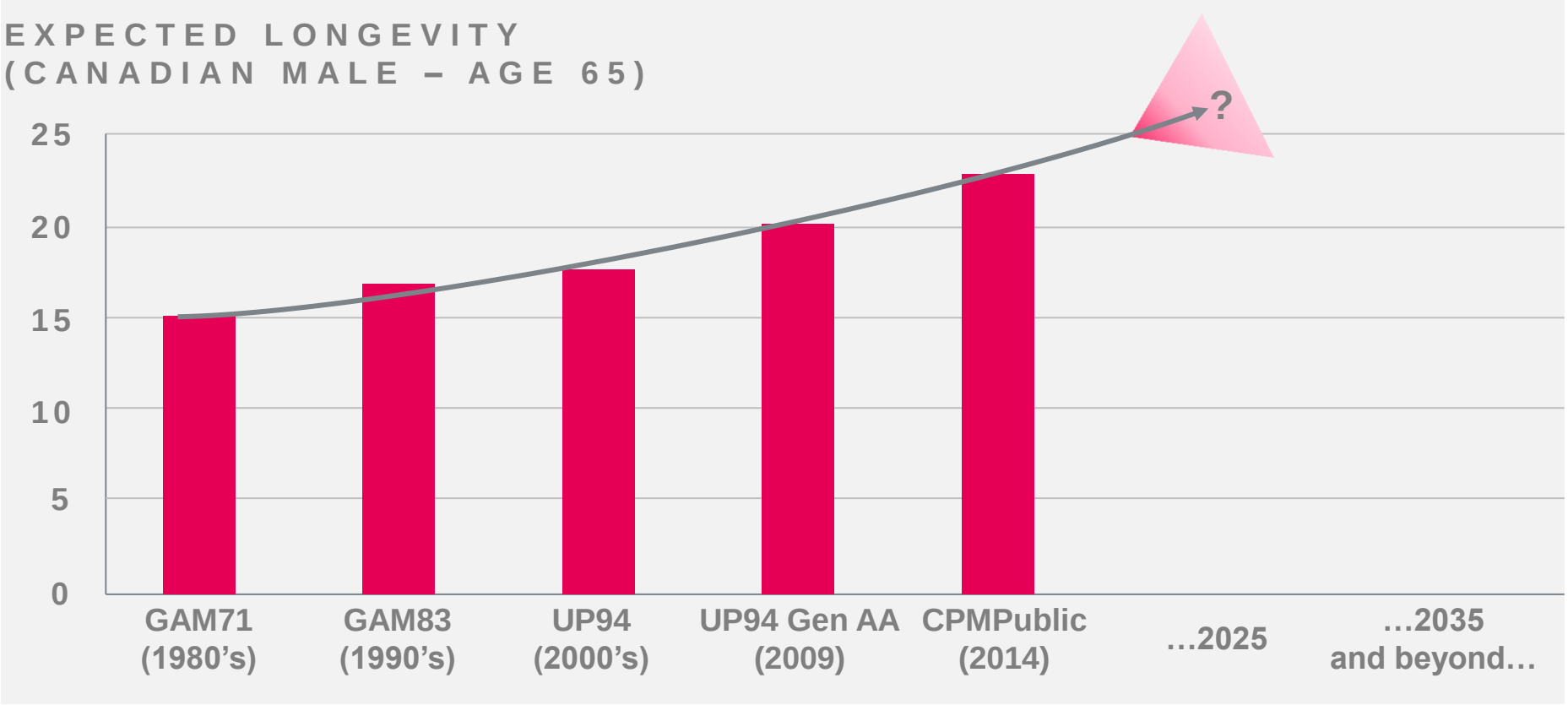
HISTORICAL LONGEVITY TRENDS IN CANADA

- Life expectancy has consistently improved in the last 40 years
- Over time, the Canadian Institute of Actuaries has suggested the use of more conservative mortality assumptions



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RMS APPROACH: MODEL FIVE FUNDAMENTAL DRIVERS OF MORTALITY IMPROVEMENTS

LIFESTYLE

HEALTH ENVIRONMENT

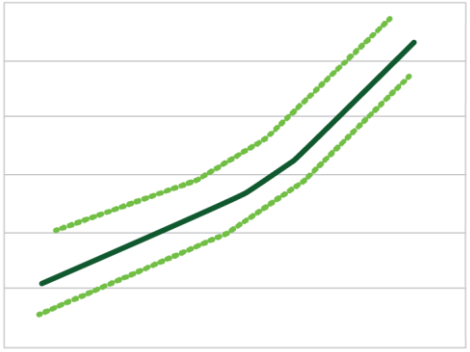
MEDICAL INTERVENTION

REGENERATIVE MEDICINE

ANTI-AGEING PROCESSES

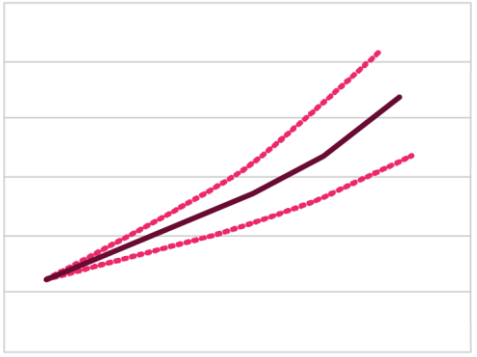
SOURCES OF LONGEVITY RISK

BASELINE RISK



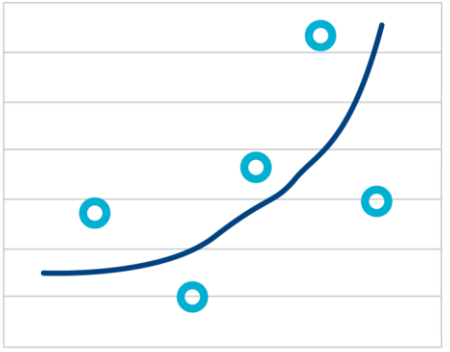
The current mortality is mis-stated.

TREND RISK



Future improvements are different to those assumed.

CONCENTRATION RISK



Experience correct “on average”, but individual high earners create risk.

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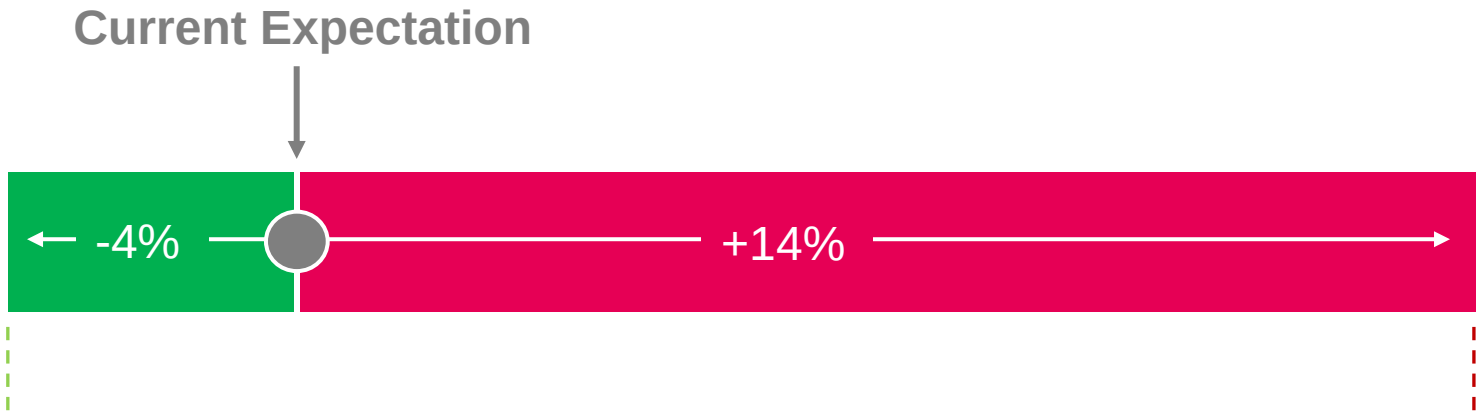
PENSION LIABILITIES UNDER VARIOUS LONGEVITY SCENARIOS

Based on current expectations, longevity risk is asymmetrical and plan sponsors are more exposed to downside than upside



No future mortality improvements

Current expected mortality rates do not improve at all

"Medical breakthroughs" (elimination of cardio-vascular diseases, cure for cancer and modest impact of regenerative medicine)

Current mortality rates improve at a long-term annual mortality improvement rate of 4.5%

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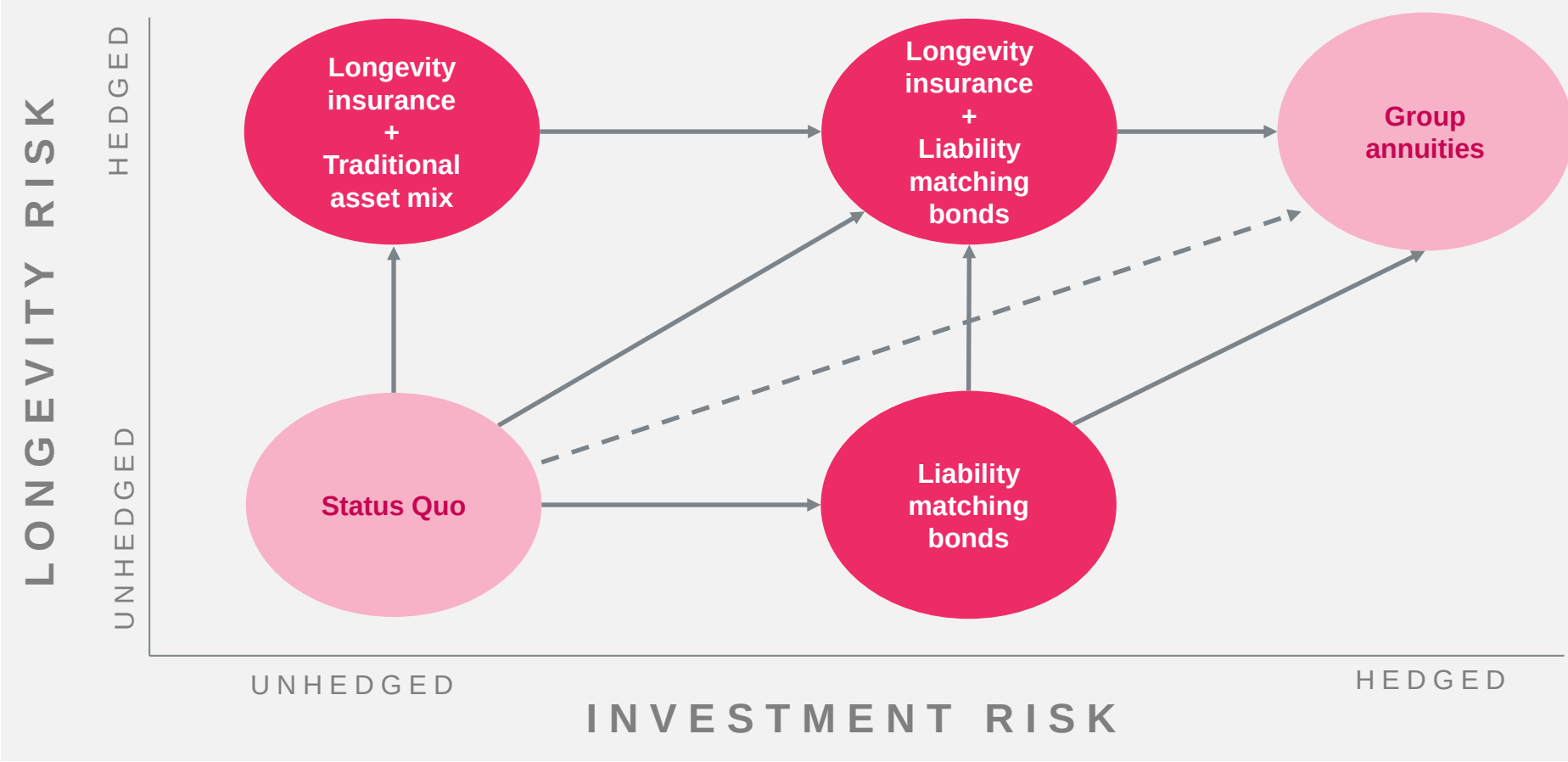
TREND: PLAN SPONSORS ARE HEDGING DIFFERENT COMBINATIONS OF LONGEVITY AND INVESTMENT RISK



Source: Sun Life Financial

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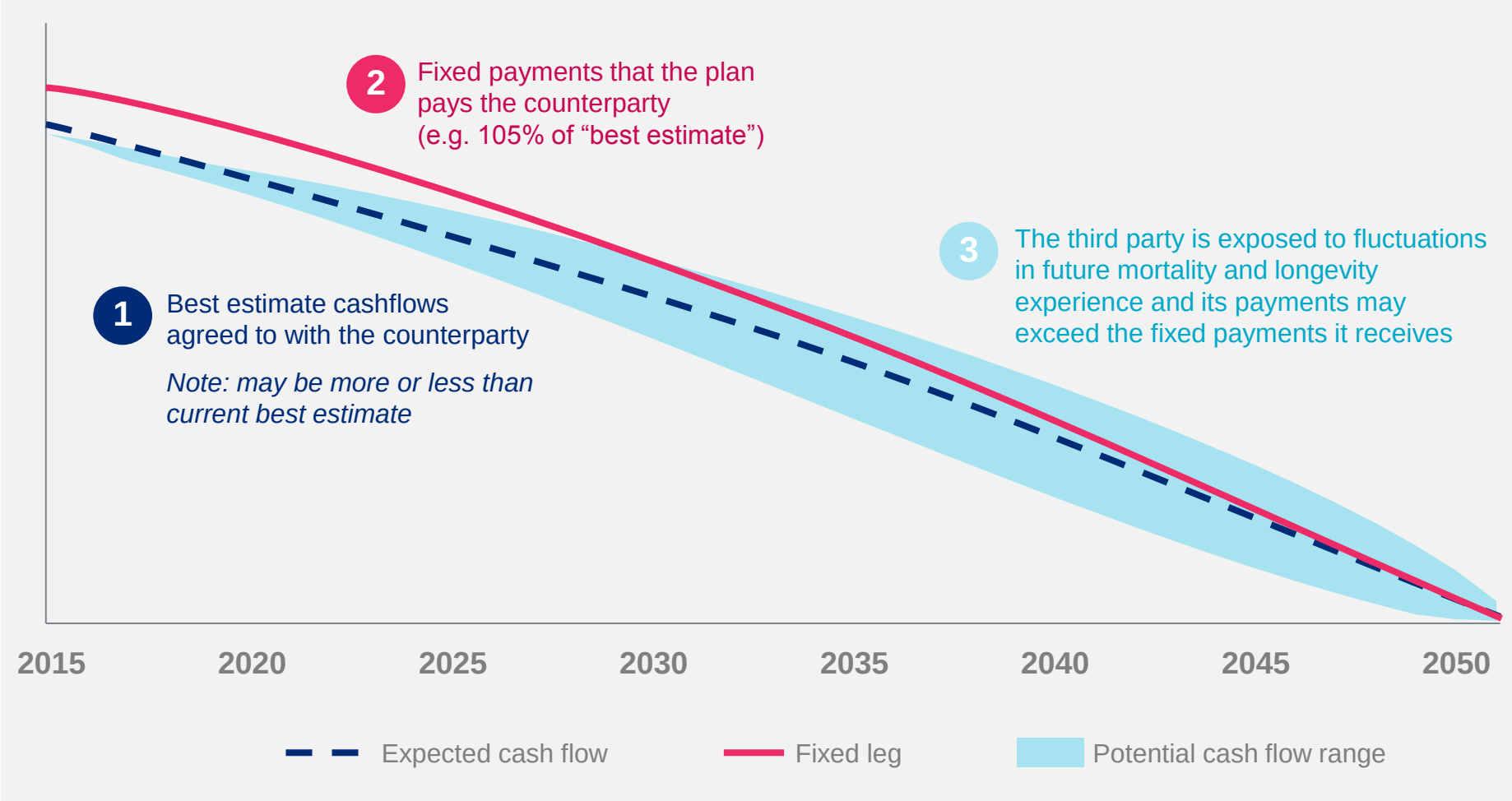
WHAT IS LONGEVITY INSURANCE



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CANADIAN BANK NOTE
CASE STUDY

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CBN'S PERSPECTIVE ON LONGEVITY RISK

- A bit about CBN
- CBN sponsors a closed DB plan
  - Approx. 220 retirees, $35 M liabilities
- Pension Committee identified longevity risk as one of the most important risks
  - Very little upside benefit to longevity risk
- Mortality assumption improvements have led to increased liabilities

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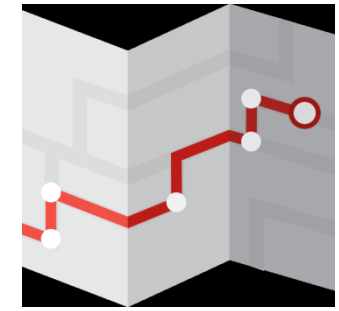
LONGEVITY DE-RISKING PROCESS

- Starting point: Pension Committee meeting 3 years ago
  - Annual governance meeting
  - Risks affecting pension plan identified
- Reached out to all large Canadian insurers
  - None were willing to quote on a longevity hedging solution initially
  - Eventually three insurers provided quotes
- Selection process identified Canada Life as best option
  - Flexible and patient
  - Shared similar entrepreneurial spirit as CBN
  - Dedicated, knowledgeable team



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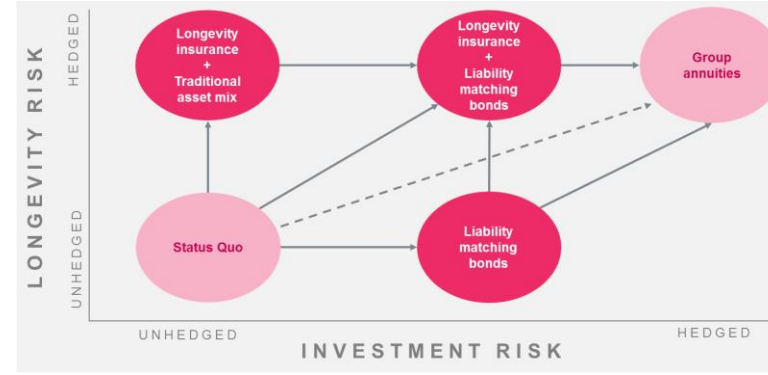
OTHER NOTES

WHY NOT ANNUITIES

Not ready to annuitize or wind-up plan

- 100+ Active members continue to accrue service
- Did not want to lock-in solvency obligation
- Comfortable managing the pension plan
- Comfortable with other risks, such as investment risk



PERFORMING DUE DILIGENCE

In-house pension actuary and legal counsel

Worked with Mercer on detailed contract review

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MESSAGE TO PLAN MEMBERS

Contract signed in October 2016

- Still in early stages of communication plan

Mediums: Press release, notice, annual statements, closer contact with our retirees

Messaging: Very positive

- Added an additional level of security for retiree pensions

Streamlined longevity solution for smaller plans

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WHAT IS TO COME NEXT?

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STREAMLINED LONGEVITY SOLUTIONS FOR SMALLER PLANS

- Longevity swaps typically reserved for only the largest of plans
- The CBN deal with Canada Life proves the viability of a “small-scale” longevity risk transfer solution
- How is it different than the traditional longevity swap?
  - No collateral (rather the plan sponsor will be subject to credit underwriting)
  - Cash flows settled on an annual basis
  - Simplified contract
- The fixed leg will be expressed as a percentage loading to a standardized accessible table

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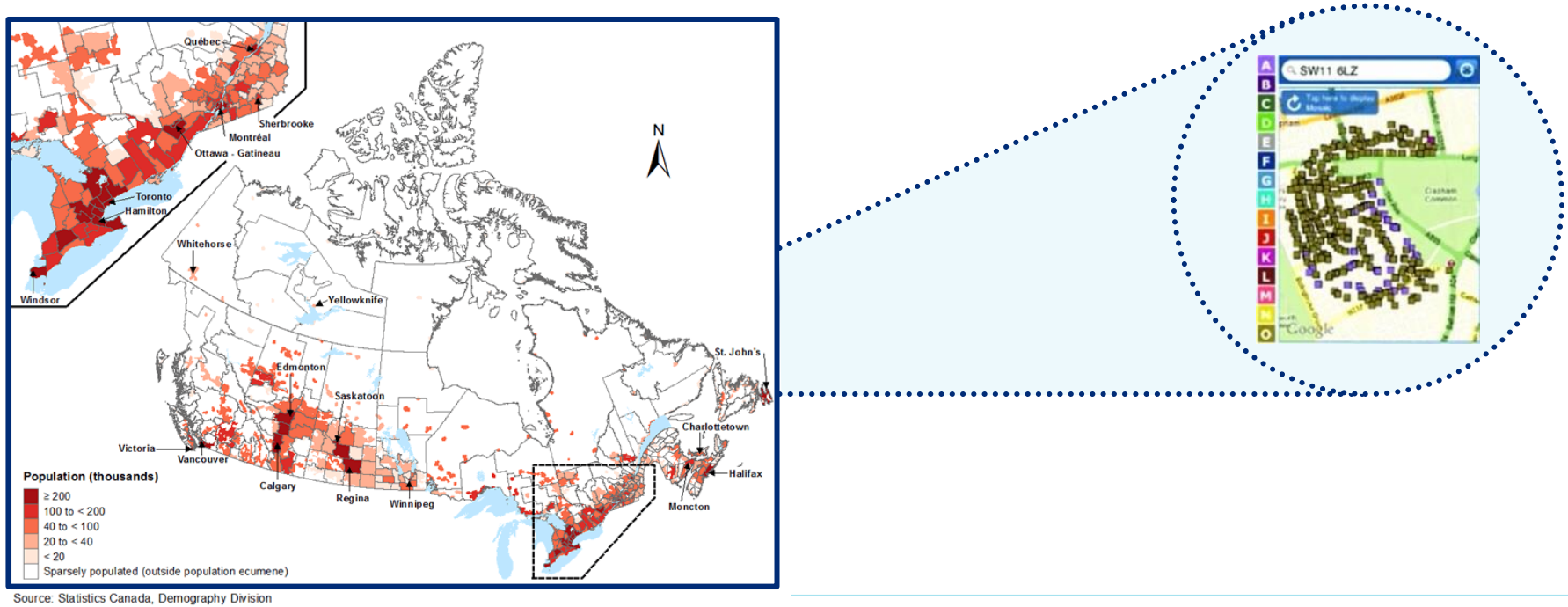
MERCER MORTALITY MODEL FOR CANADA

- New model to be launched in 2017
- Will apply the theory of survival models to Canadian mortality, allowing for detailed analysis across numerous risk factors simultaneously
- Will introduce the concept of “geo-demographic” profiling similar to the postcode analysis now commonly conducted in the UK



Source: Statistics Canada, Demography Division

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MERCER MORTALITY MODEL FOR CANADA

LOCATION

Accessibility
Rural vs. Urban
Postal code

FINANCIAL MEASURES

Income
Credit behaviour

SOCIO-ECONOMICS AND CONSUMPTION

Occupation
Industry
Employment status
Education

DEMOGRAPHIC

Household demographics
Population movement
Health
Background & beliefs

PROPERTY CHARACTERISTIC

Building
Tenure
Amenities

PROPERTY VALUE

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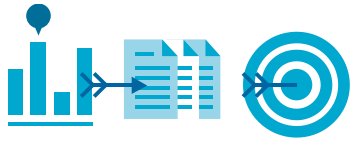
MERCER PENSION RISK EXCHANGE™
MERCER'S GROUND-BREAKING SOLUTION TO ANNUITY TRANSACTION CHALLENGES



READINESS

TRANSPARENCY

MONITORING

EXECUTION

GLOBAL VIEW

Beginning in 2017, the Mercer Pension Risk Exchange will be expanded to monitor longevity insurance pricing, bringing its unparalleled insight, transparency and efficiency to the longevity swap market

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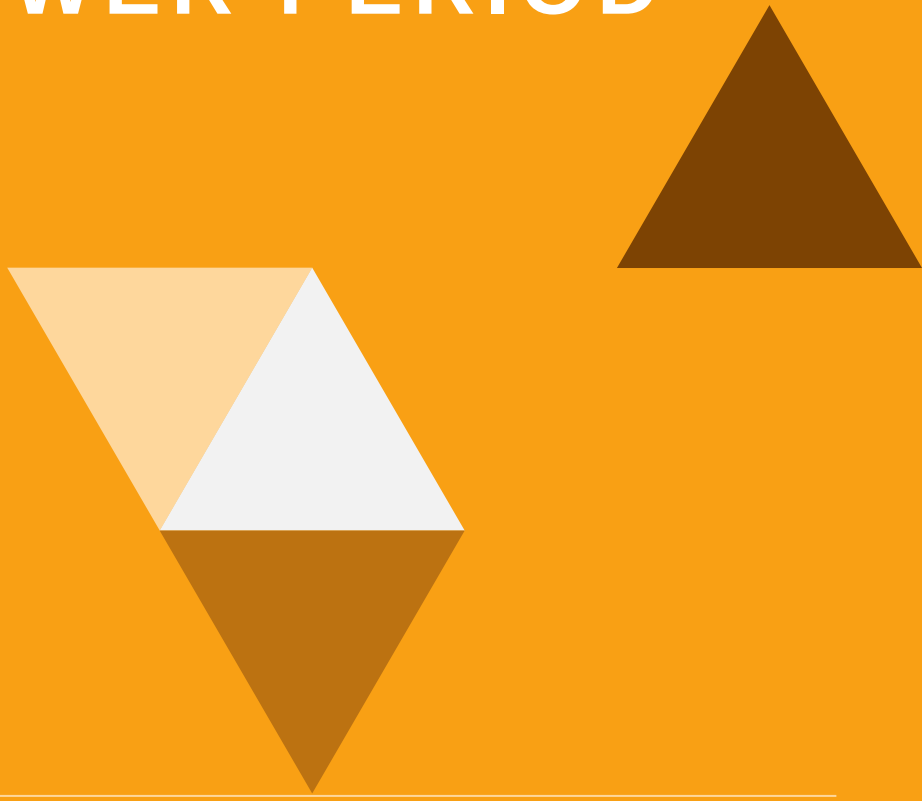
QUESTION AND ANSWER PERIOD



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ANY QUESTIONS?

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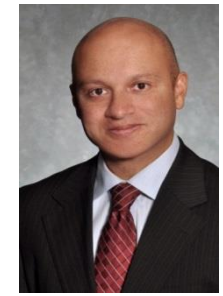

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QUESTIONS

Please type your questions in the Q&A section of the toolbar and we will do our best to answer as many questions as we have time for.

To submit a question while in full screen mode, use the Q&A button, on the floating panel, on the top of your screen.

CLICK HERE TO ASK A QUESTION TO "ALL PANELISTS"

FEEDBACK

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MAKE TOMORROW, TODAY

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