



Prudential

Bring Your Challenges®

Longevity De-risking a Defined Benefit Plan

Why Plan Sponsors Transact and
Which Approaches Are Available

Amy Kessler

Senior Vice President
Head of Longevity Reinsurance
Prudential Retirement®

Pension Risk Transfer

IS going

GLOBAL





**Canada
2013**

**United States
2012**

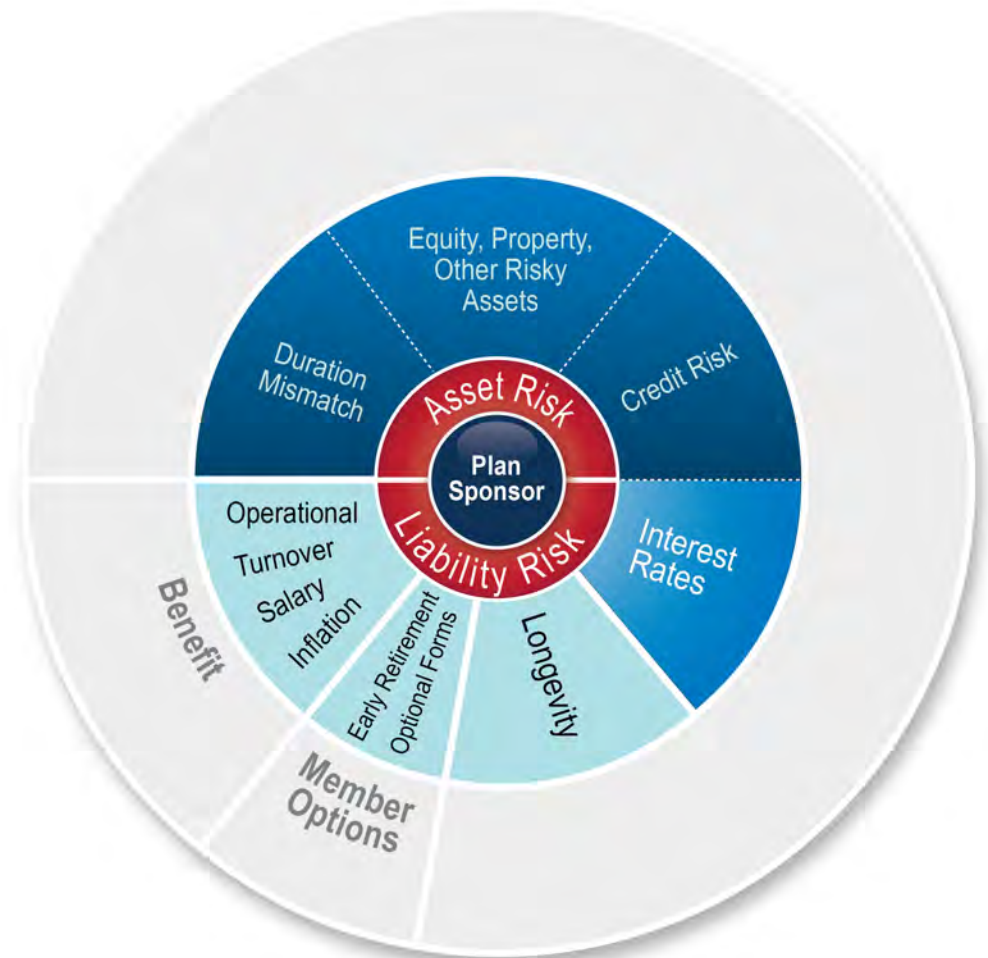


**Netherlands
2014**



**When the pension plan
is getting in the way of the
business plan, leading companies
around the world are turning
to pension risk transfer.**

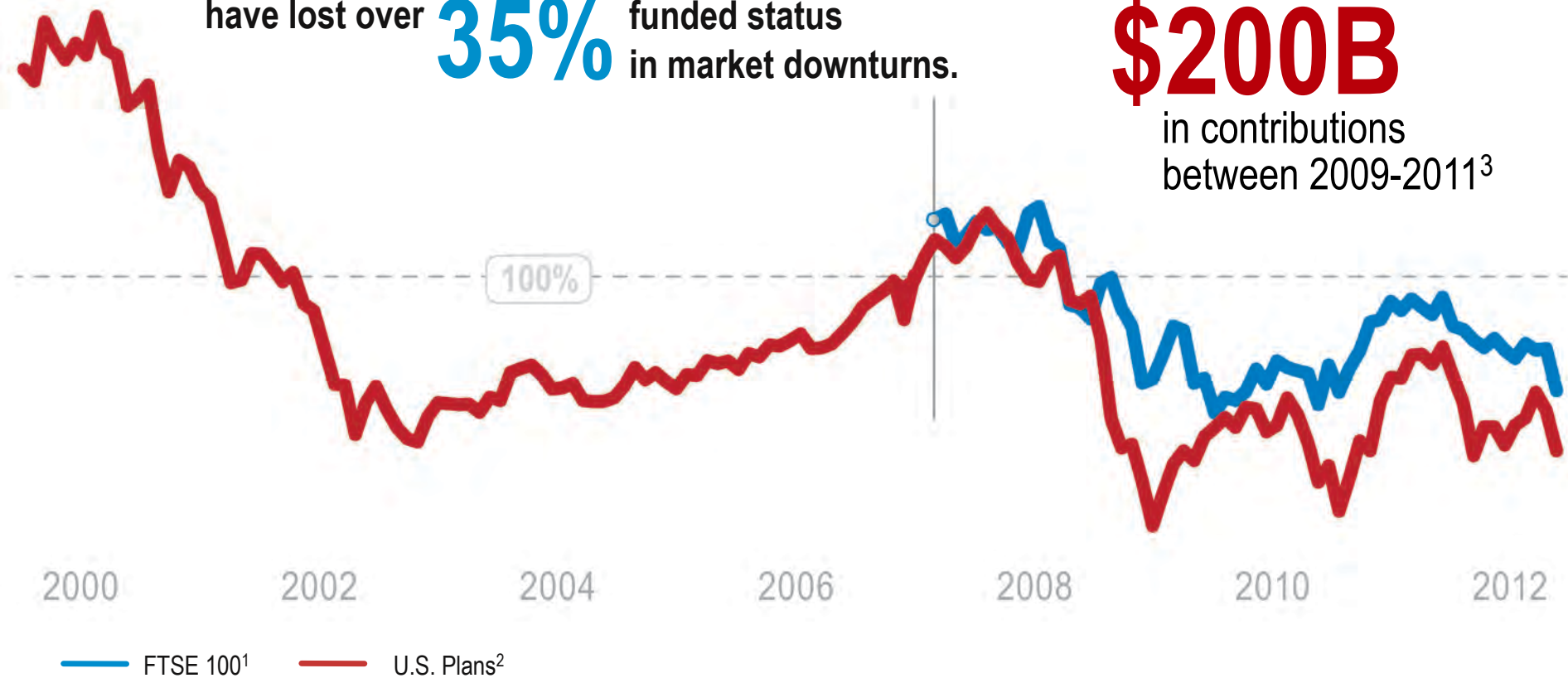
Pension plan sponsors are surrounded by risk.



Funded status volatility has been excruciating and very expensive

Twice in the past 12 years, U.S. Sponsors of defined benefit plans have lost over **35%** funded status in market downturns.

U.S. Plans
\$200B
in contributions
between 2009-2011³

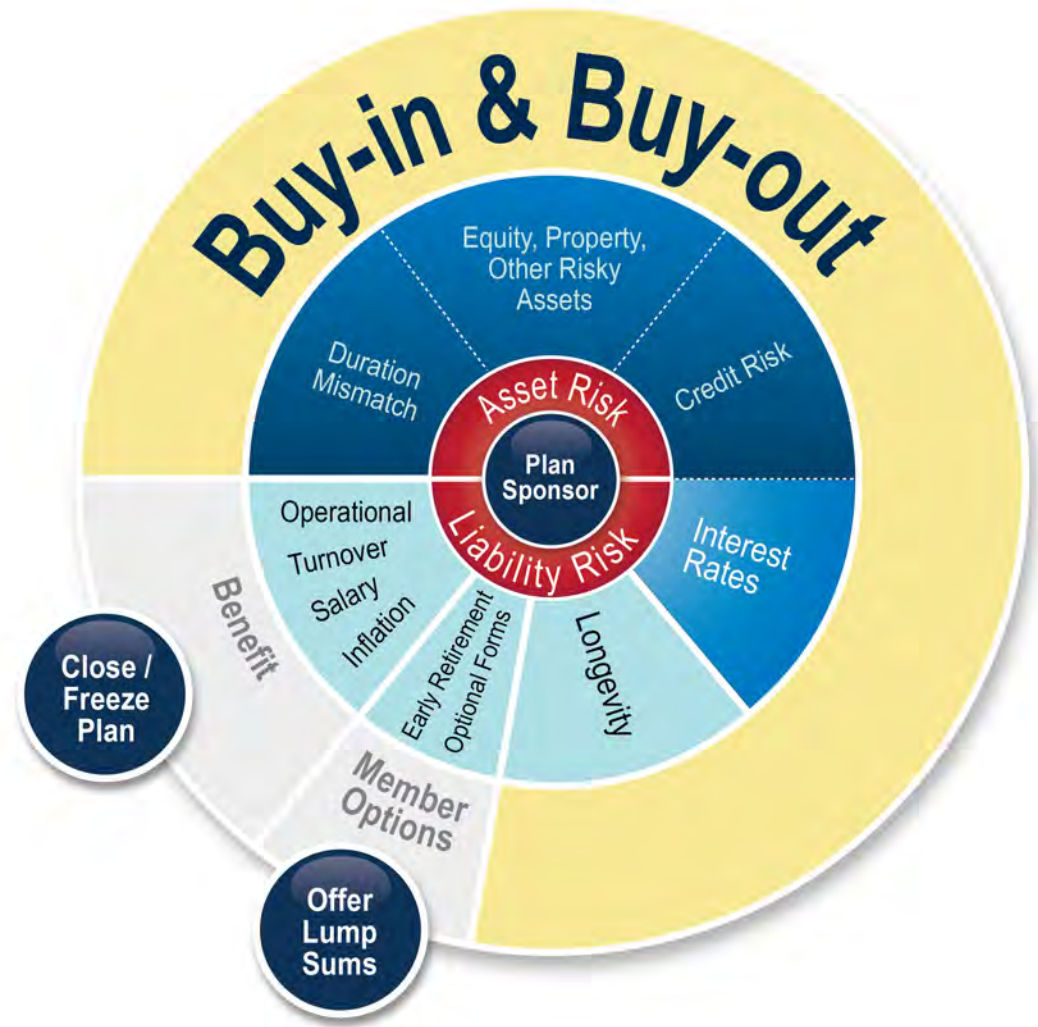


¹Source: Aon Hewitt, "Aon Hewitt Global Pension Risk Tracker," as of June 13, 2012, <https://rfmtools.hewitt.com/PensionRiskTracker>. Funding ratio (cumulative assets/liabilities) of all pension schemes in the FTSE 100 index on the Accounting basis.

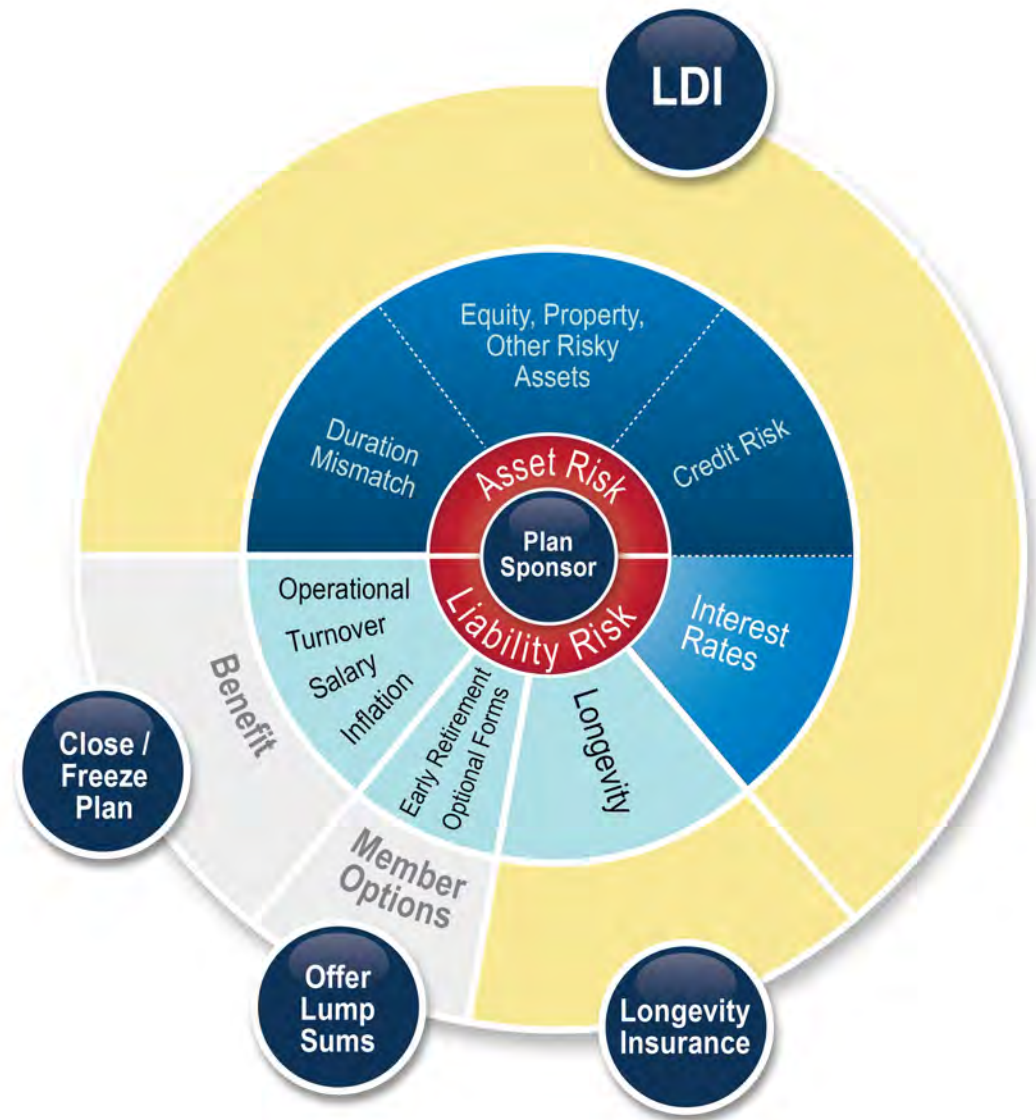
²Source: Prudential. Illustrates approximate funded status of U.S. corporate pension plans. For illustrative use only.

³Source: Standard & Poor's, "S&P 500 2011: Pensions and Other Post-Employment Benefits (OPEBs)"

There are many de-risking options



There are even
“do-it-yourself”
solutions



De-risking
has a real **impact**
on corporate cash flow
and **stock price.**

market capitalization **\$5.1B**

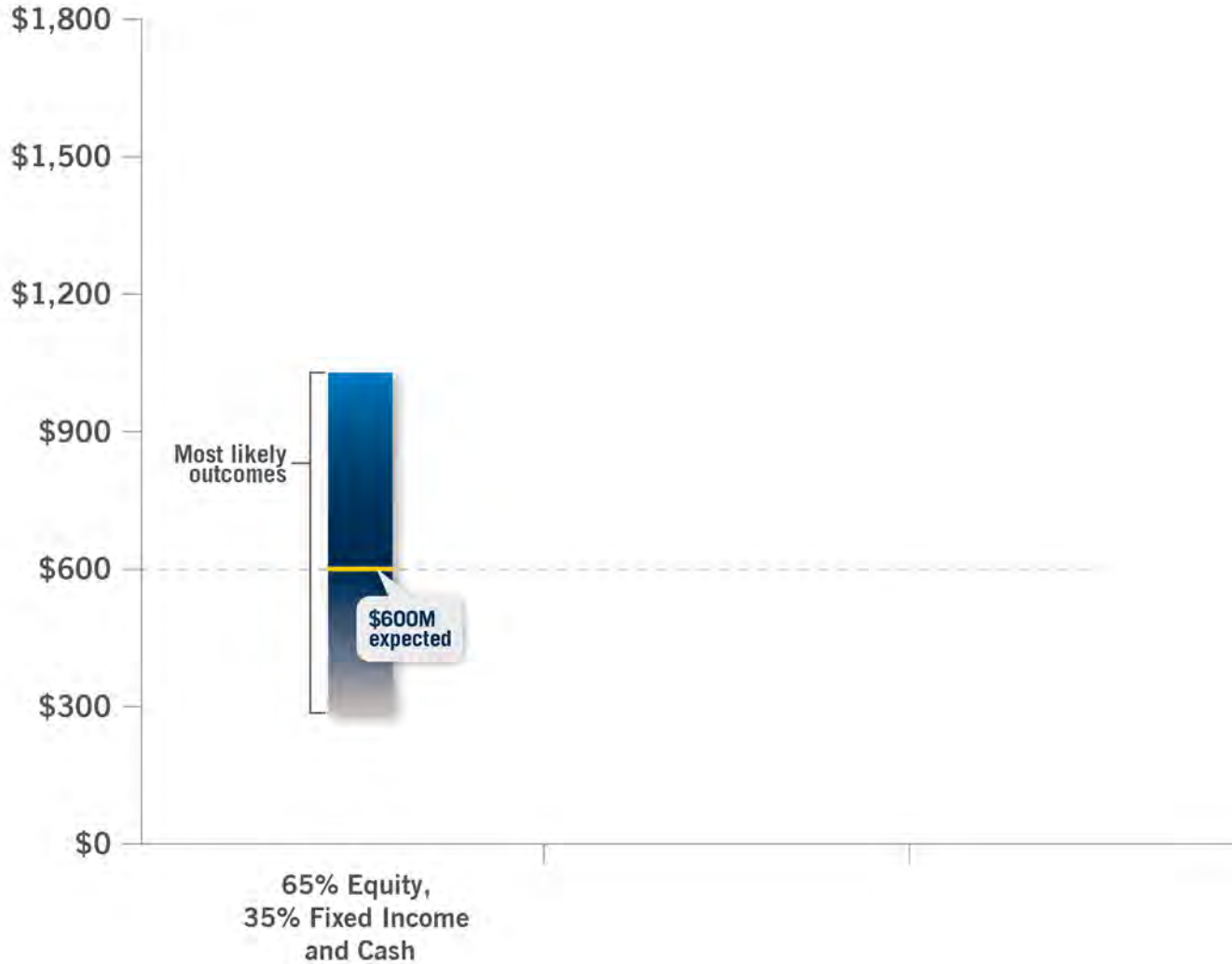
pension liabilities **\$2.9B**

funded status **85%**

equities **65%**

fixed income/cash **35%**

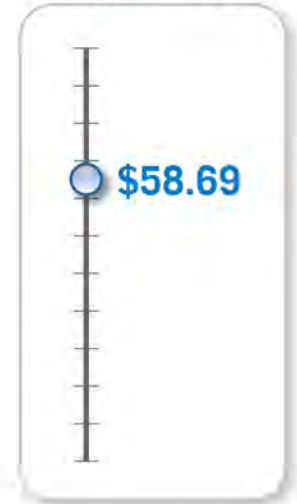
NPV of Contributions (in millions)



Percentiles



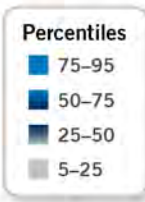
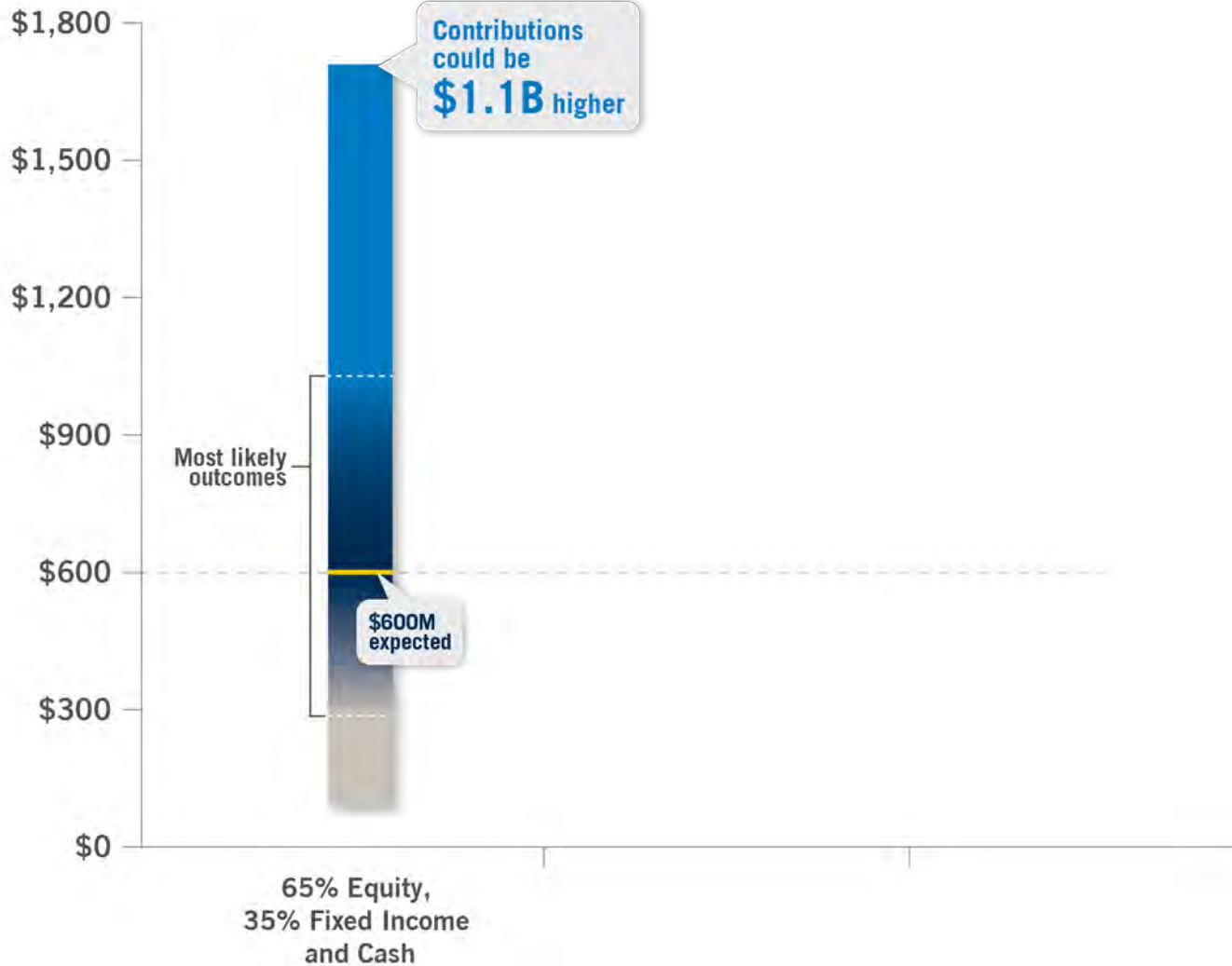
Stock Price



Source: Prudential. Represents a hypothetical publicly traded company with \$5.1 billion in market capitalization, \$2.9 billion in pension liabilities and a funded status of 85%. The pension plan's liabilities are allocated as follows: 55% retiree, 30% deferred and 15% active. The range of potential outcomes is modeled using 1000 stochastic scenarios and assumes funding relief is not enacted by Congress. In each strategy, assets not used for lump sum payments or a buy-in are assumed to be invested in 65% equities and 35% fixed income and cash. The analysis of stock price volatility conservatively assumes no reduction in firm beta after de-risking.

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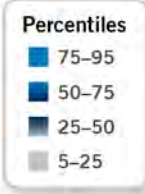
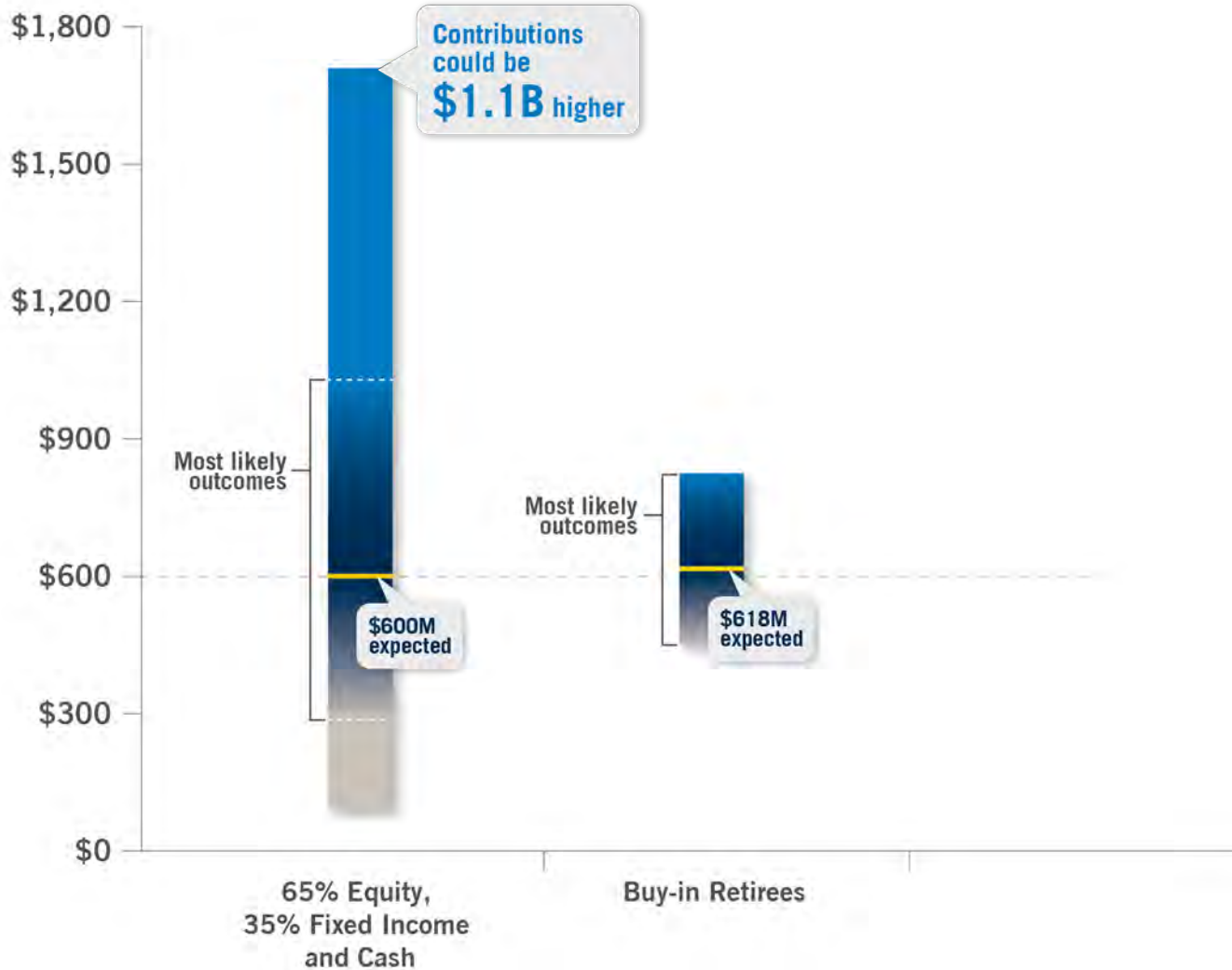
NPV of Contributions (in millions)



stock price could be
12% lower

Source: Prudential. Represents a hypothetical publicly traded company with \$5.1 billion in market capitalization, \$2.9 billion in pension liabilities and a funded status of 85%. The pension plan's liabilities are allocated as follows: 55% retiree, 30% deferred and 15% active. The range of potential outcomes is modeled using 1000 stochastic scenarios and assumes funding relief is not enacted by Congress. In each strategy, assets not used for lump sum payments or a buy-in are assumed to be invested in 65% equities and 35% fixed income and cash. The analysis of stock price volatility conservatively assumes no reduction in firm beta after de-risking.
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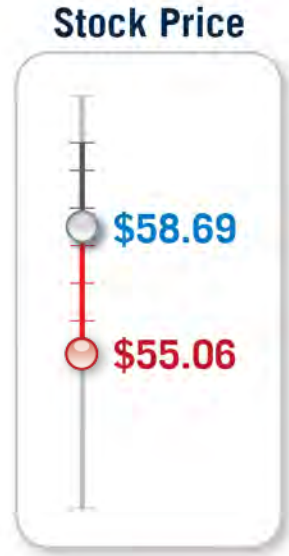
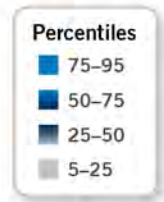
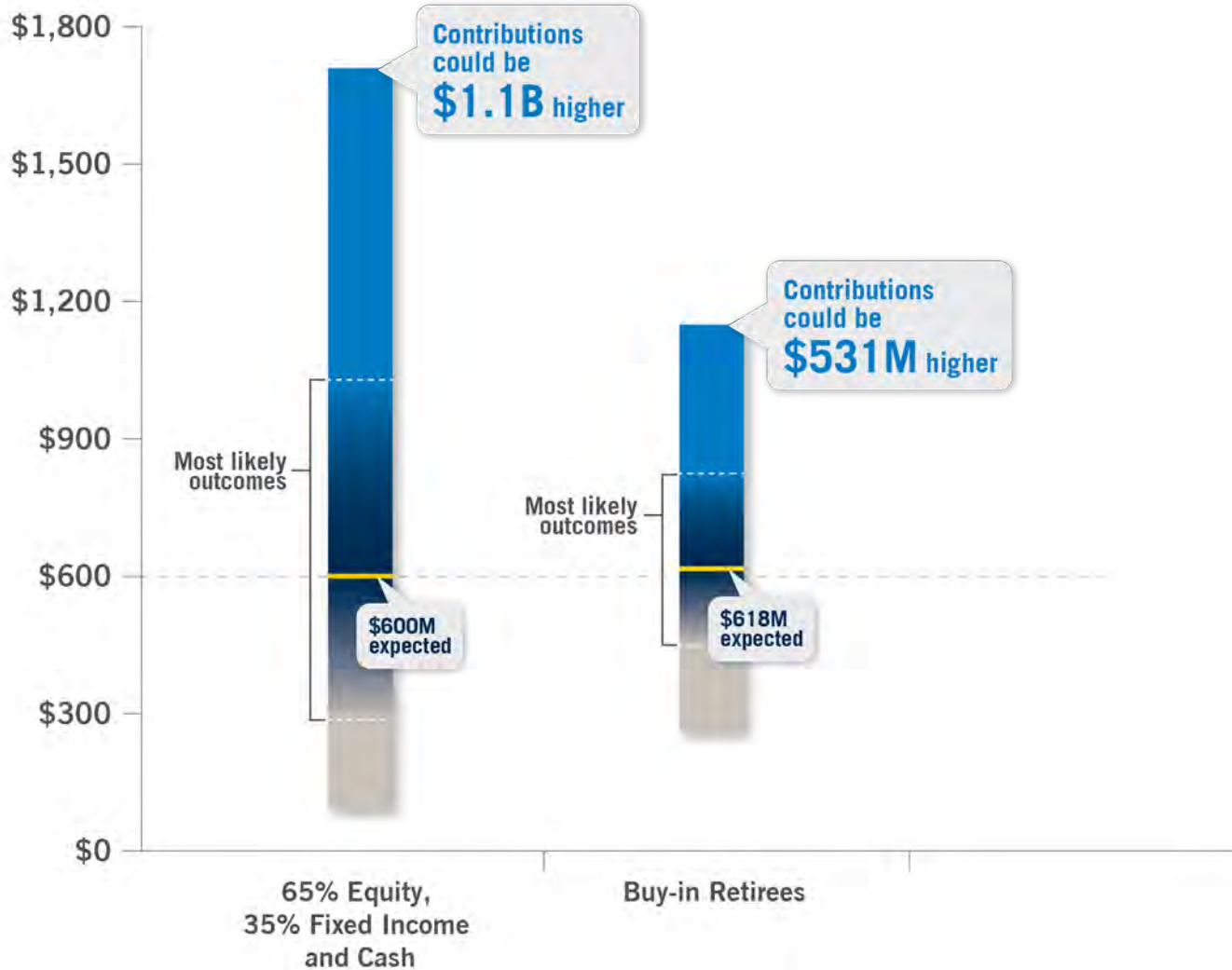
NPV of Contributions (in millions)



Source: Prudential. Represents a hypothetical publicly traded company with \$5.1 billion in market capitalization, \$2.9 billion in pension liabilities and a funded status of 85%. The pension plan's liabilities are allocated as follows: 55% retiree, 30% deferred and 15% active. The range of potential outcomes is modeled using 1000 stochastic scenarios and assumes funding relief is not enacted by Congress. In each strategy, assets not used for lump sum payments or a buy-in are assumed to be invested in 65% equities and 35% fixed income and cash. The analysis of stock price volatility conservatively assumes no reduction in firm beta after de-risking.

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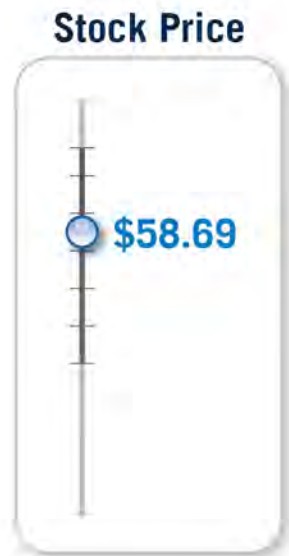
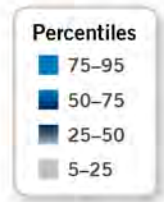
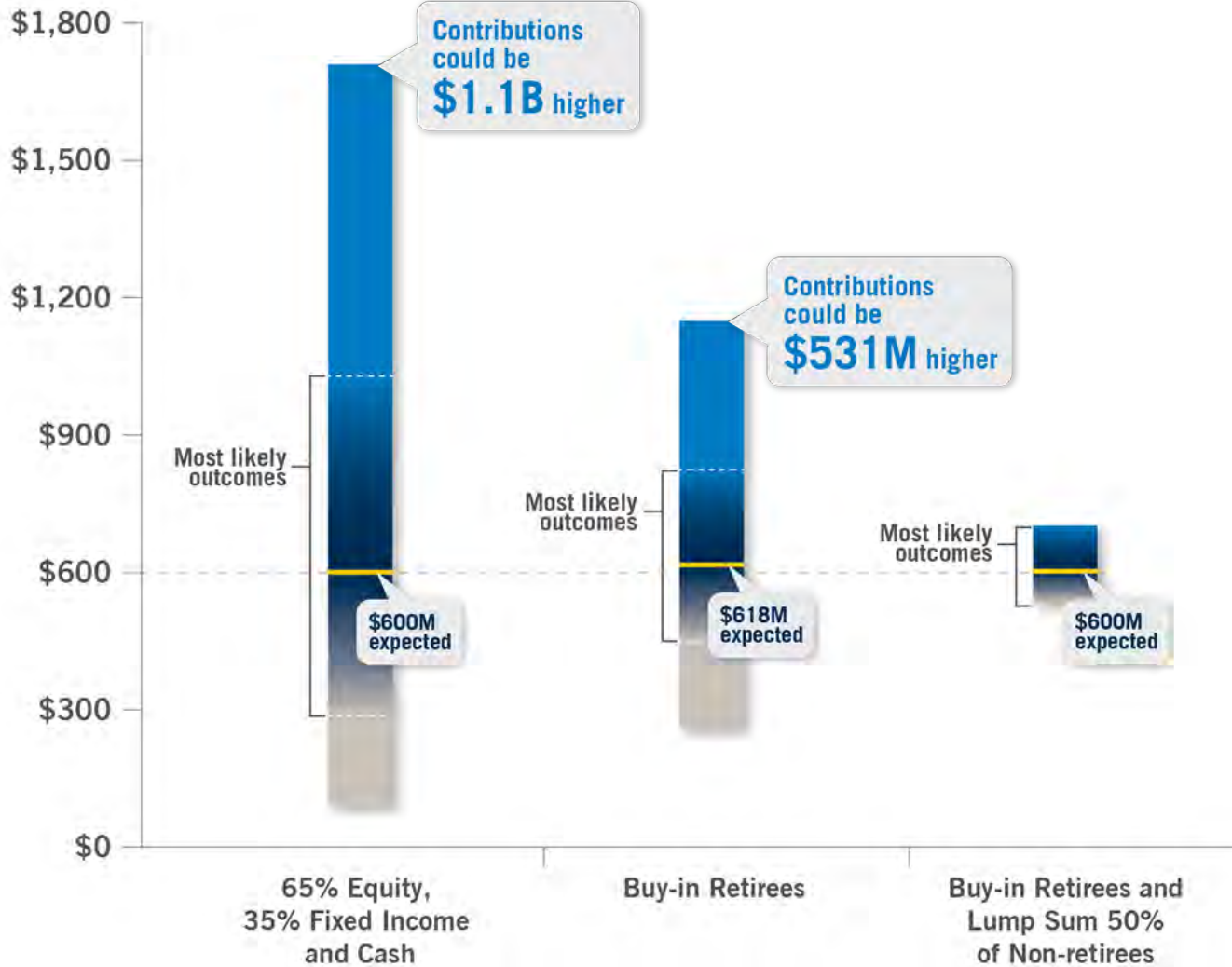
NPV of Contributions (in millions)



stock price could be
6% lower

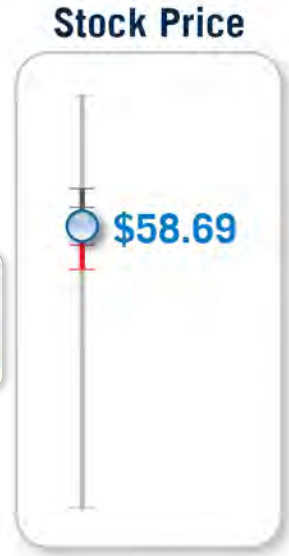
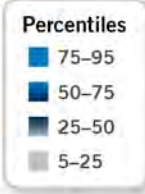
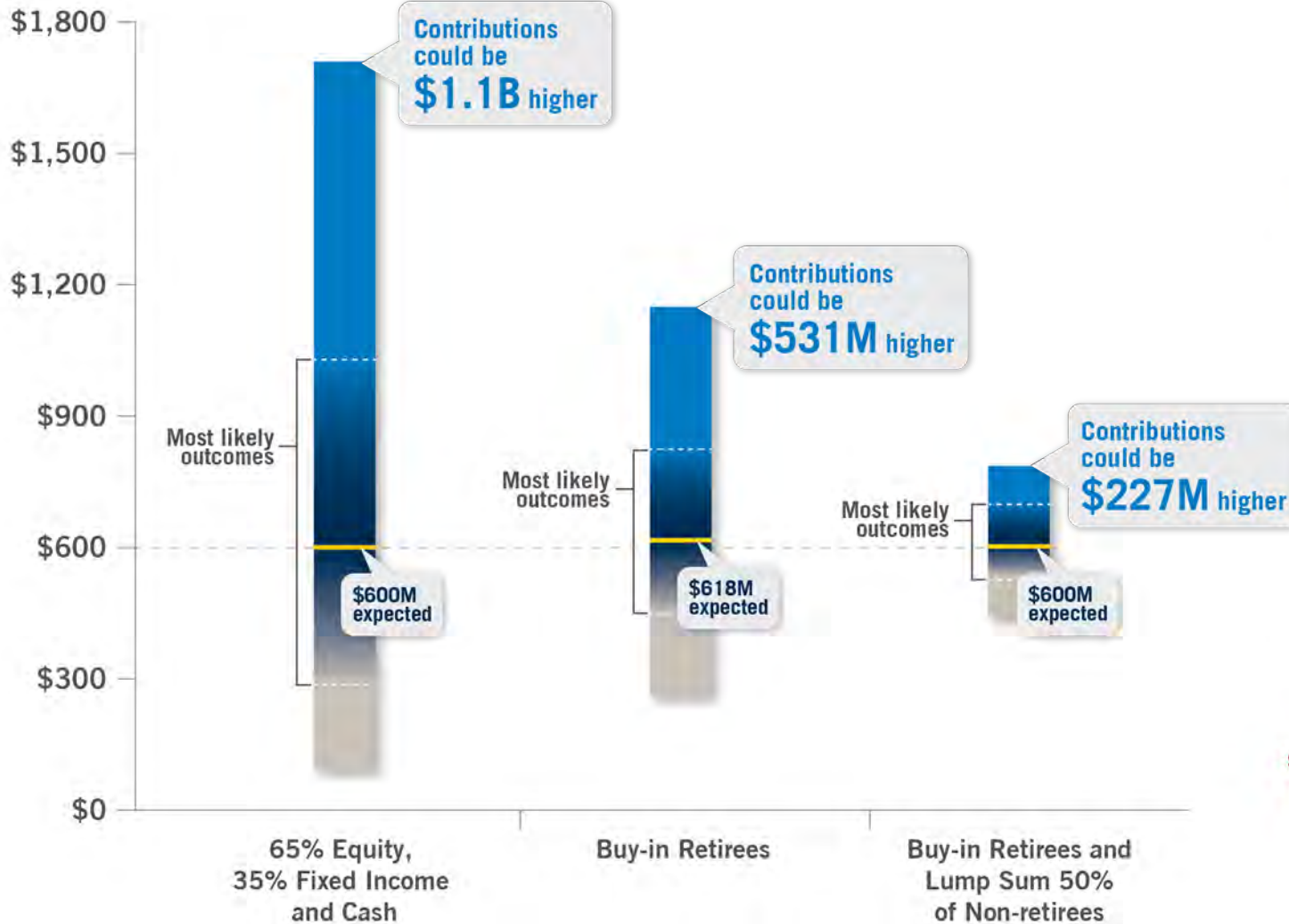
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NPV of Contributions (in millions)



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NPV of Contributions (in millions)



stock price volatility is insignificant

Source: Prudential. Represents a hypothetical publicly traded company with \$5.1 billion in market capitalization, \$2.9 billion in pension liabilities and a funded status of 85%. The pension plan's liabilities are allocated as follows: 55% retiree, 30% deferred and 15% active. The range of potential outcomes is modeled using 1000 stochastic scenarios and assumes funding relief is not enacted by Congress. In each strategy, assets not used for lump sum payments or a buy-in are assumed to be invested in 65% equities and 35% fixed income and cash. The analysis of stock price volatility conservatively assumes no reduction in firm beta after de-risking.
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**Companies that de-risk
set themselves apart
from their peers.**



Solidify industry leadership

Create consistent financial results

**Eliminate a potential cash
call on the company**

**Maximize strategic
flexibility**





Equity Analysts and Other Corporate Stakeholders are Watching...

GM takes action to reduce its pension benefit obligation by approximately \$26B.

“...the move helps significantly **reduce economic volatility, improve valuation transparency** and enables GM to **focus more on making cars** rather than managing a pension fund.”

— Morgan Stanley

Source: “General Motors: Pension Down, Credibility Up.” Morgan Stanley. June 1, 2012. Used with permission.

“As GM continues to fund and de-risk its pension, **investors should develop increased confidence that incremental cash flows will accrue to them, and not the pension.** As this happens, **GM’s multiple should expand.**”

— Credit Suisse

Source: “Doing the Right Thing...GM Further De-risks Pension; Positive for Equityholders.”
Credit Suisse, Equity Research. June 4, 2012. Used with permission.

**The U.K. has
led the world
in pension
de-risking.**





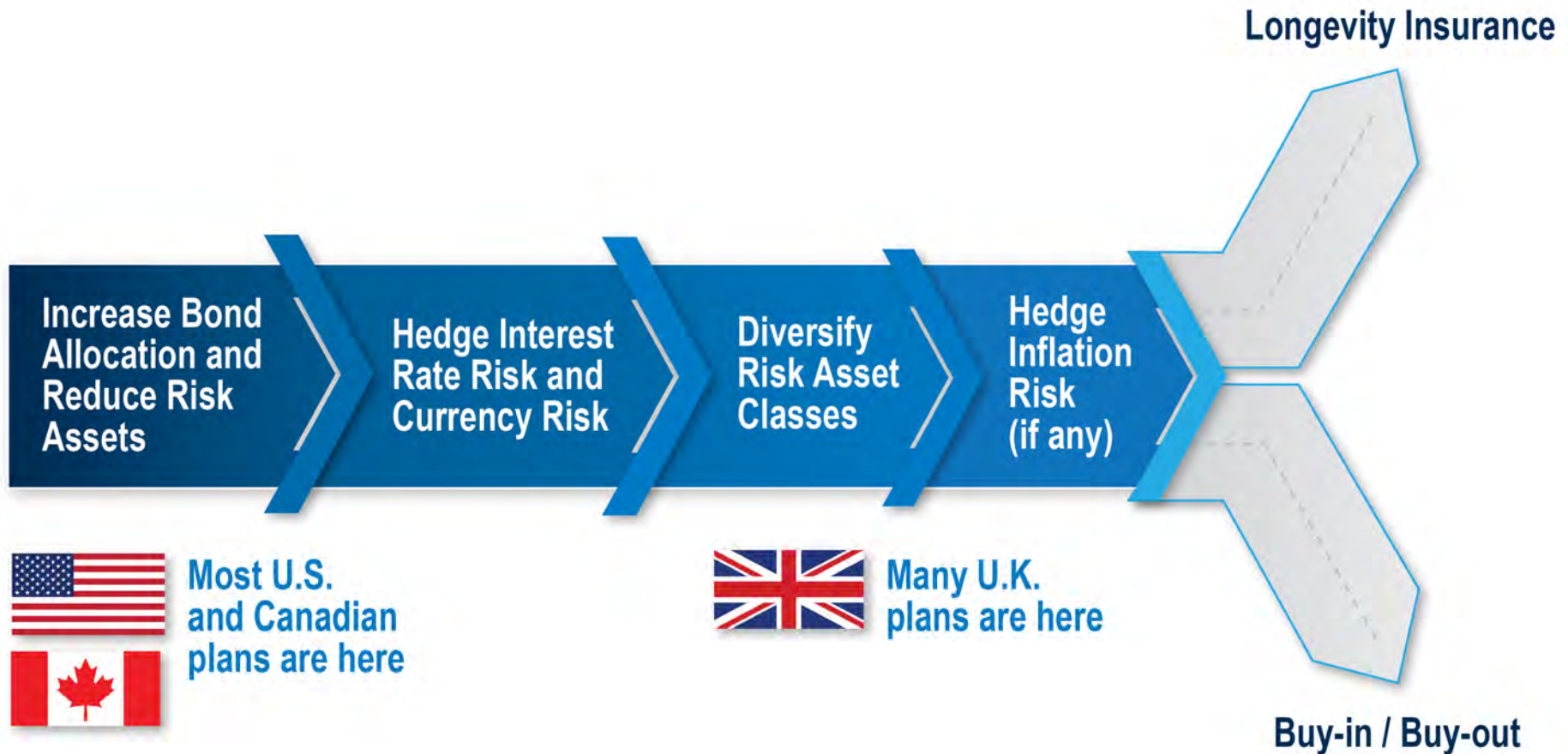
**The U.S.
is quickly
following suit.**



Canada may see
meaningful activity
as soon as

2013

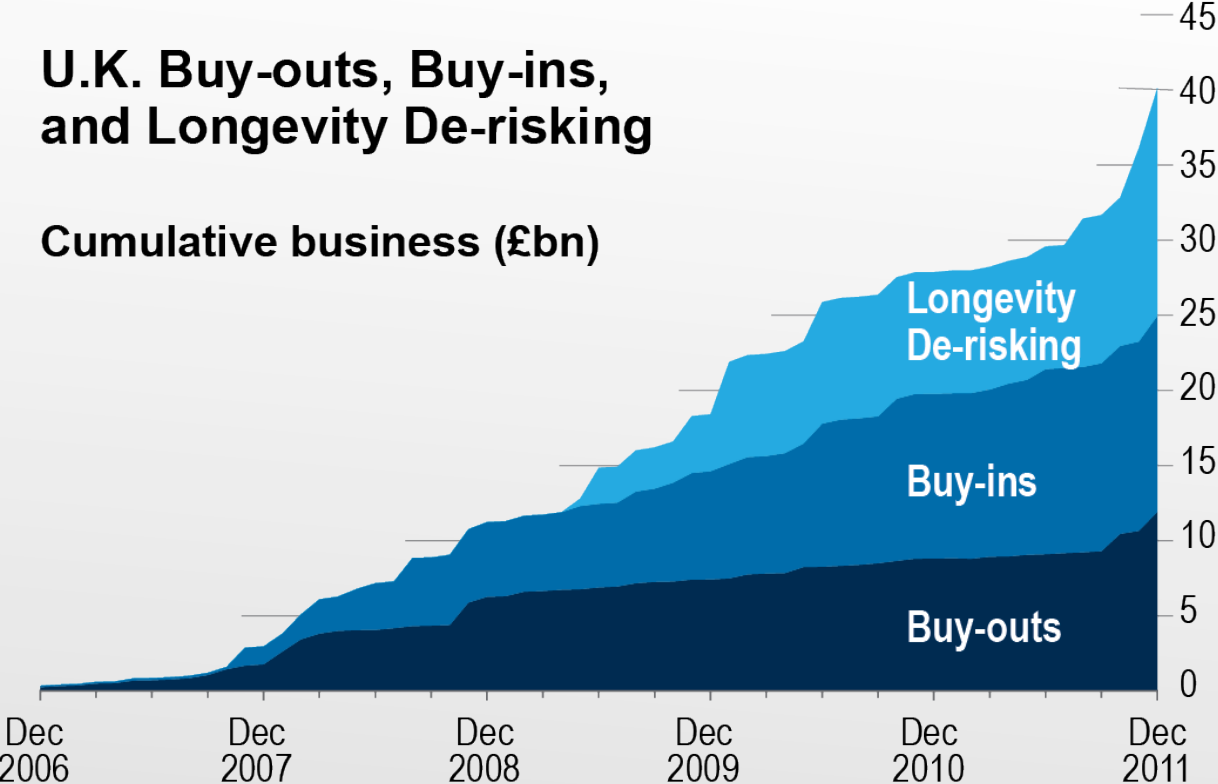
Companies that Aim to Reduce Pension Risk Are Following a Consistent Path



Companies Choose a Solution Based on Their Needs

U.K. Buy-outs, Buy-ins, and Longevity De-risking

Cumulative business (£bn)



Source: Lane Clark & Peacock LLP, 2012

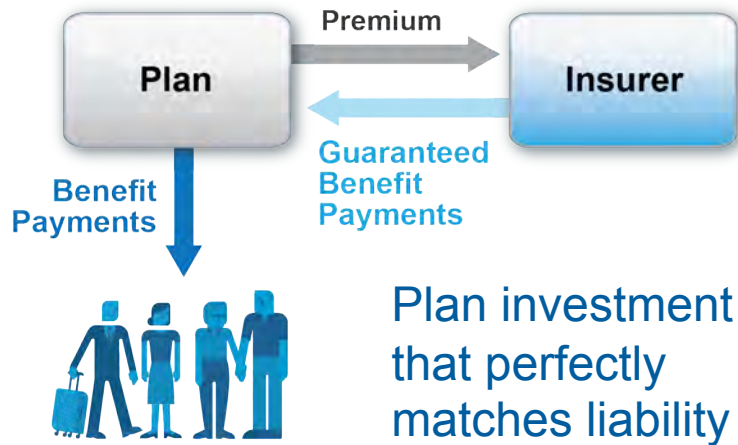
Longevity Insurance



Buy-in / Buy-out

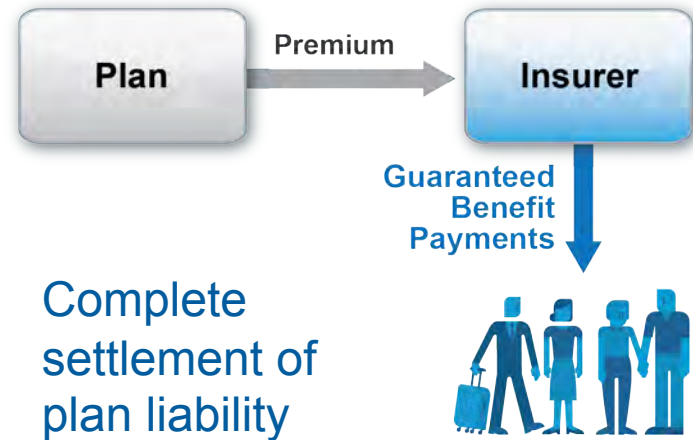


Buy-in



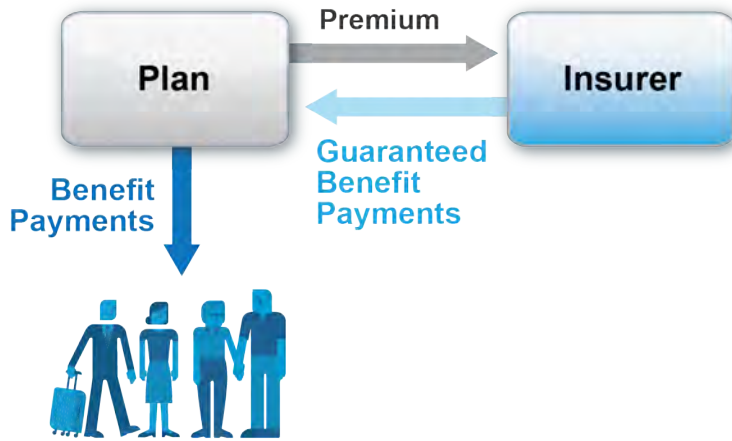
- Insurer makes guaranteed payments to **plan**
- Insurer covers investment and longevity risk
- **Does not trigger** settlement accounting or reduce funded status
- Convertible to buy-out at any time

Buy-out

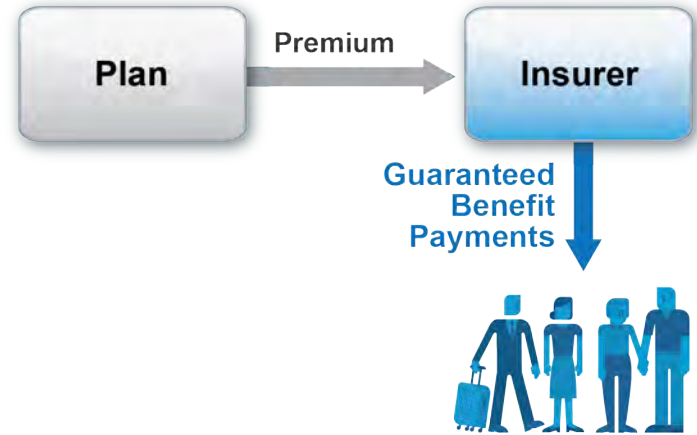


- Insurer makes guaranteed payments to **participants**
- Insurer covers investment and longevity risk
- **May trigger** settlement accounting and reduce funded status
- Irrevocable

Buy-in



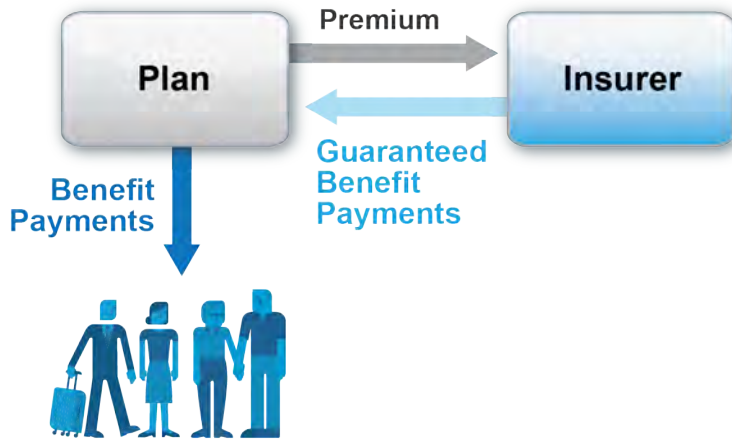
Buy-out



Uniq
Dec. 2011
£830m

Restructuring

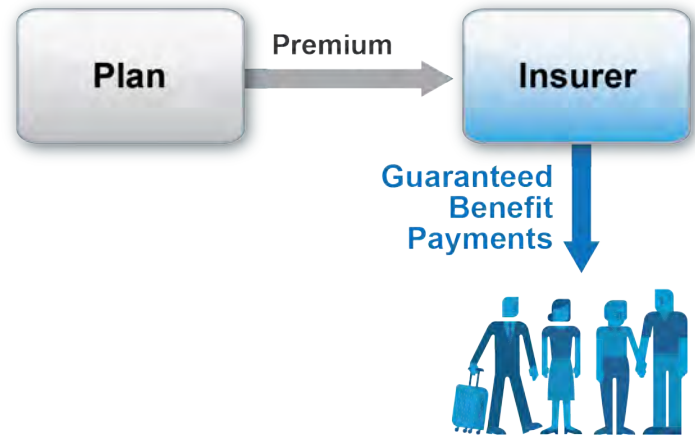
Buy-in



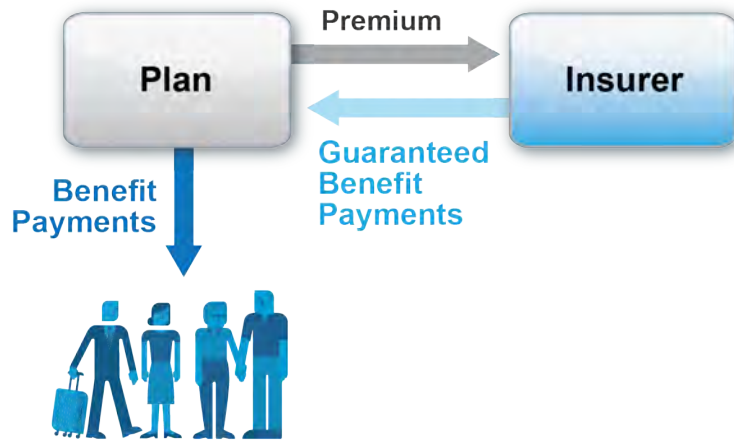
Cadbury
Dec. 2009
£500m

M&A

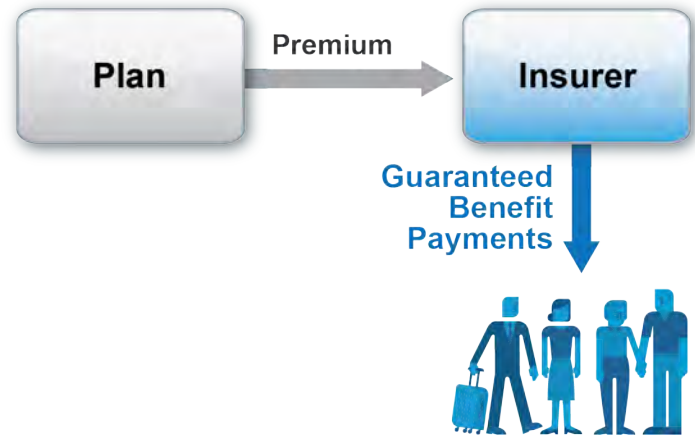
Buy-out



Buy-in



Buy-out



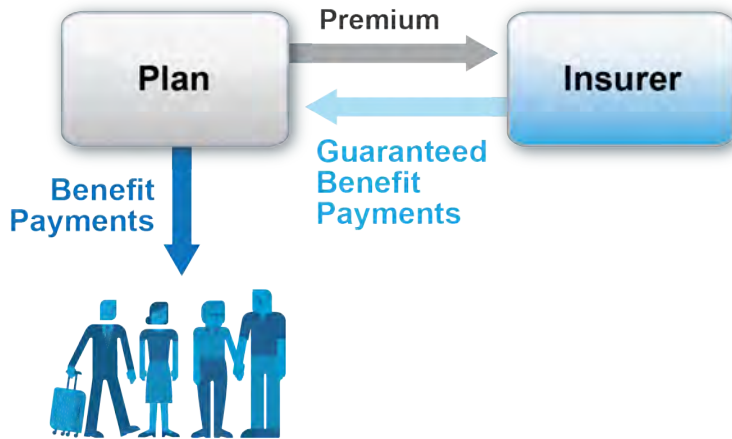
British Air

July 2010

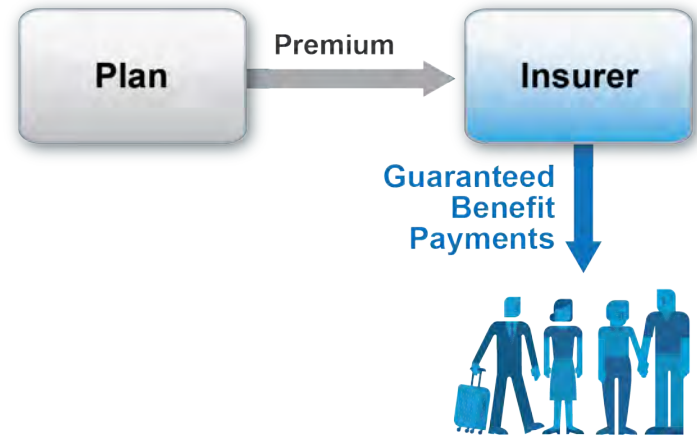
£1.3bn

**Opportunistic
de-risking**

Buy-in



Buy-out



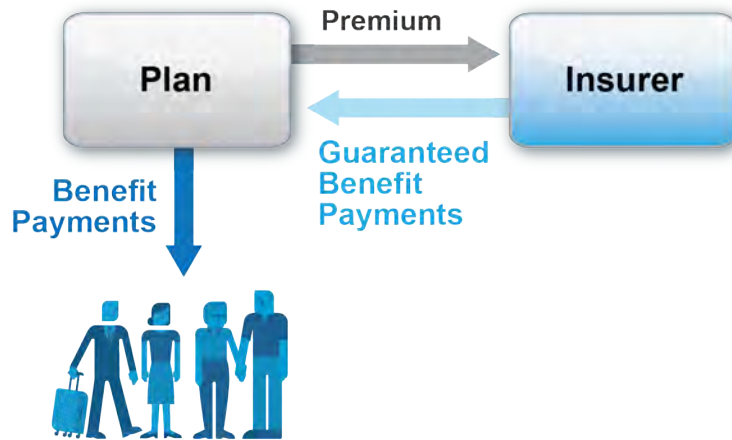
Turner & Newall

Nov. 2011

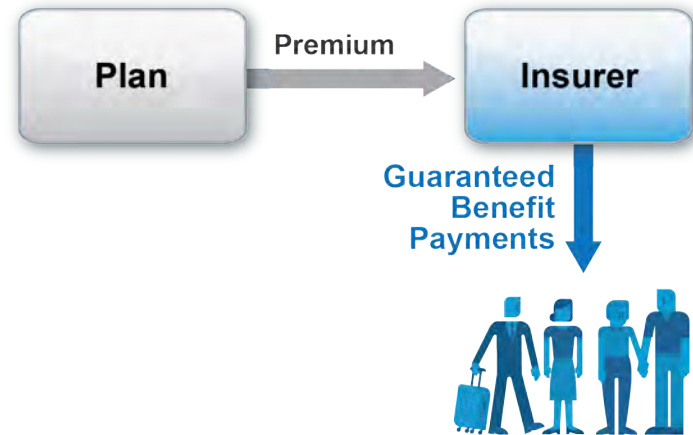
£1.1bn

Restructuring

Buy-in



Buy-out



General Motors Co. signs pension risk transfer agreement

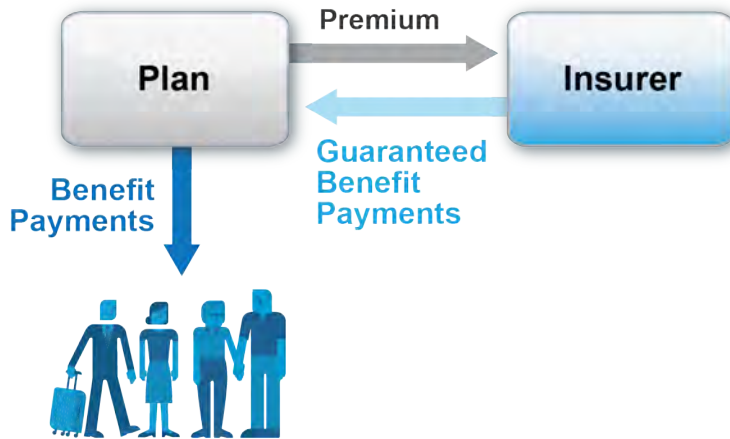
June 2012

approx. \$26bn

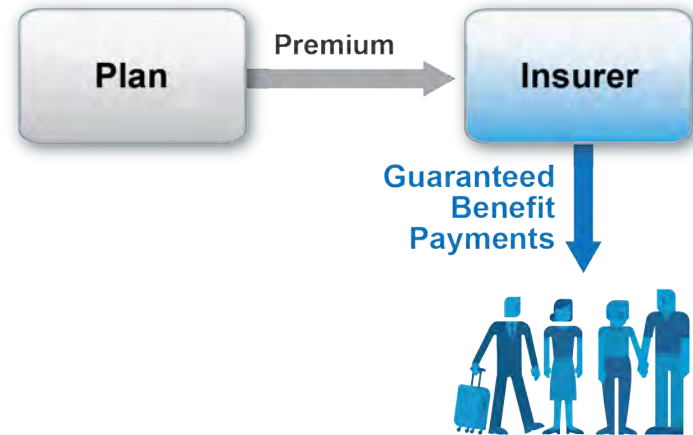
(closing expected year end 2012)

Risk reduction

Buy-in



Buy-out



Reducing Risk

- M&A / restructuring
- Fixed income alternative
- Market opportunity

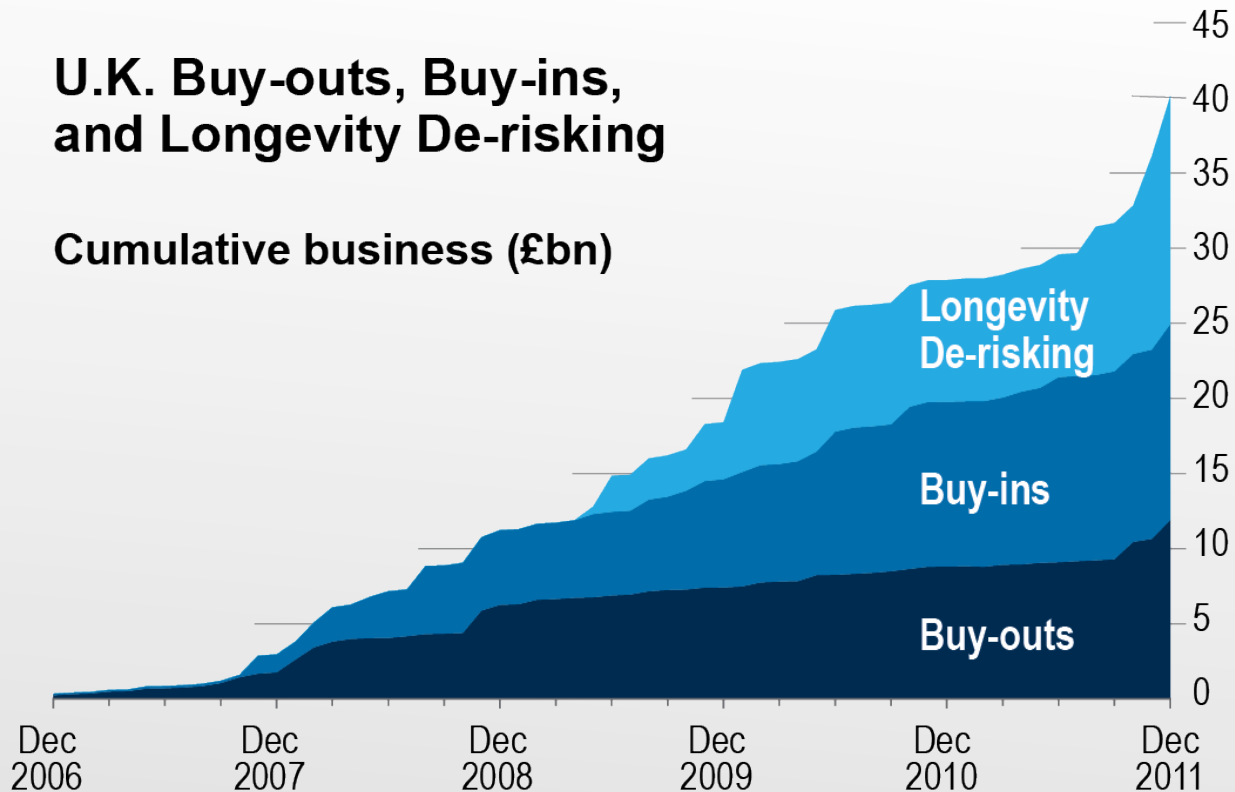
Partial or full termination

- Settle liability
- “Right size” the pension plan

Companies Choose a Solution Based on Their Needs

U.K. Buy-outs, Buy-ins, and Longevity De-risking

Cumulative business (£bn)



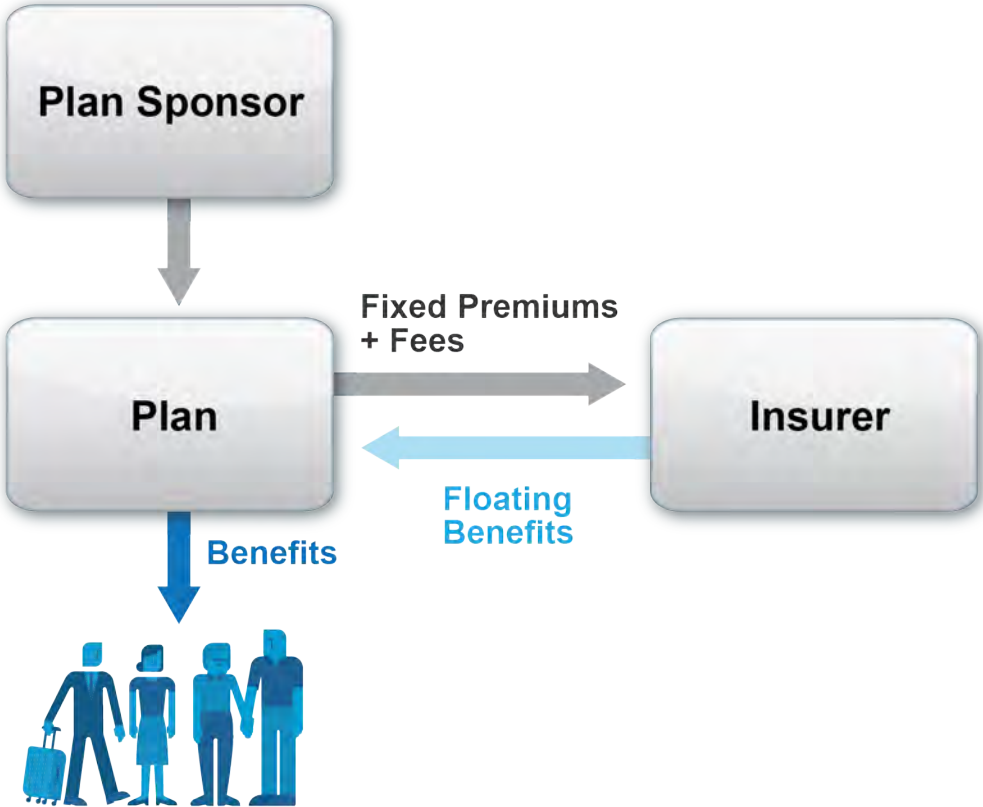
Source: Lane Clark & Peacock LLP, 2012

Longevity Insurance

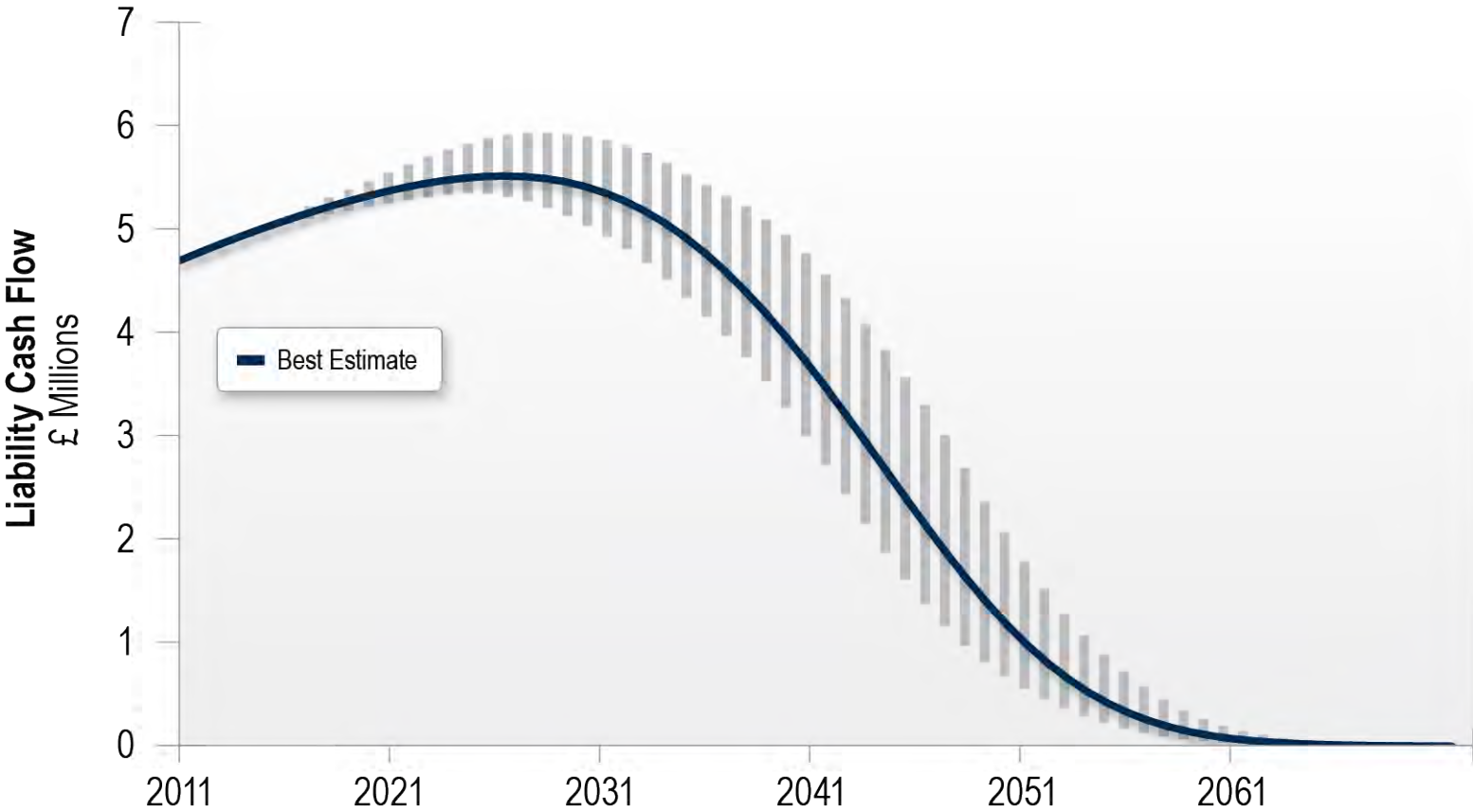


Buy-in / Buy-out

Longevity Insurance

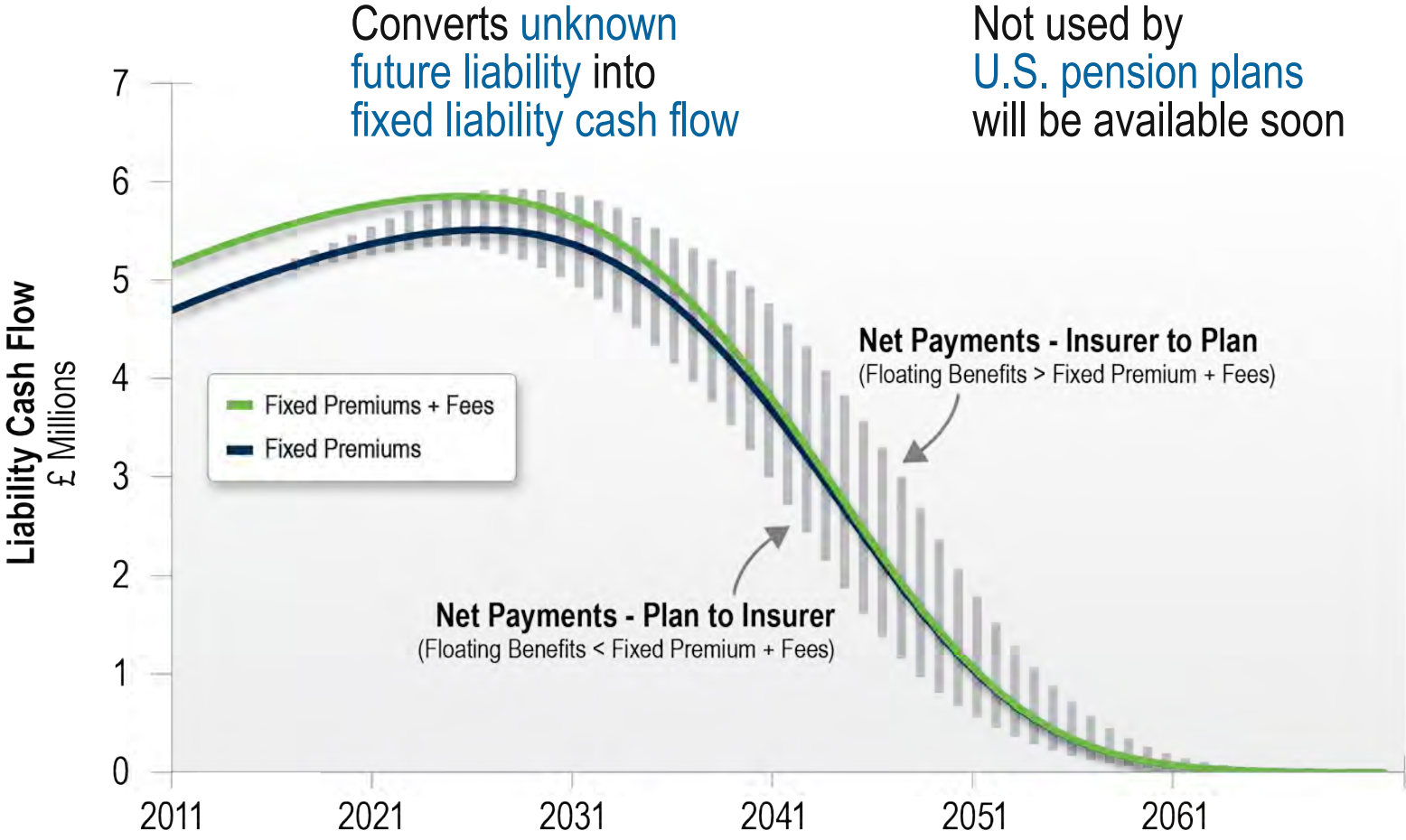


Longevity Insurance



Source: Prudential

Longevity Insurance



Source: Prudential

When is Longevity Insurance the Answer?

Longevity Insurance



Berkshire County

Dec. 2009

£750m

Rolls-Royce

Nov. 2011

£3bn

Buy-in / Buy-out

When is Longevity Insurance the Answer?

Longevity Insurance



Large
^
SCALE
v
Any

High
^
FIXED INCOME
ALLOCATION
v
Any

High
^
FUNDED
STATUS
v
Any

Some
^
RISK
RETENTION
v
None

Buy-in / Buy-out

What path will you take?



Amy Kessler
Senior Vice President
Head of Longevity Reinsurance
Prudential Retirement®

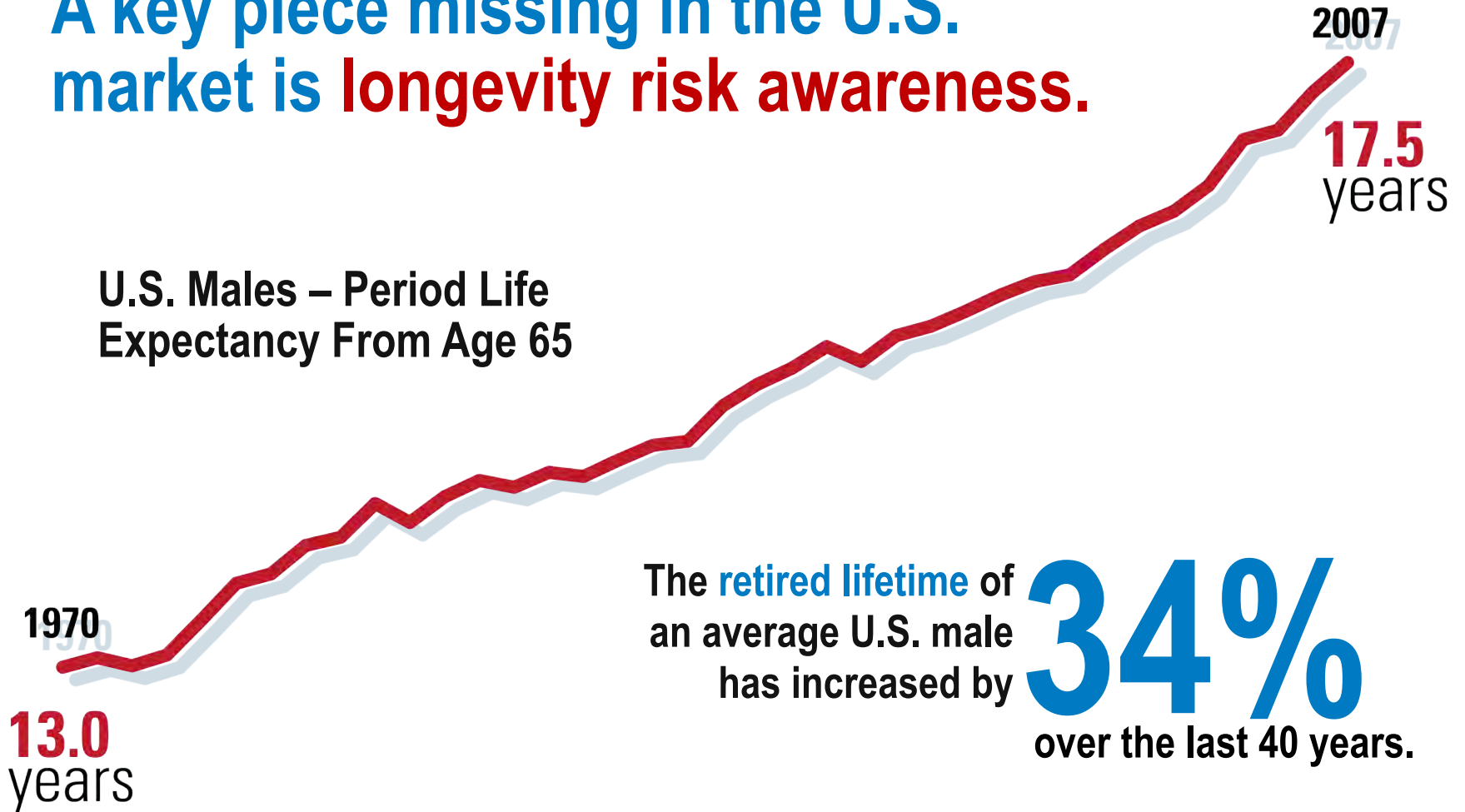
amy.kessler@prudential.com



Longevity Risk

A key piece missing in the U.S. market is **longevity risk awareness.**

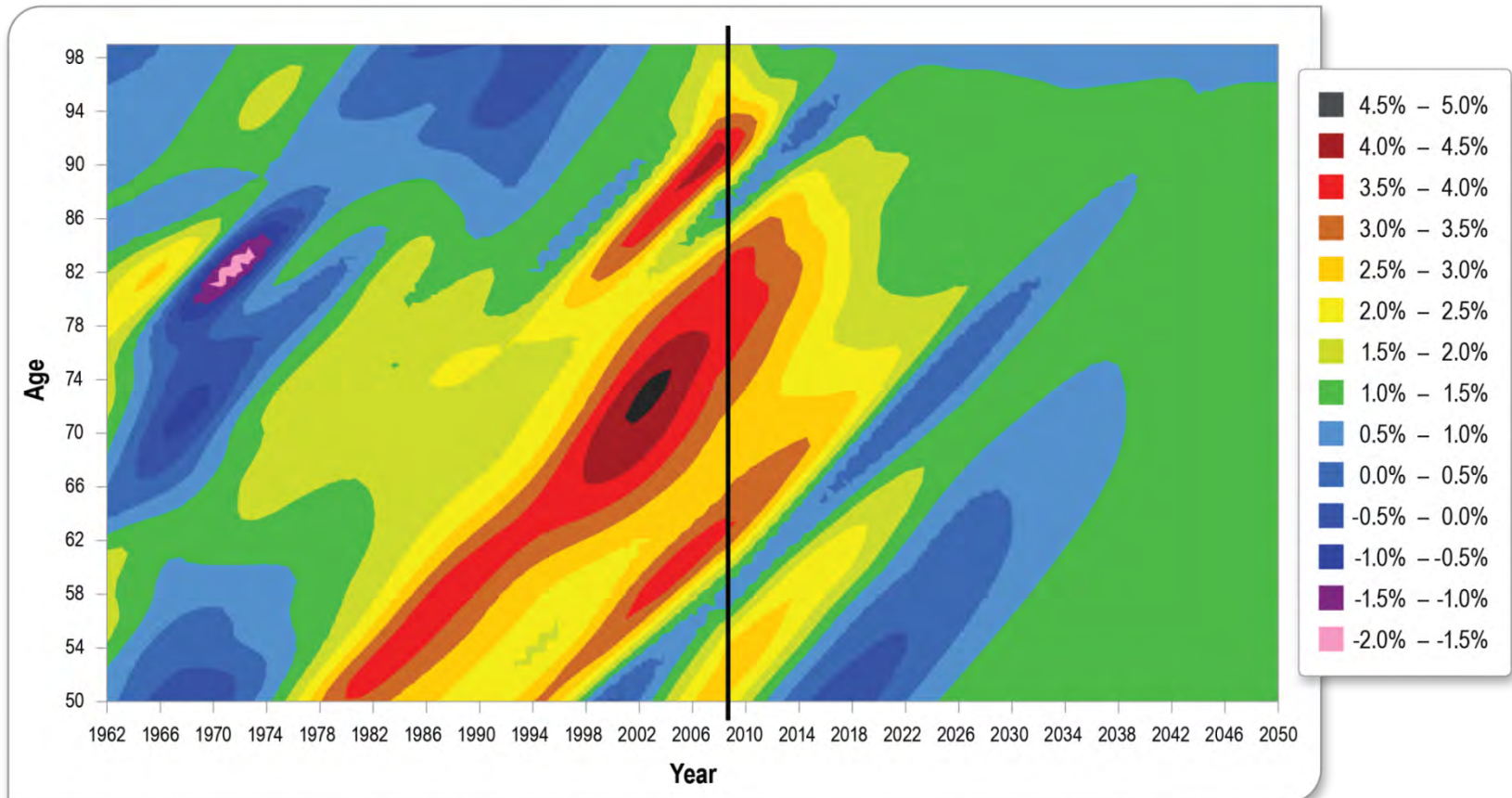
U.S. Males – Period Life Expectancy From Age 65



Longevity Risk

Male Historical Improvements

England & Wales Male Historical Improvements then CMI Improvements from 2009



Source: Pacific Life Reinsurance. Reprinted with permission.

Historical Data Source: U.K. Office of National Statistics, smoothed using Age-cohort p-spline smoothing.

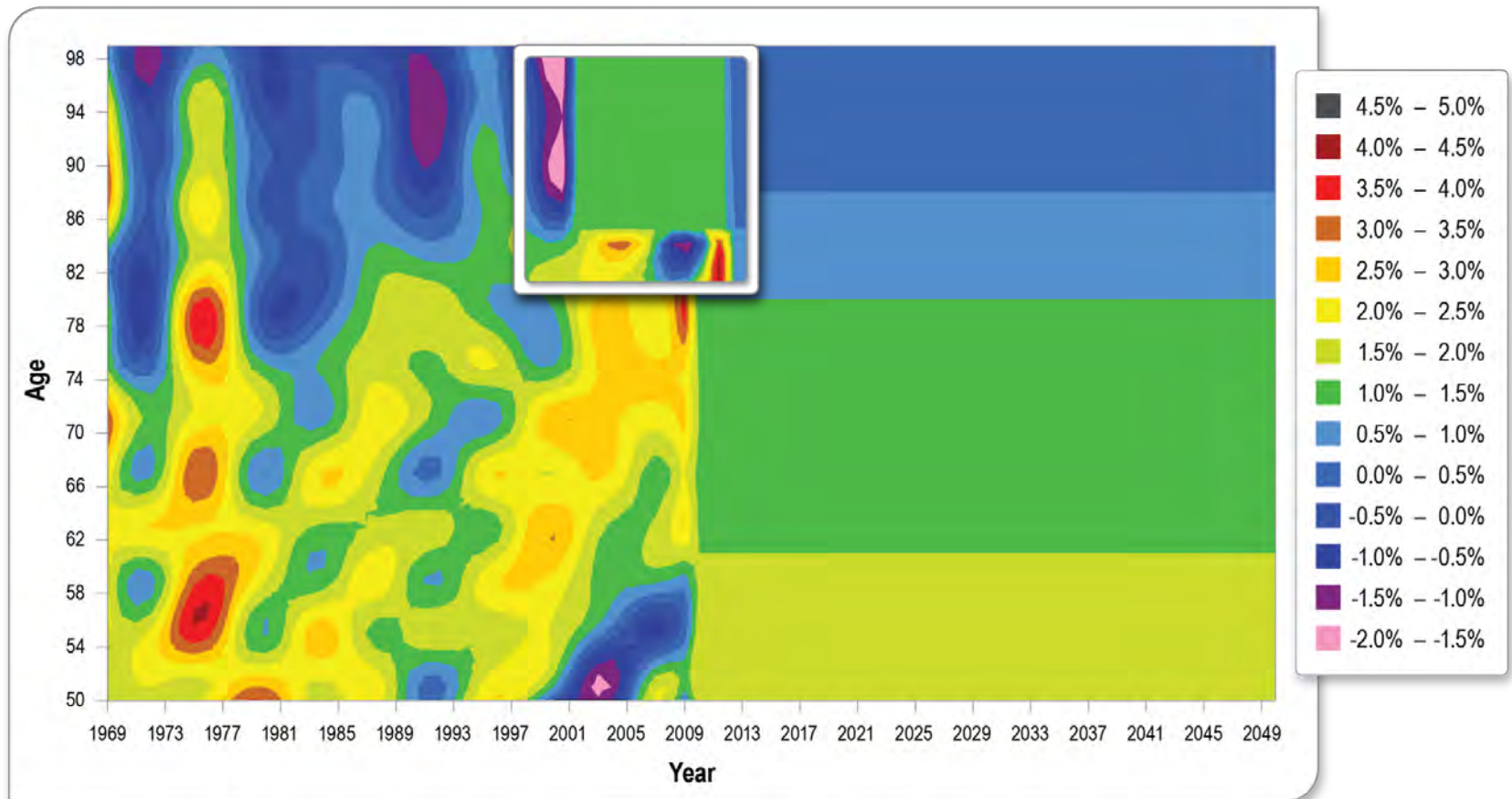
Improvement Projections Source: Continuous Mortality Investigation, Mortality Projections Model (CMI-2011 Model, Working Paper 55).

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Longevity Risk

Male Historical Improvements

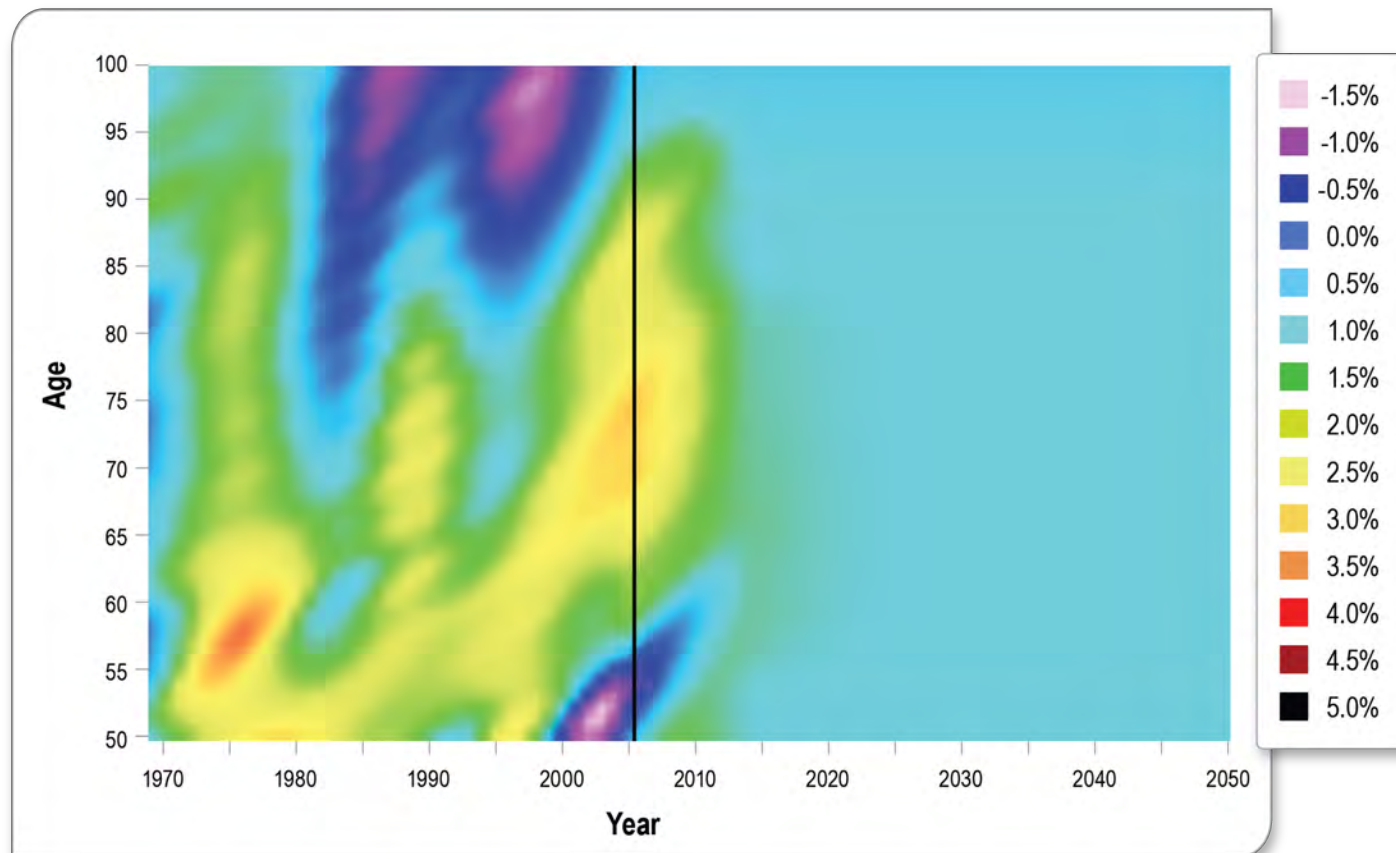
U.S. Male Historical Improvements up to 2009 then U.S. Scale AA Improvements



Longevity Risk

Male Historical Improvements

U.S. Male Historical Improvements through 2007 blended with anticipated future mortality then Scale BB Improvements



Historical improvement rates based on SSA mortality rates through 2007, blended using an advanced version of the CMI model assuming a 10 year cohort convergence period and a long term rate of 1%.

Source: Exposure Draft, Report of the Society of Actuaries, Mortality Improvement Scale BB, March 2012.

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