



Institute  
and Faculty  
of Actuaries

## Innovation in Annuities

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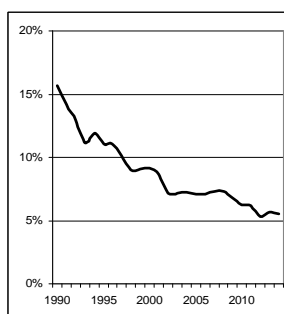
Robin Thompson

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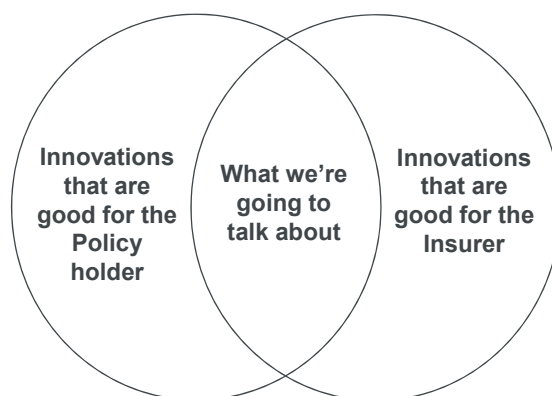
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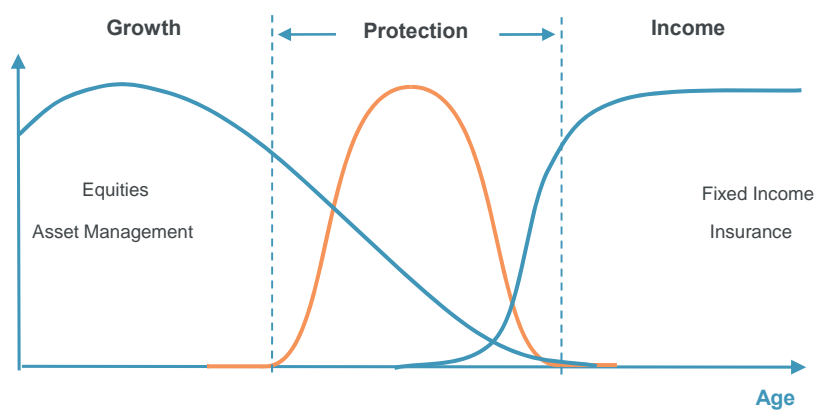
## Introduction



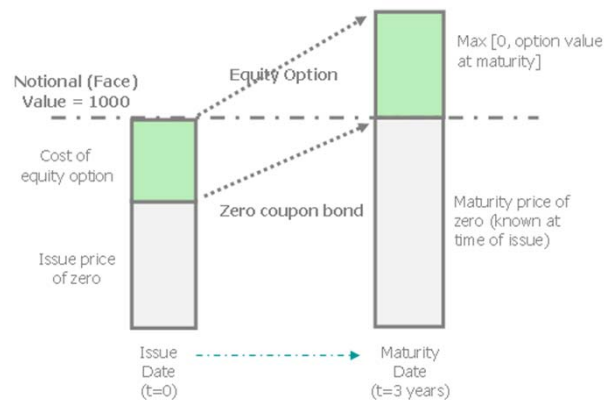
## Today's topic



## Structured products: why relevant



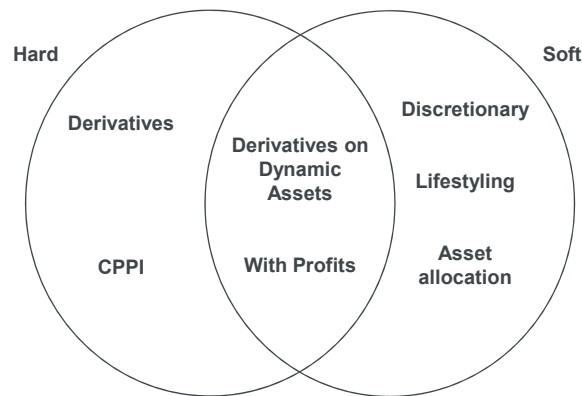
## Structured products: how do they work?



## Types of Protection

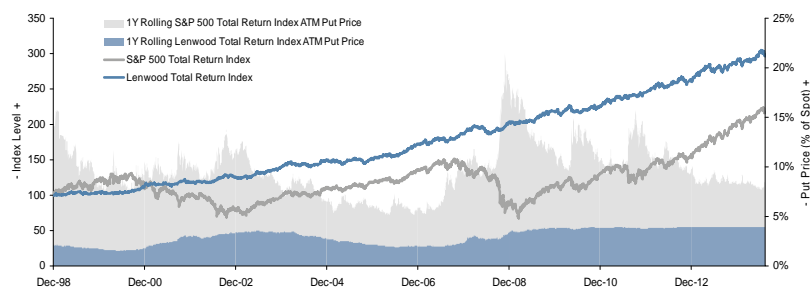


## Types of Protection



## Example

- Product design
  - Dynamic, multiasset, low volatility, smoothed returns
  - Flexible, differentiated, exclusive
- Stable predictable hedging costs
- Scalable approach – opportunity to offer more than 1 investment strategy



Note: This information refers to simulated past performance and past performance, both of which cannot be relied on as a guide to the future performance and are for informational purposes only. The used time series may include proxy assumptions (e.g. potential costs).  
Source: RBS M&B & Bloomberg, data taken from 12 Dec 1998 to 04 August 2014.

## Trends & Innovation

- Investment assets:
    - Monoasset > Multiasset
    - Static > Dynamic
    - Risk management
  - Simple, transparent products
  - Personalisation of Risk
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ALPHAARTISTS



## Innovation from the: US Insurance Industry

**J.P. Steele**  
**Partner**  
**Alpha Artists, LLC**  
**Index Methodologies, LLC**

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## The U.S. Demographics, Retirement Planning

- U.S. Trends – DB Plans
  - 10,000 Americans turn 65 daily or 4,000,000 annually<sup>1</sup>
  - In 1998, 90% of the Fortune 100 companies offered DB plans to new salaried employees<sup>3</sup>
  - Down 43% in 2009, Down 37% in 2010, Down 33% in 2011.
- U.S. Trends - DC Plans
  - As of 30/6/2012, 19% of Fortune 100 companies offered “hybrid” DB/DC plans<sup>3</sup>
  - 7 companies out of Fortune100 now offer traditional DBs to new employees
  - In 2012, 68% of Fortune 100 companies offered only a DC plan to new salaried workers
  - 401k vehicles dominate
    - 41% of plans feature employer matching contributions
    - 56% allow both matching and nonmatching contributions

<sup>1</sup> The Washington Post, 24/7/2014, <sup>2</sup> Statistic Brain, [www.statisticbrain.com](http://www.statisticbrain.com), <sup>3</sup> [www.workforce.com](http://www.workforce.com), Towers Watson

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## The U.S. Annuity Industry

- U.S. Annuity Market Size
- Market Segmentation
- Different types of U.S. Products
- Innovation: Fixed Index Annuities
  - Pre-Crisis product offering
  - What changed?
  - Transformational features
  - Impact

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## The U.S. Annuity Industry

- Current Level of Annual Annuity Sales<sup>3</sup>
  - 2013: \$230.1 Billion in new sales (5% Y/o/Y Growth)
  - 2014 (6 months): \$119.5 Billion in new sales (10% Y/o/Y Growth)
- The Quarterly Annuity Sales Growth Profile<sup>3</sup>
  - 4Q13: 17% Growth (largest in 11 Years), \$1.7B increase from prior quarter
  - 1Q14: 11% increase Y/o/Y
  - 2Q14: 8% increases Y/o/Y
- All accomplished in ultra low market interest rates

<sup>3</sup> LIMRA Secure Retirement Institute

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## Market Segmentation

- Accumulation
- Accumulation/Income
- Income

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## US-UK Sales/Growth Product Comparison

US PRODUCTS	Sales 2013 (£B)	% Δ	UK PRODUCTS (~Equivalent)
Variable Annuity	91.9	 (2%)	Unit Linked Funds
Fixed-Rate Deferred Annuities	18.1	 19%	Continental With Profits
Deferred Annuities	42.9	 17%	Continental With Profits
Income Annuities Single Premium <u>Immediate</u> Annuity	5.2	 8%	Fixed Annuities
<u>Deferred</u> Income Annuities	1.4	 113%	Deferred Annuities (Institutional DB)
N/A	-	-	UK With Profits
Fixed Index Annuities	24.6	 16%	N/A

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## Fixed Index Annuity: Pre-Crisis

- USD\$25 billion per year in sales
- High agent level commissions (i.e., 8-14%)
- Premium bonuses present (5-7% average)
- Two investment choices
  1. Fixed account
  2. M-T-M or Annual reset – S&P500 w/o dividends (SPX)
    - All SPX index credits were capped due to hedging structures
    - Market caps were 3.00-3.5% annually
- Variable annuity market had crashed
  - Policyholder accumulated values significantly depressed
  - Insurer hedges suffering
  - Generous policy benefits pulled

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## Fixed Index Annuity: What changed?

- 2009: Common Investment Themes
  - Consumers willing to give up high returns in exchange for downside protection
  - Reasonable growth rates accepted (“new norm”)
  - Flexibility prized
  - Choices are highly valued
  - Consumers horrified by financial and economic volatility
  - Consumers need income choices to address low market interest rates, demographics and devastated investment balances
  - Finally, consumers want protection
  - Product development begins....

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## Transformational features

- April 2012 “Total Value Annuity” Launched featuring
  - 8-10% premium bonus (varies by resident state)
  - Stacked accumulated interest concept
  - GLWB rider with highest guaranteed income, increasing annually
    - Annuitants choose income start date with know income factors
    - Income can be started, stopped and restarted (once)
  - Guaranteed Minimum Death Benefit
  - Guaranteed minimum annual credited interest rate (1-3%)
  - Penalty-free partial withdrawals of up to 10% annually
  - 100% Terminal Illness Withdrawal Waiver
  - 100% Nursing Home Waiver
  - Surrender chargers for 10 years
  - Principal protected, accumulated values never go down

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## Impact

- Total Value Annuity interest crediting options:
  - Fixed Account
  - Annual PTP SPX
  - RBS custom proprietary investment index added:
    - 100% formulaic, rules-based
    - Uncapped return profile
    - 5 year investment horizon structure
    - RBS Volatility Control Overlay added onto index targeting 7.50% annual volatility to stabilize performance profile
    - Low correlation to equities
- Sales after 30 months: USD\$5.7B

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## Transformation Continues

- 306 Index Annuities - Segmented By Product
- 1,632 Index Annuity Strategies – Segmented By Index Crediting Method
- 24 custom proprietary investment indices launched in the last 30 months
- 48 life insurers issuing FIAs (doubled)
- 2014 Fixed Index Annuity premium -> expected to exceed USD\$50 Billion from USD\$25 Billion in 2009

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## Other Innovations & Current Themes & Modifications

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## Private Retirement Provision Worldwide

**The Netherlands**  
Collective DC  
Conditional Indexing

**Denmark**  
ATP - deferred annuities + bonus  
Move to U-L from with-profits

**Sweden**  
DB, DC,  
WP, Annuities

**Hong Kong**  
Benefits taken as a lump sum  
**Japan**

Part-time work during retirement  
Variable annuities  
Savings accounts.

### USA

Lump sums  
Fixed-term withdrawals  
Variable annuities  
Fixed Annuities  
New - deferred annuities  
Minimum withdrawals apply from age 70.5.

### Singapore

Publically managed, fully-funded individual DC accounts  
Annuitise or invest in a retirement account.

### New Zealand

KiwiSaver (~ superannuation)  
Access to savings from age 65 / buy 1<sup>st</sup> house / severe financial hardship

### South Africa

<1/3<sup>rd</sup> lump sum  
> 2/3<sup>rd</sup> annuitised

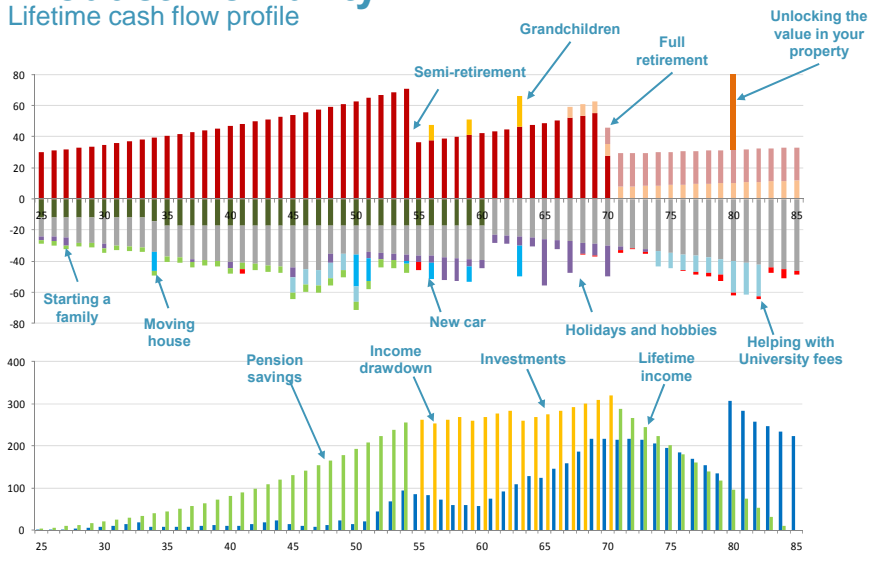
### Australia

Compulsory saving (superannuation)  
No requirement to annuitise  
Tax-advantaged cash withdrawals post-retirement

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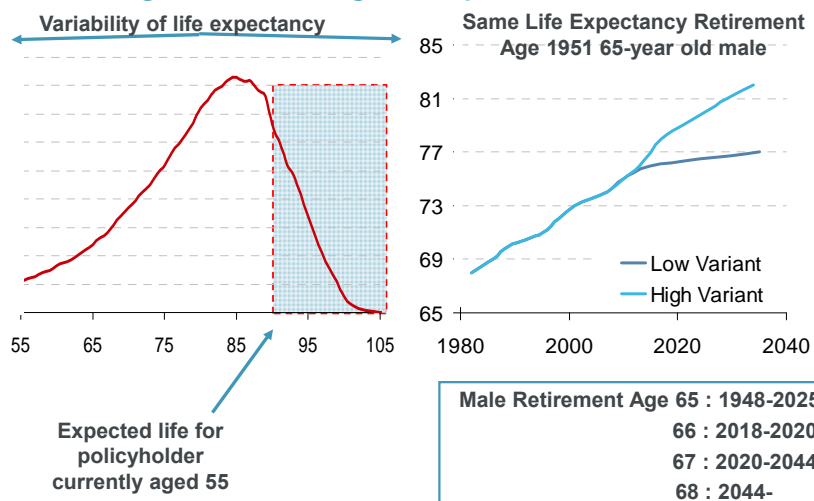
## Product Flexibility

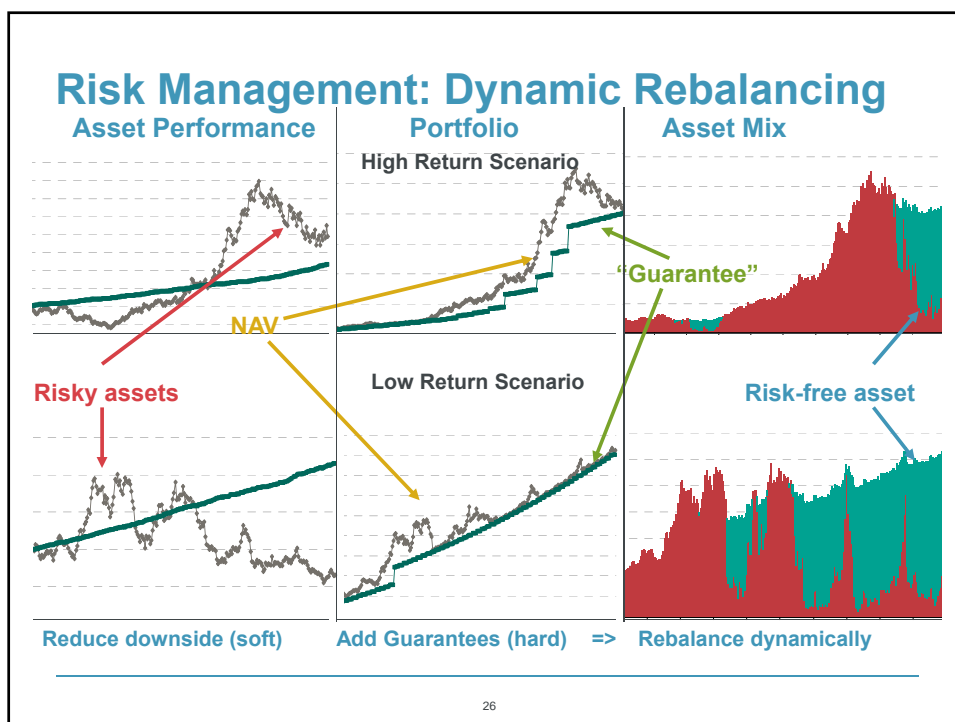
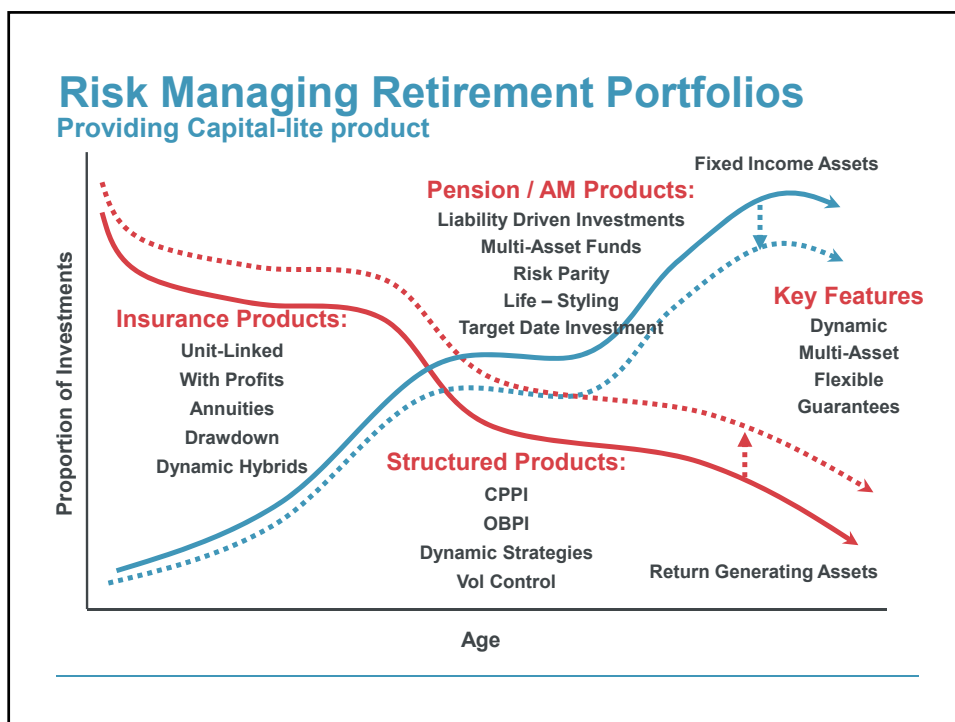
Lifetime cash flow profile



## Longer Retirement

Protection against exhausting a cash pot

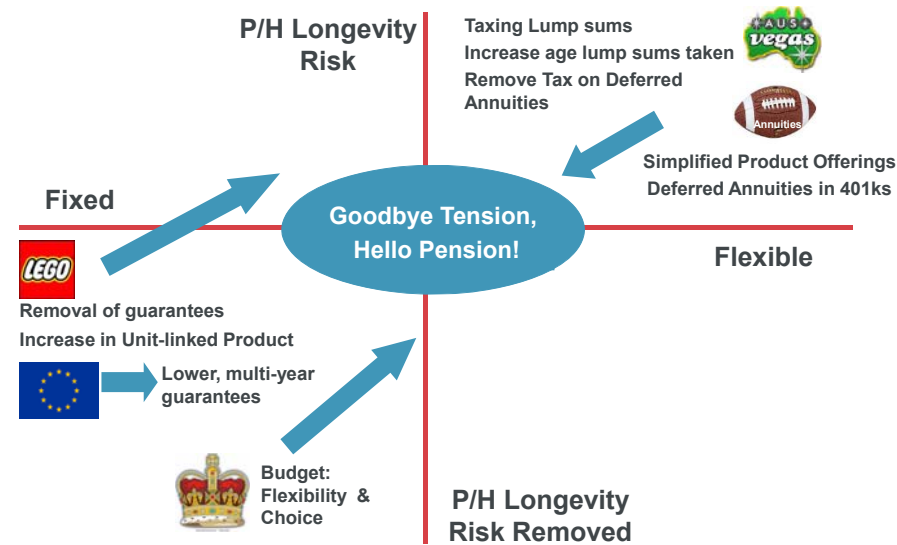




## Retirement System Biases

Country	Biased Towards	Biased Against
US	Investment Choice Guarantee Complexity	Longevity Risk
Australia	Tax-free lump sums Option against Pillar 1 / State	Deferred annuities
Mainland Europe	Pillar 1 reliance (pensions) Intragenerational Risks – CDC (pensions) Annual guaranteed bonuses – capital intensive (insurance) Fixed Income Investments, yield (insurance)	Investment Choice Return generating assets
Denmark	LDI / Return Split – Deferred annuities (ATP) Modified DC with High Guarantees / Hedging	Investment Choice Return generating assets
UK	Inflation-linked Products Annuities / Fixed Income on Retirement	Investment Choice on Retirement

## Changes to Proposed Systems



## Summary

- **Focus on Transition**
  - **Multi-Asset, Dynamic**
  - **Guarantees**
  - **Flexible**
  - **International Convergence**
- 



**Questions**

**Comments**

Expressions of individual views by members of the Institute and Faculty of Actuaries and its staff are encouraged.

The views expressed in this presentation are those of the presenter.