



Society of Actuaries in Ireland

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# The New Retirement Saver

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12 October 2015

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# Background

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- Retirement Actuary of the Future Working Party, Discussion Paper presented to Society 2013 (Q4)
- Identification of the likely development of existing and potential roles for future “Retirement Actuaries”
- Identification of the skills and competencies that will be needed in order to continue to play a key role in future retirement planning
- Our focus for this evening is on the future “DC World”



# Possible Key Roles for Actuaries

## Potential Roles – DC Services

|   |   |   |                     |
|---|---|---|---------------------|
| <p>Large</p> <p>Size of Role</p> <p>Small</p> |   |   |                     |
|   | <b>Wealth management advice to individuals</b>  | <ul style="list-style-type: none"><li>• Investment solutions</li><li>• Guarantees</li></ul>                                       | Retirement products |
|   | <ul style="list-style-type: none"><li>• Retirement education and awareness</li><li>• Work-force management</li><li>• Employer advice/consulting</li></ul> | Communication of DC benefit/outcome   |                     |
|   | Coverage advice and IORPs monitoring  | <ul style="list-style-type: none"><li>• Advisory software</li><li>• Government advice</li><li>• DC scheme consolidation</li></ul> |                     |



# Recommendations Made

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4. Opportunities will exist for actuaries to develop retirement solutions for members retiring from DC schemes with “un-defined benefits”. Potentially leading to be a blurring of practice areas (between Pension and Life Actuaries) in the post-retirement market as “pension challenges” inter-mingle with “insurance solutions”. This could create a “retirement actuary” sub-practice area.

## Recommendation 5

**Pension Actuaries need to consider up-skilling in Life Insurance techniques that impact on post-retirement product design.**

## Recommendation 6

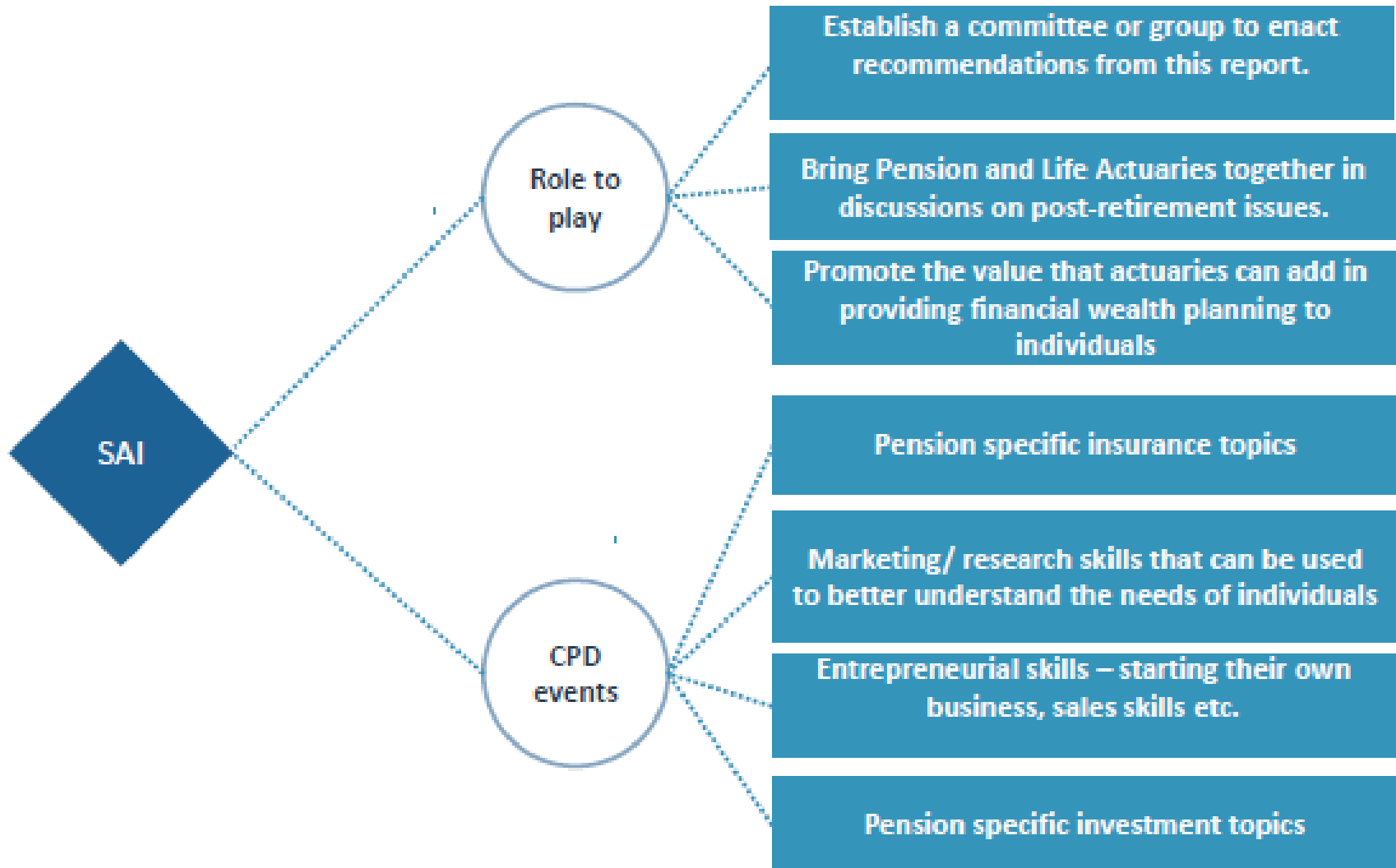
**The SAI has a role to play in bringing Pension and Life Actuaries together in discussions on post-retirement issues.**

## Recommendation 7

**The SAI should consider holding CPD events that introduce Pensions Actuaries to “relevant” technical insurance issues that impact the retirement market.**



# Recommendations - Role of the Society





# Supplementary Pension Provision

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- The Irish State Pension – payable from 66/67/68
- Approximately 33% of the average industrial wage – quite high adequacy compared to UK
- Other benefits which are provided based on age include Free Travel, Household Benefits, Tax and USC Relief, The Fair Deal Scheme
- Sustainability of State Benefits – OECD, SAI, MMGI
- No Mandatory Pillar, yet



# Product Design for the Future Pension Saver

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- Retirement Saving/Investing World is changed
- Uncertainty and Flexibility – Opportunity?
- Universal Pension Provision
- Today's speakers will look at the requirements of DC Members from the Demand Side and retirement products available from the Supply Side



# DC Mass Market – Product Supply & Demand

| Demand from          | Demand for?  | Supply Side   |
|----------------------|--|---|
| Investor/Advisor     | Investment Guarantee/<br>Income Underpin/<br>Retirement<br>Flexibility/Match<br>Spending Pattern | Insurance Companies/<br>Investment<br>Banks/Other Investors |
| Saver/Investor/State | Transparency/<br>Certainty Fund<br>Secure/Perceived<br>Value                                     | Insurance Companies   |

- Matching Customer Needs/Wants with Product Design





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# **This generation of pension savers**

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# Outline

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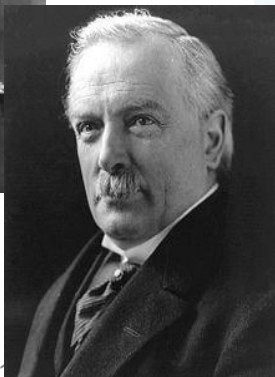
- Pensions in Ireland today
- Some retirement scenarios
- Possible options

***Disclaimer:***

***The material, content and views in the following presentation are those of the presenter(s).***

# History of pensions

- Ireland
  - Brehon laws: legal responsibility on the kin group to take care of its members
- Germany
  - 1645: widow's fund for clergy
- US
  - 1780s: promises made to veterans of the Revolutionary War

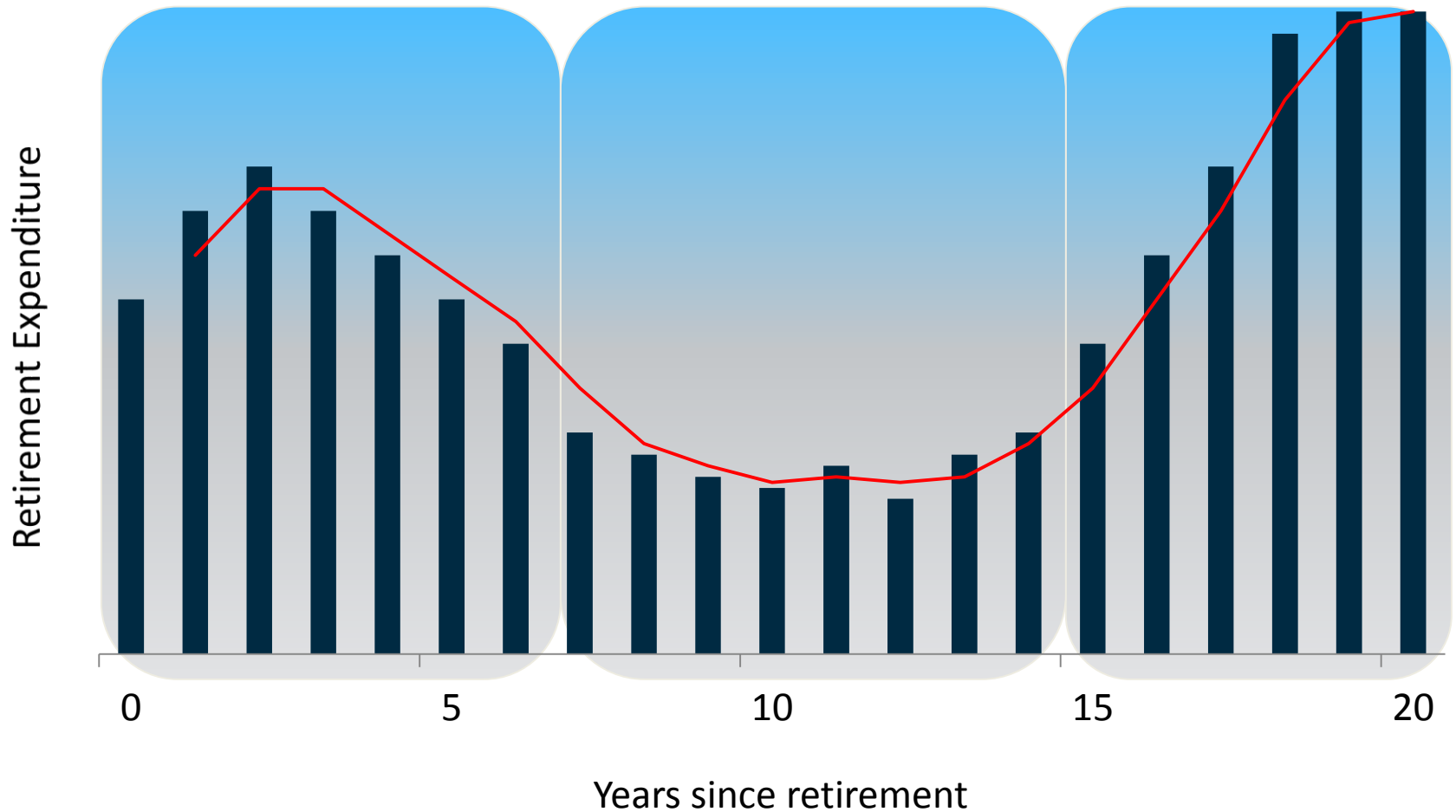


- Public Pensions
  - 1889: Old age pension introduced by Bismarck in Germany
  - 1908: Old age pension introduced in UK
- Introduction of defined benefit
  - Passing responsibility for retirement to employers

# What do today's retirees need?



# Spending patterns in retirement



# What about the State Pension?

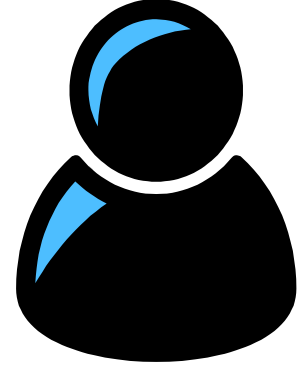
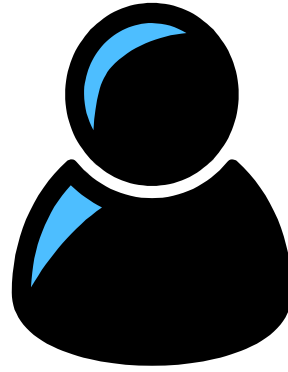
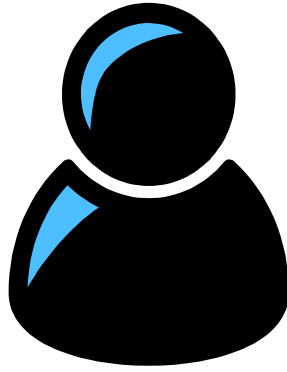
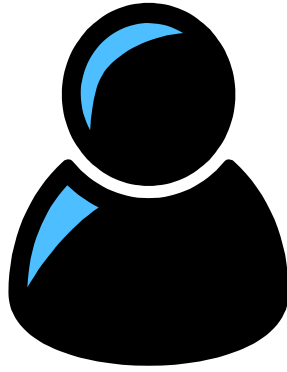
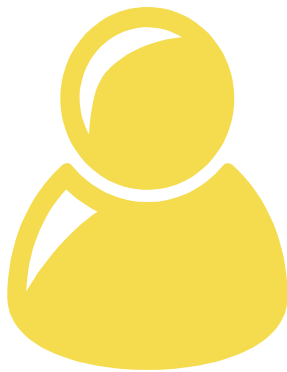
- State pension
  - Defined benefit
  - Payable from age 68 from 2028
  - Ranked 2<sup>nd</sup> for adequacy \*
  - But 23<sup>rd</sup> (out of 25) for sustainability
- Projecting contributions & benefits to 2066, aggregate deficit is €324 billion \*\*
  - nearly double the value of the national debt.

\* Source: Mercer Melbourne Global Pension Index

\*\* Source: Actuarial Review of the Social Insurance Fund, Undertaken by KPMG on behalf of the Department of Social Protection, June 2012

# What about the State Pension?

**NOW**

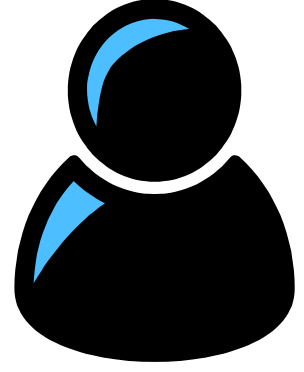
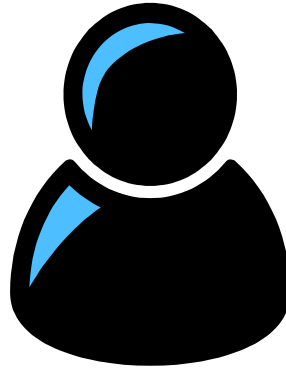
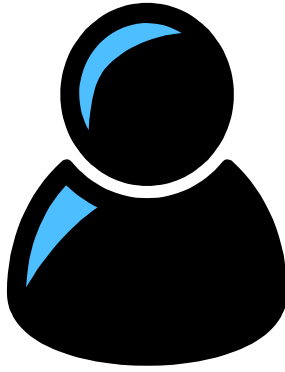
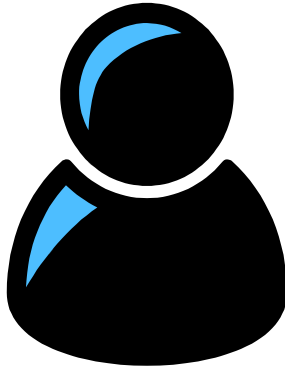
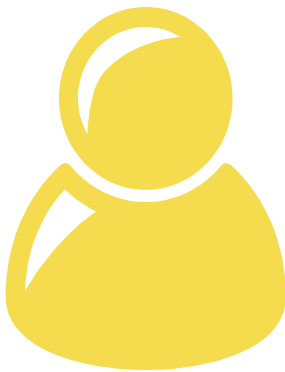


Pensioners

Workers

# What about the State Pension?

2050

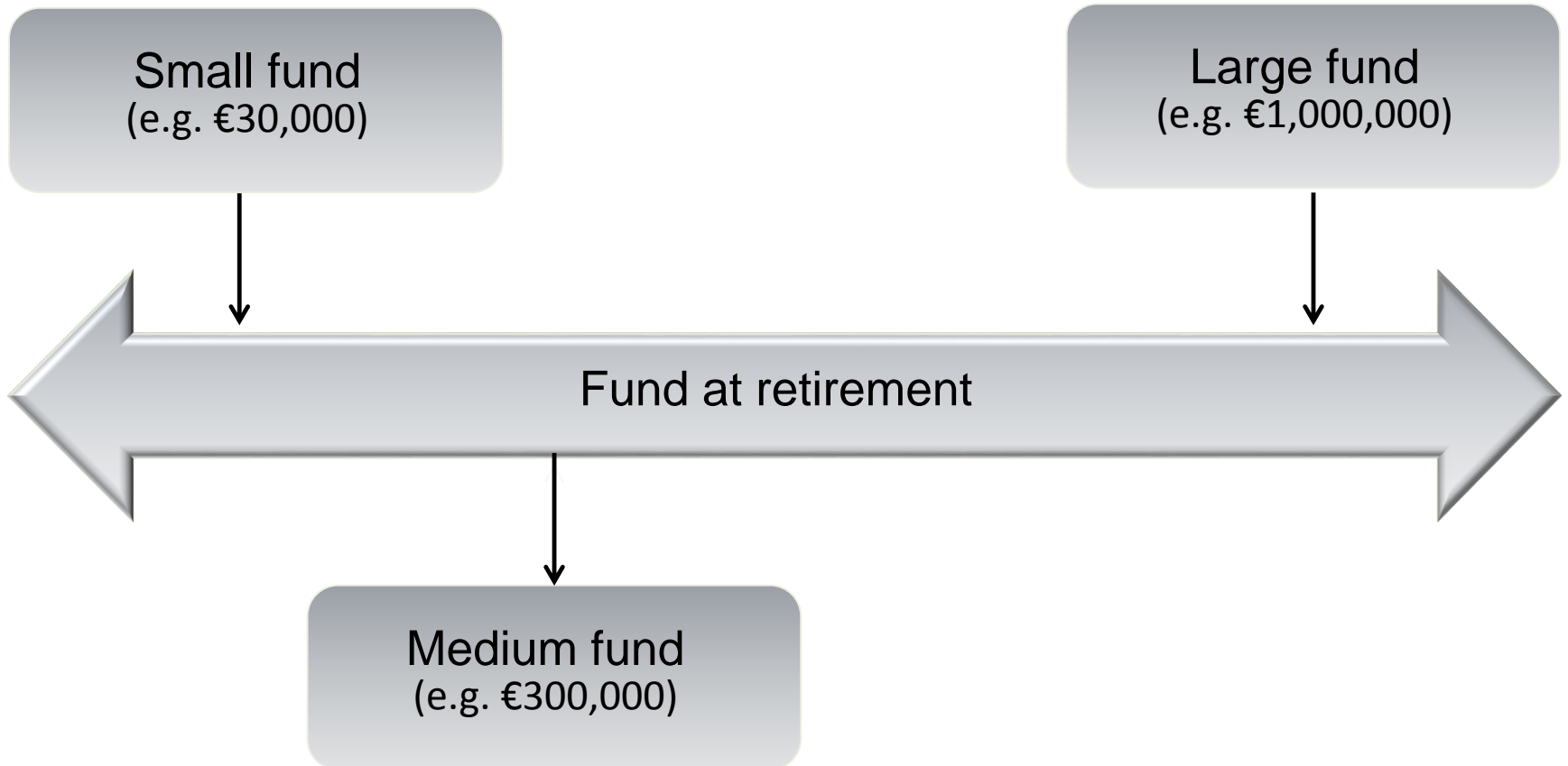


Pensioners

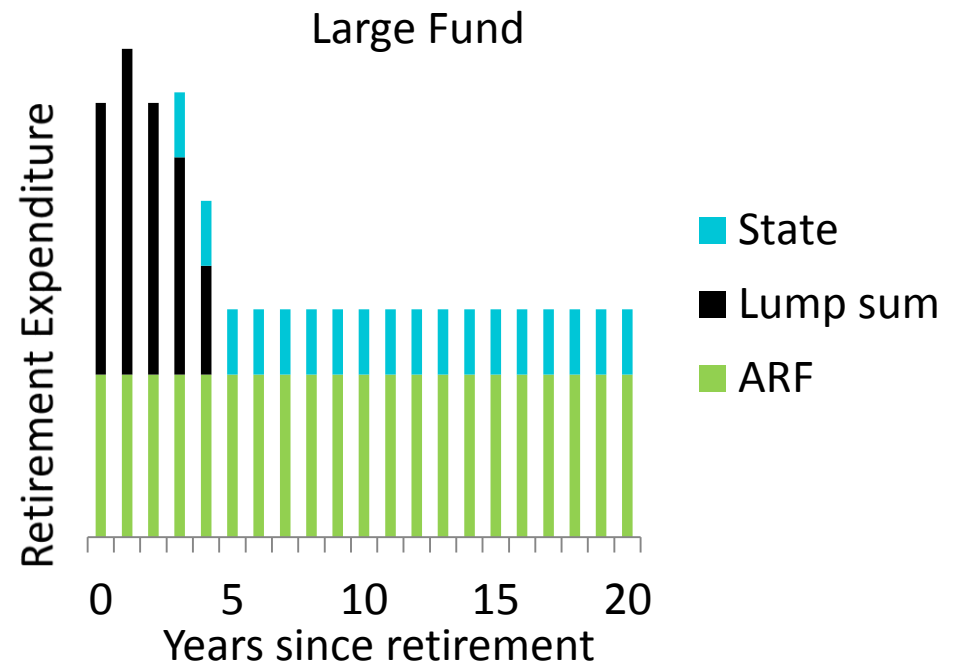
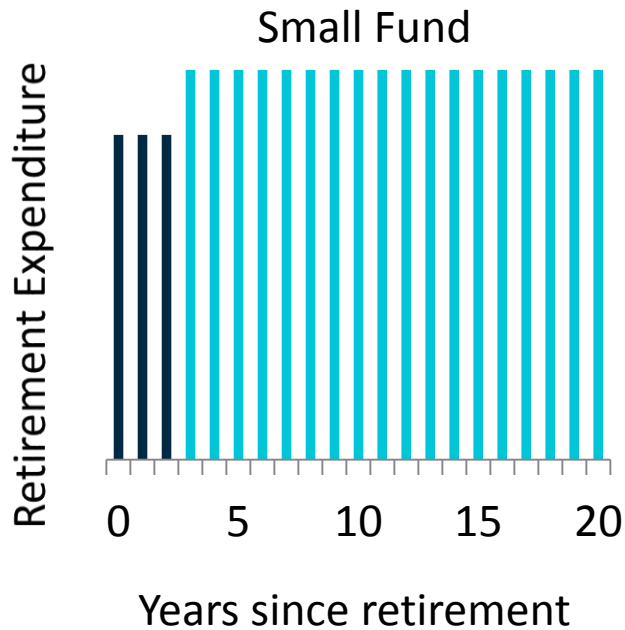
Workers



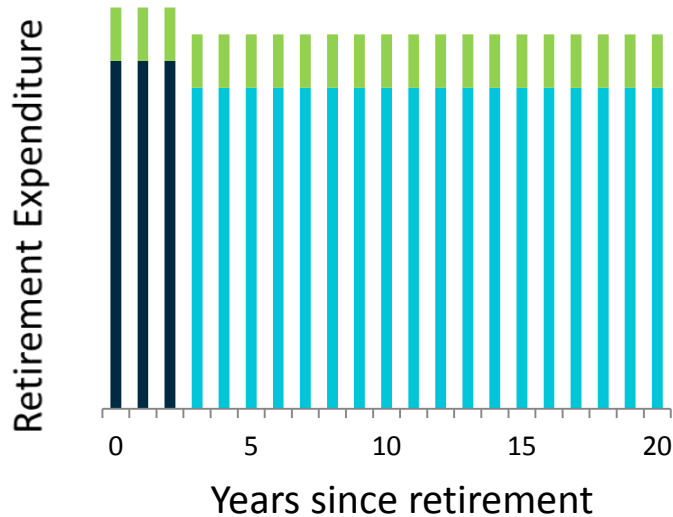
# Retirement scenarios



# Retirement options



# Retirement options



- Assume Salary €50,000 & fund €300,000 at retirement

- Similar outcomes under both Annuity & ARF routes

- LS: €50,000
- Income: €9,000



# Retirement options

|                       | Advantages                     | Disadvantages  |
|-----------------------|--------------------------------|--|
| Lump sum plus annuity | Income security                | Cost of guarantee  |
| Lump sum plus ARF     | Flexible income<br>Inheritance | Managing money in later life<br>Could run out without discipline |

Role for actuaries in the DC space

# What do members need?

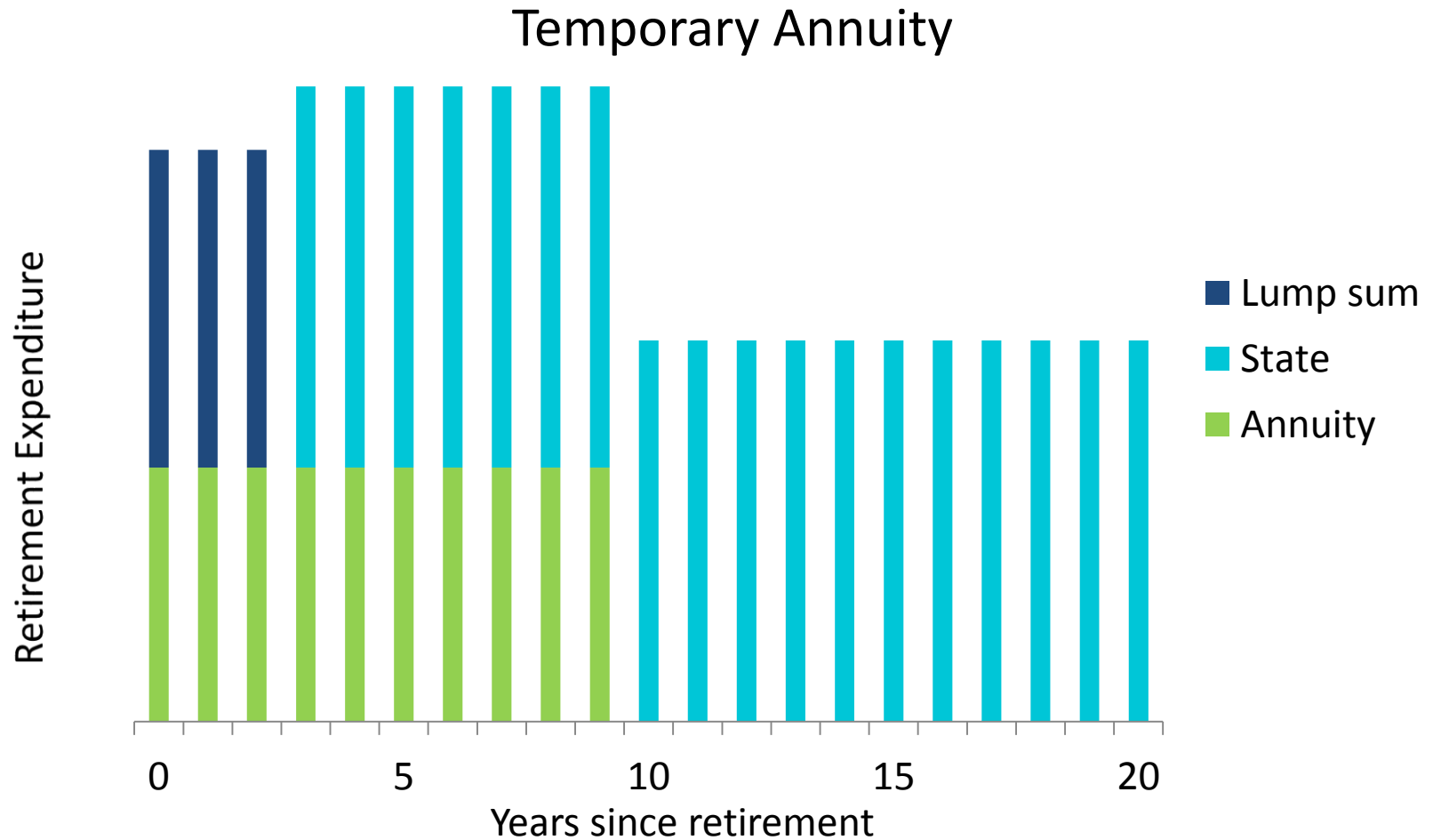
## Saver

- Communication & education
- Auto-enrolment
- Mandatory minimum contributions
- Auto-escalating contributions

## Investor

- Communication & education
- White-labelling
- Sophisticated default strategy

# What do retirees need?



# What do retirees need?

## ARF + Annuity



# What do retirees need?

- Longevity pooling
  - Providing some protection against longevity under ARF route
- Variable annuity
  - Mixing the qualities of ARFs & annuities



# Wrap up

- Greater responsibility on individual to provide for retirement
- New savers need to have a different mindset to previous generation
- Where to actuaries fit in?
  - Understanding the challenge
  - Encouraging saving
  - Design retirement products
  - Providing advice



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# **Guarantees in a low yield environment**

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Eoin Kennedy, October 2015

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# Agenda

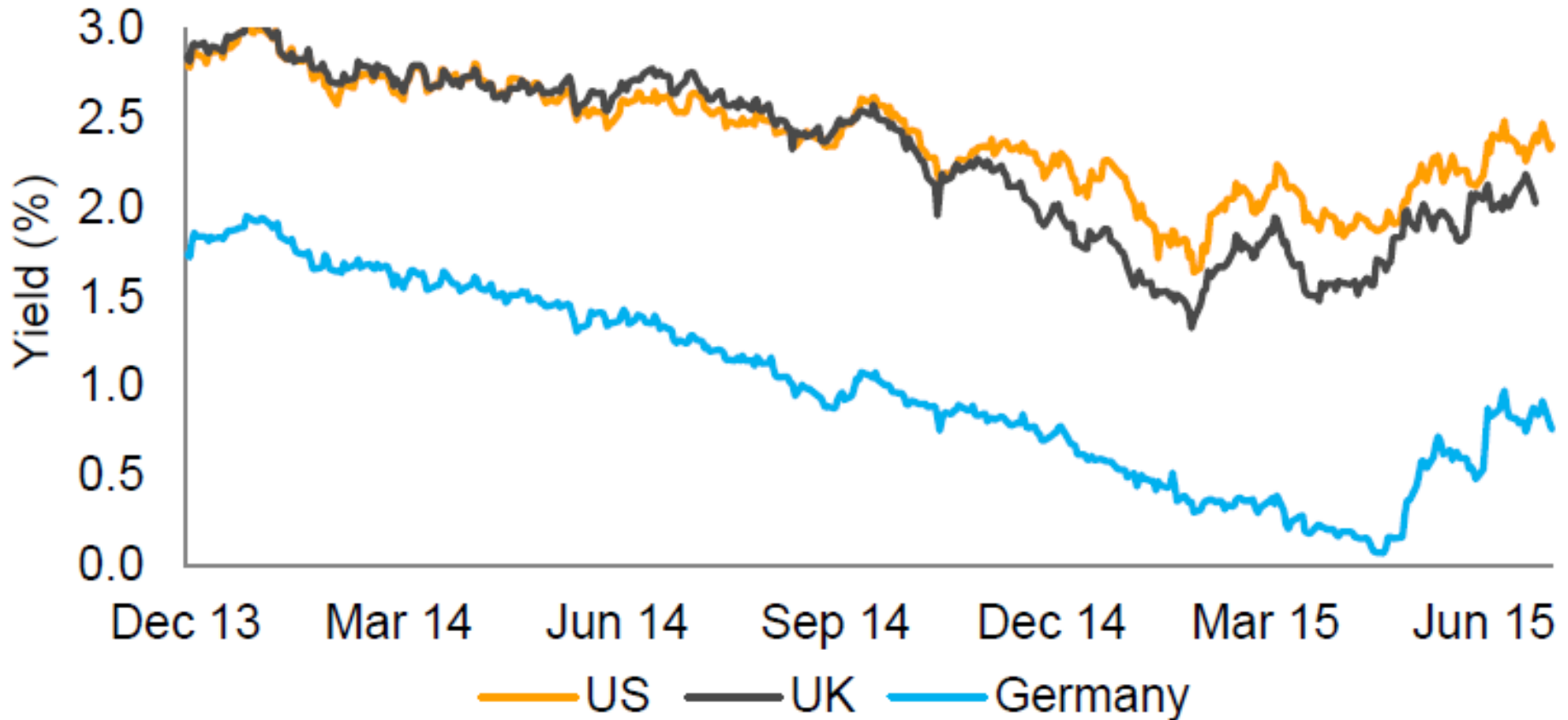
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- Current annuity pricing (in brief)
- Capital guarantees and annuity variations
- Challenges and opportunities



# Bond yields up slightly from April lows

## Global government bonds





# Why are annuities so expensive?

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- People are living longer
- Bond yields are extremely low
- Many of the same issues as DB!

# Deconstructing an annuity (male 65)

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$$\text{Capital E(Term)} + \text{Growth} - \text{Expenses} = \text{Annuity}$$

$$\frac{\text{€100}}{26} + 0.5\% - 0.4\% = 3.9\%$$

||  
3.8%



# A look at guaranteed products

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- **Pre-retirement – guaranteed funds**
- At retirement – end of life & temporary annuities



# Pricing guaranteed products

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- Capital isn't the issue; market cost is
- Everything is marked-to-market
- Life companies don't write investment guarantees
- Guaranteed business is now "unit linked"

\* To provide the 95% capital protection at the end of the initial investment period (on 11 May 2021), New Ireland Assurance Company plc trading as Bank of Ireland Life (Bank of Ireland Life) holds a deposit with Bank of Ireland. Bank of Ireland Life is committed to passing on to you, the policyholder, the amounts received from Bank of Ireland on that date. If, for any reason, Bank of Ireland Life is not repaid its deposit in part or in full on 11 May 2021, you may not receive back some or all of the amount invested.





# Constructing a guaranteed product

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Policyholder capital is invested as follows:

**1. Meet the guarantee**

Invest enough in a non-risk asset

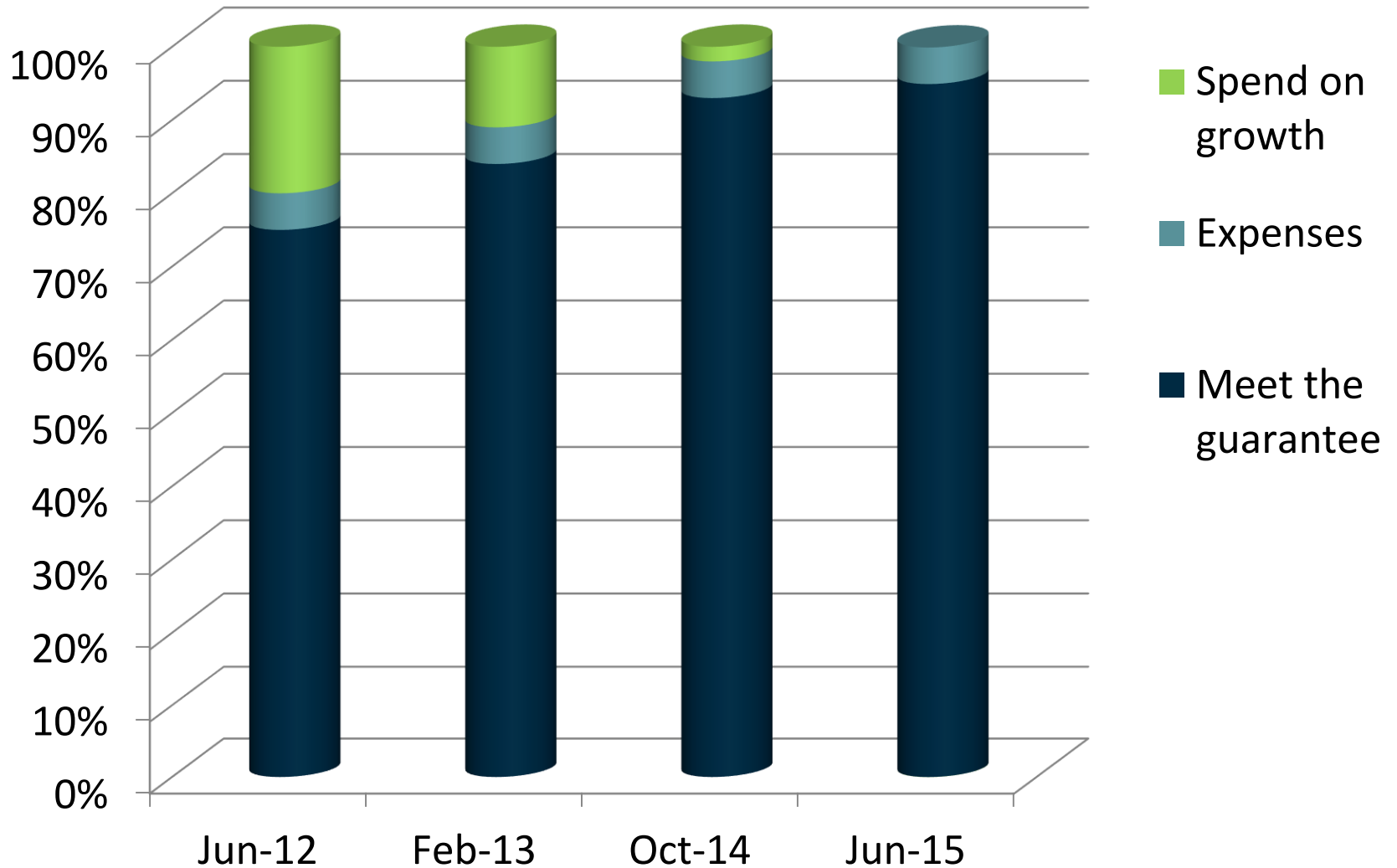
**2. Take a fee**

**3. Generate growth with what's left**

Invest in a risky asset, typically an equity option



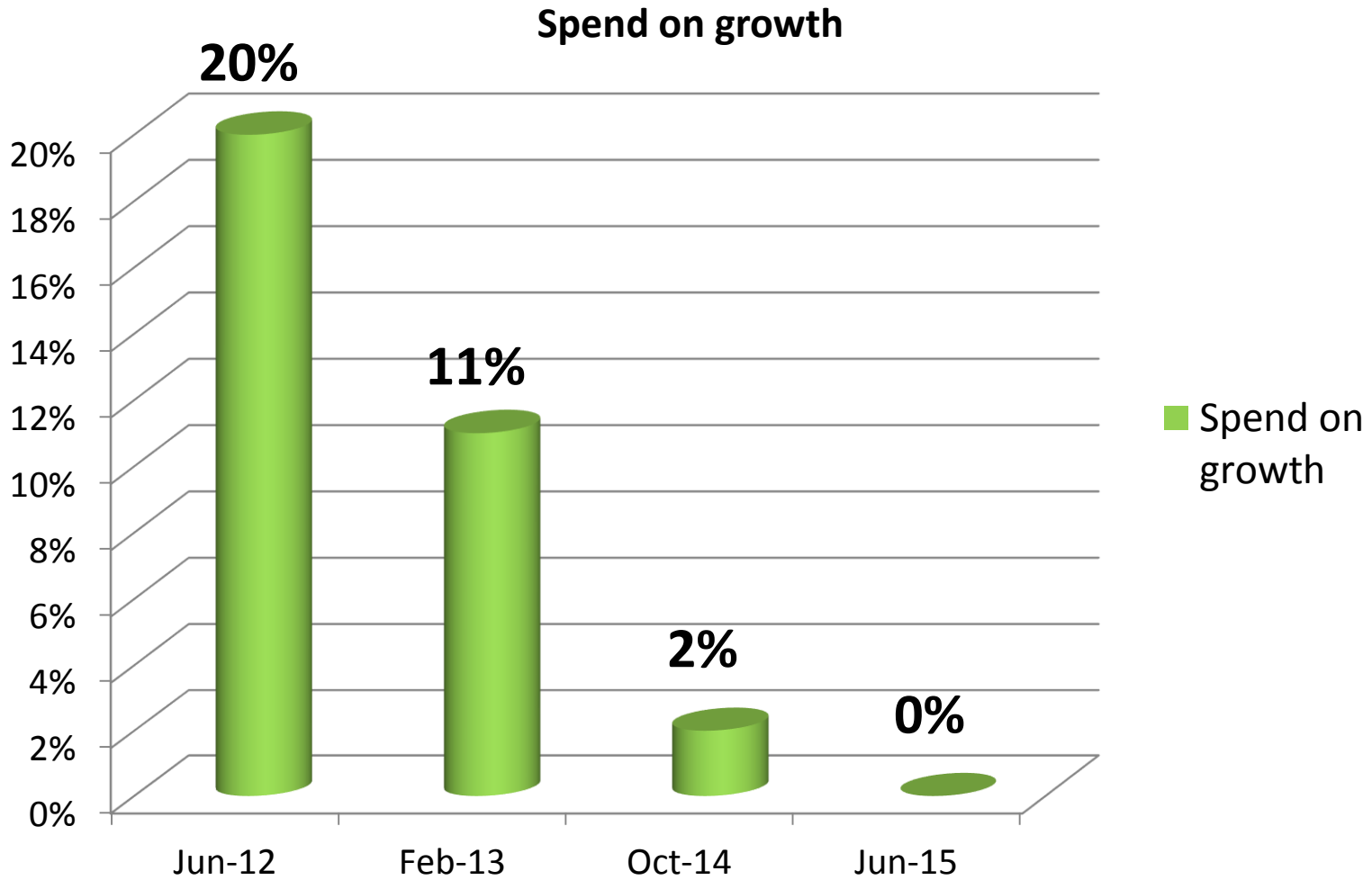
# Irish guarantees in recent years



Based on a 5 year term, 100% guarantee, 5% up front fee, Irish commercial deposit rates



# Irish guarantees in recent years



Based on a 5 year term, 100% guarantee, 5% up front fee, Irish commercial deposit rates



# Is there any way to make it work?

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- Extend the term
- Go to <100% guarantee
- Take (i.e. give customers) more counterparty risk
- Encourage / educate customers to take more risk
- Leave customers on deposit



# Sample pricing – guaranteed fund for pensions

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## The product:

- No allowance for expenses
- Fixed term
- Total Return indices (i.e. includes dividends)
- Straight participation in an equity index
- Return of **100% of capital** plus growth



# Sample pricing – guaranteed fund for pensions

## Participation Rates

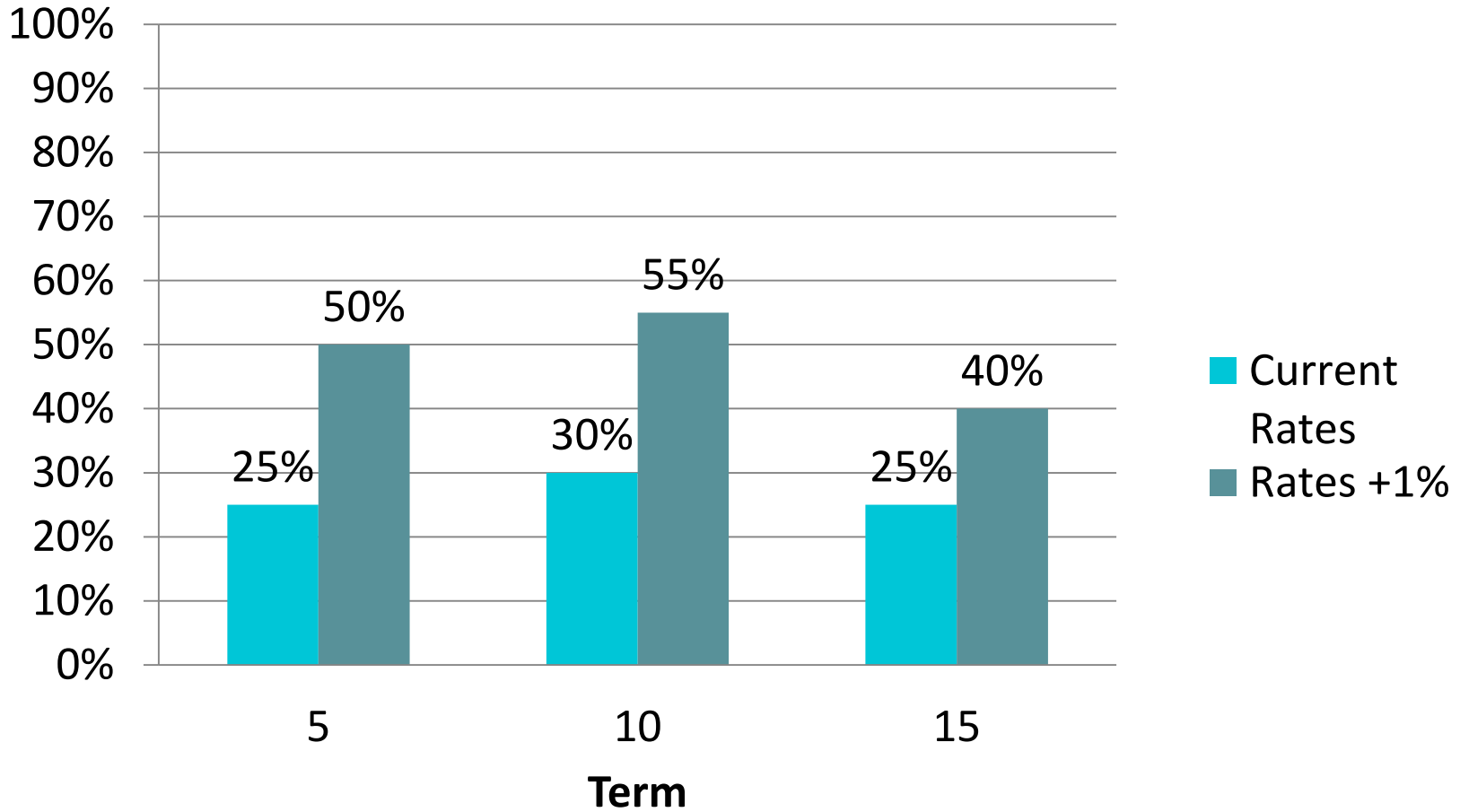




# Things might improve...

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## Participation Rates





# A look at guaranteed products

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- Pre-retirement – guaranteed funds
- **At retirement – end of life & temporary annuities**





# Other types of annuity – end-of-life

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- Part of the retirement pot set aside for very old age
- Costs should be reduced because of:
  - **Mortality** on the cohort during the deferred period
  - **Investment return** on the capital during the deferred period
  - **Reduced life expectancy** at the end of the deferred period



# Sample pricing – cost per €10k annuity

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| Age now | Delay period | Current pricing |
|---------|--------------|-----------------|
|         |              |                 |
| 65      | 0            | €250,000        |
| 65      | 15           | €105,000        |
| 65      | 20           | €70,000         |



# Sample pricing – cost per €10k annuity

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| Age now | Delay period | Current pricing | Discount at yields +1% |
|---------|--------------|-----------------|------------------------|
|         |              |                 |                        |
| 65      | 0            | €250,000        | 15%                    |
| 65      | 15           | €105,000        | 20%                    |
| 65      | 20           | €70,000         | 25%                    |



# Other types of annuity – temporary annuity

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- Spend, spend, spend!
- That's about it.



# Sample pricing – cost per €10k temp. annuity

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| Age now | Term    | Current pricing |
|---------|---------|-----------------|
|         |         |                 |
| 65      | Forever | €250,000        |
| 65      | 10      | €100,000        |
| 65      | 15      | €145,000        |



# Sample pricing – cost per €10k temp. annuity

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| Age now | Term    | Current pricing | Discount at yields +1% |
|---------|---------|-----------------|------------------------|
|         |         |                 |                        |
| 65      | Forever | €250,000        | 15%                    |
| 65      | 10      | €100,000        | 5%                     |
| 65      | 15      | €145,000        | 10%                    |



# Challenges in creating a new product

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- Regular premiums – hard to create guaranteed product
- Very long term put options – not much of a market
- Lack of inflation-proofing
- Locking in to low yields
- Is there enough demand?



# Other avenues to explore

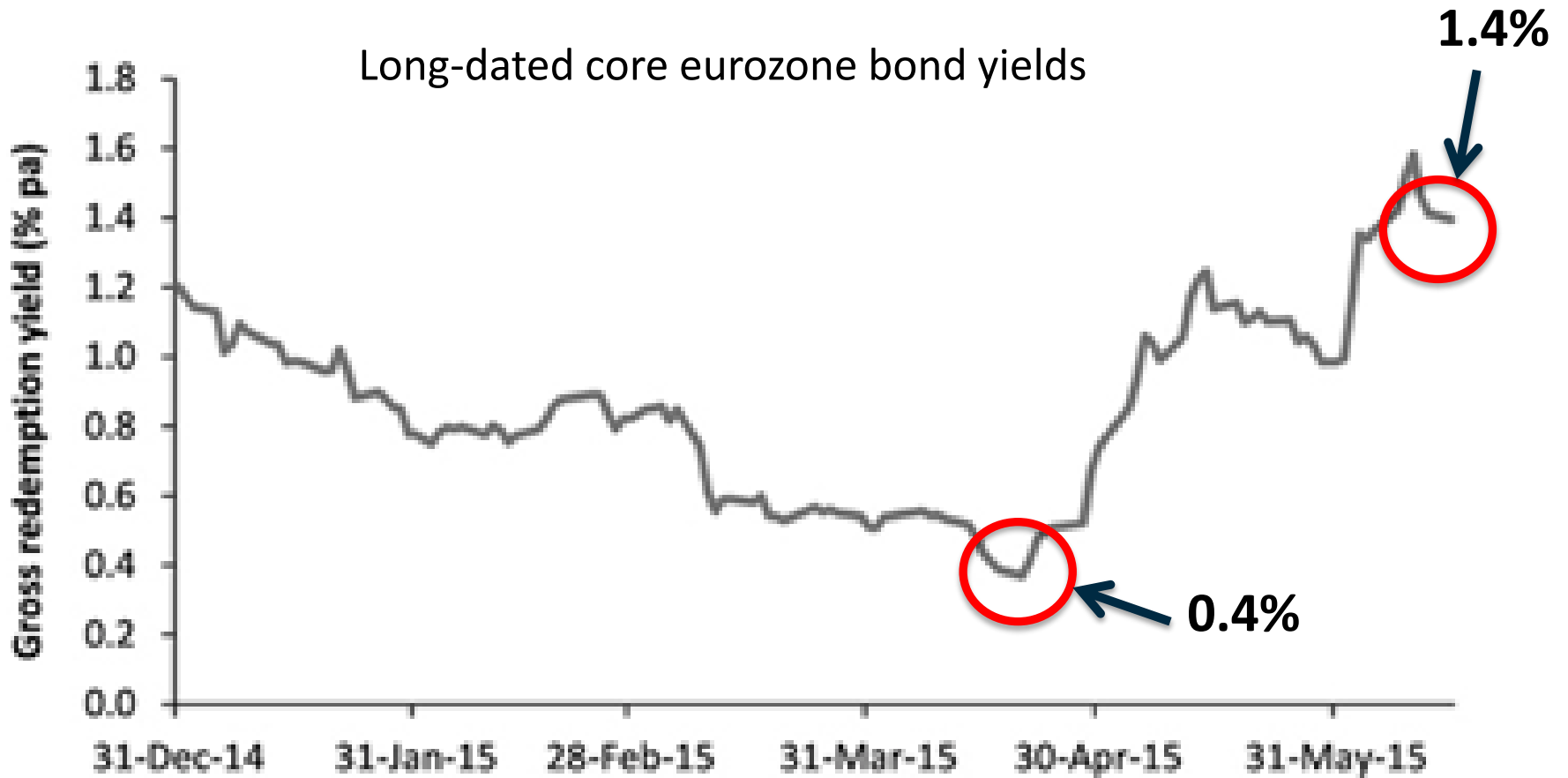
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- Rolling guarantees
- CPPI
- Variable annuities
- Lifestyling / auto-switching (pre or post retirement)





# Things might get better...





# Summary & Conclusions

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- In a very low interest rate / inflation environment, all guarantees are expensive
- Generally customers must either:
  - Accept very low but certain returns
  - Take some risk in pursuit of higher returns
- There is some scope for innovation...
- **... but now might not be the right time**



# Summary of Key Issues and Challenges

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- Existing and New DC population – Guarantee attraction?
- Dissatisfaction with “giving funds away” at retirement – Temporary/Deferred/Variable Annuity alternative?
- Future DC World – more discerning customer
- Future State Pension – DC World highly sensitive to this



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**QUESTIONS?**

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