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Longevity insurance
A solution for longevity risk

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Association of Consulting Actuaries, 20 October 2010

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Some terminology

"Longevity swap"

- A derivative contract that protects against uncertain longevity
  - Only Babcock International have purchased one of these to date

"Longevity insurance"

- An insurance policy that protects against uncertain longevity
  - RSA, BMW and Royal County of Berkshire have purchased one of these

"Bulk annuity contract"

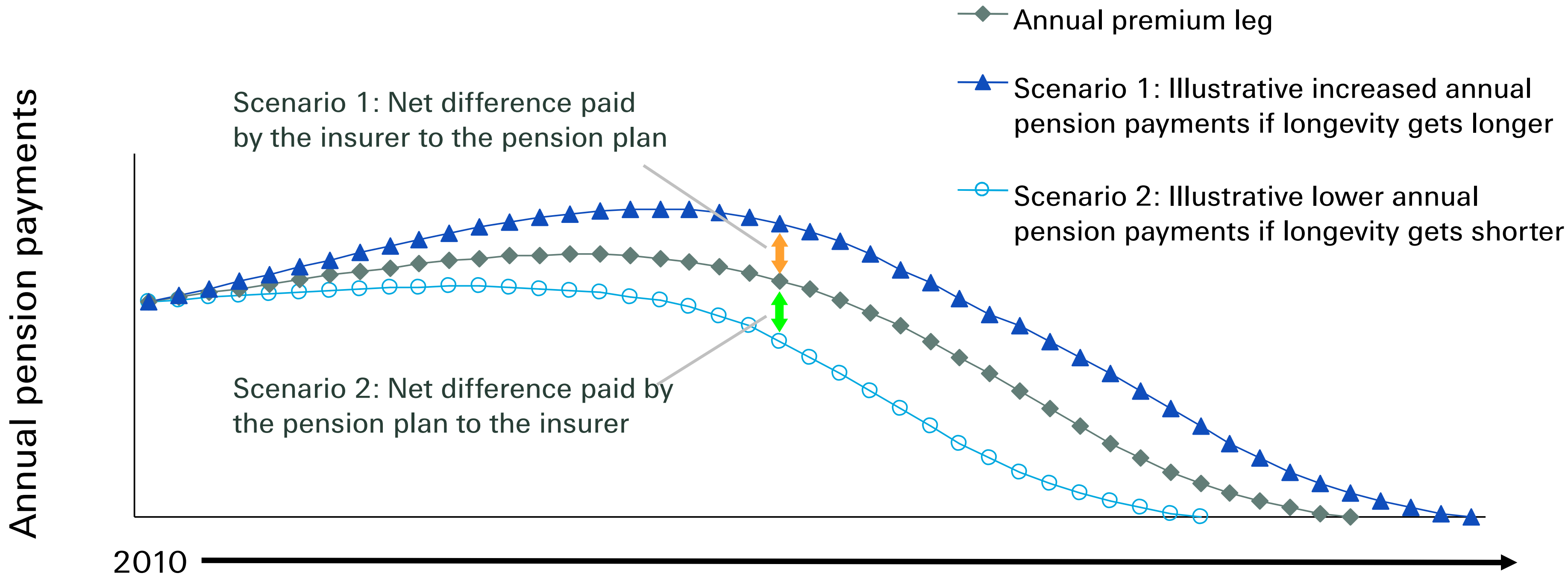
- We all know what these are ...

  ... but we may not know that longevity insurance policies are bulk annuity policies

"Reinsurers"

- Wholesale depositories for longevity (and property, earthquake, mortality...) perils

Longevity insurance fixes uncertain liabilities



Certainty	Pension plan liability is the annual premium payment regardless of changes in longevity
Swap Format	Insurer covers the cost if longevity increases, and gains if longevity decreases

Bulk annuities and longevity insurance are not mutually exclusive

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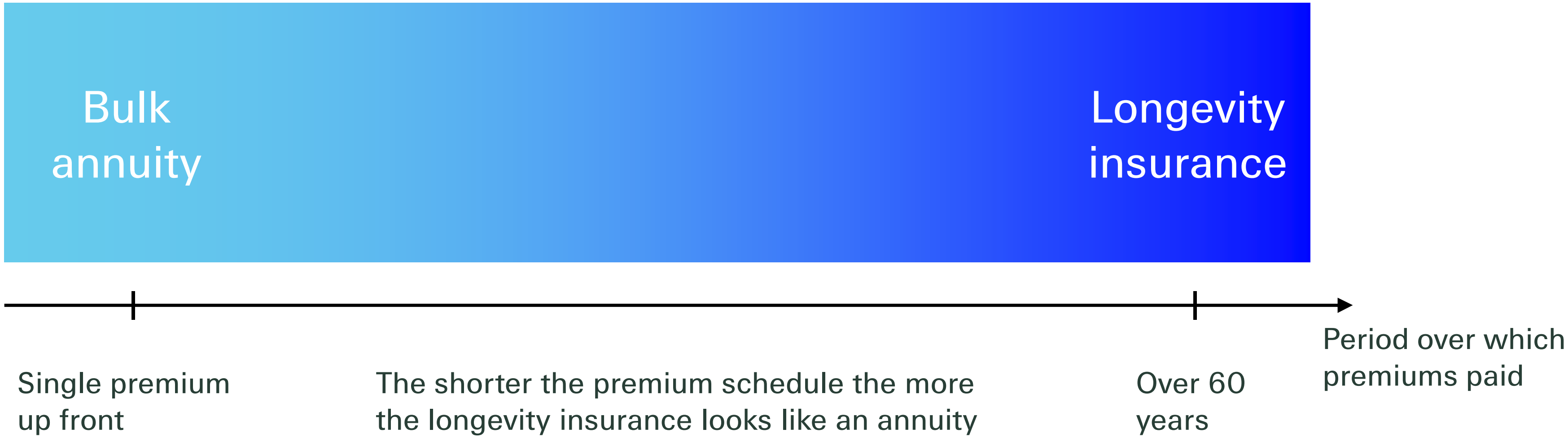
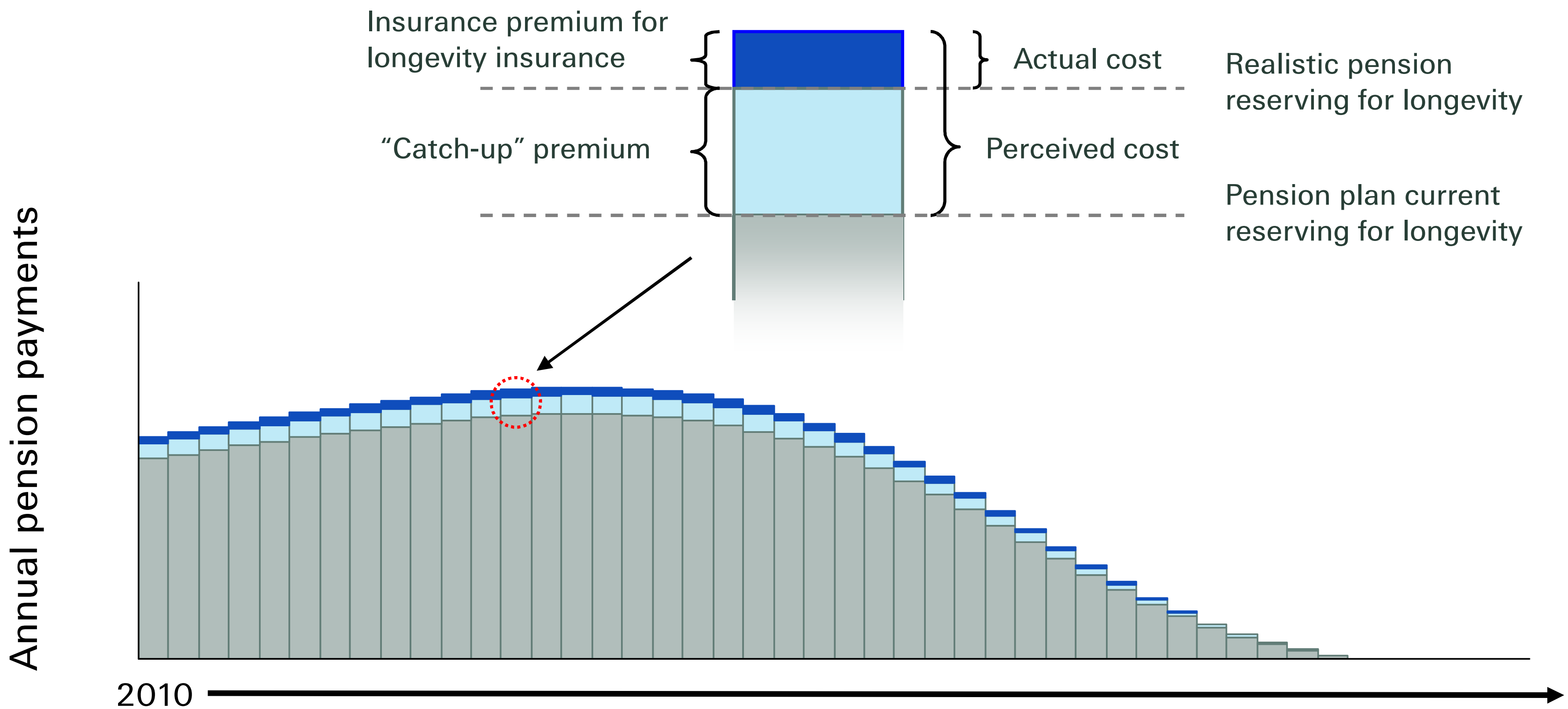


Longevity insurance premium durations can be set to coincide with pension end game targets. Once premiums are paid you're left with a bulk annuity

But longevity insurance costs money ....
(of course it does –insurance isn't free!)



The funding prudence margin typically offsets much of the cost. Decision therefore is whether to use the prudence margin, plus perhaps a little more, for certainty

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Longevity hedging is not new

".... the markets providing insurance against these residual risks remain at a relatively early stage of development. Only seven longevity swap deals [by pension plans]..." **PPF Long-Term Funding Strategy, August 2010**

But what about insurer cases for their annuity portfolios, including[1]...

- AVIVA
- AXA
- Canada Life
- Cooperative Insurance
- Friends Provident
- ...

[1] Various sources

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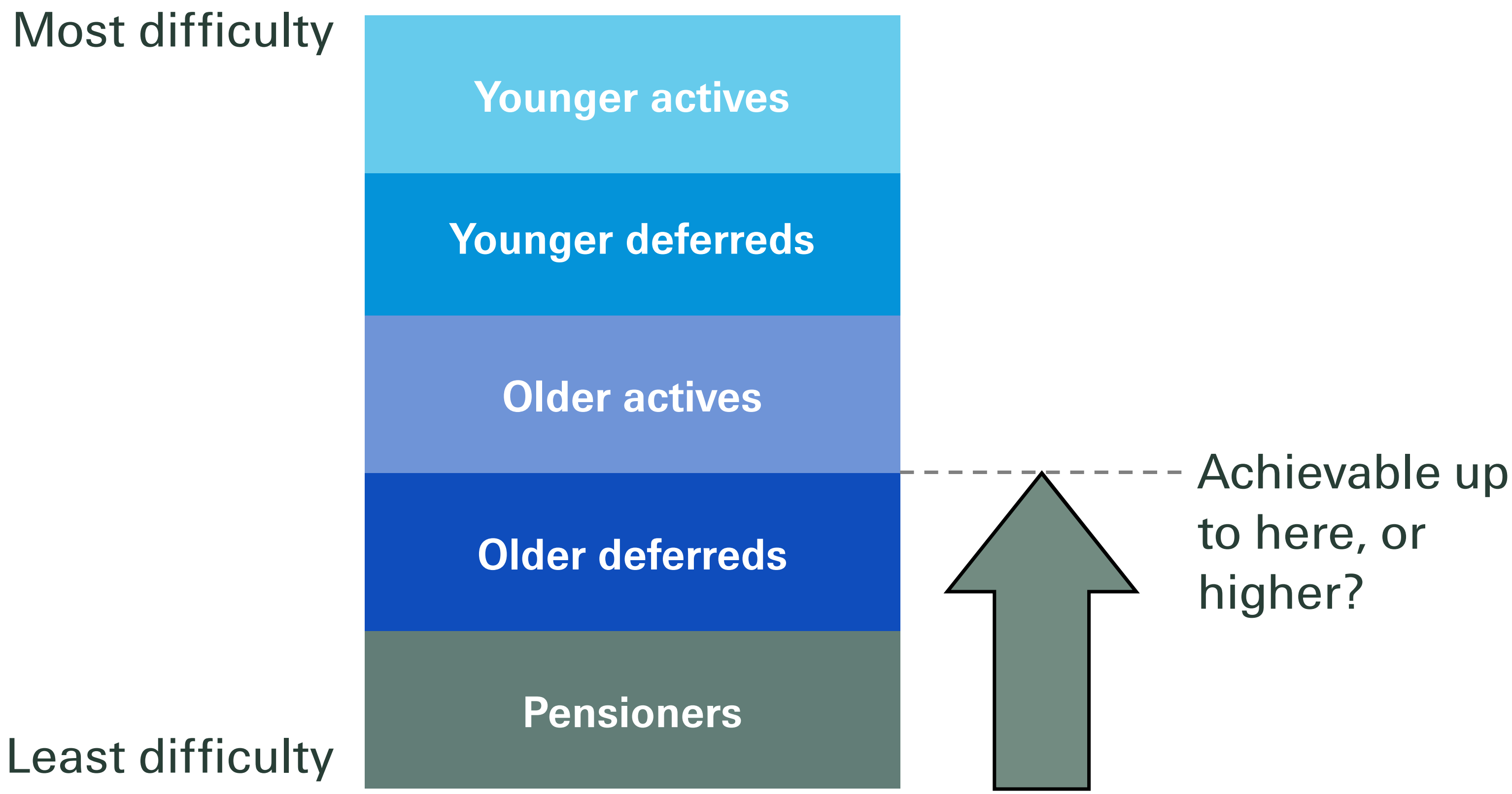
Is longevity hedging all about pensioners?



Longevity hedging is not "all or nothing". Entirely rational to hedge only pensioners and retain risk for non-retirees

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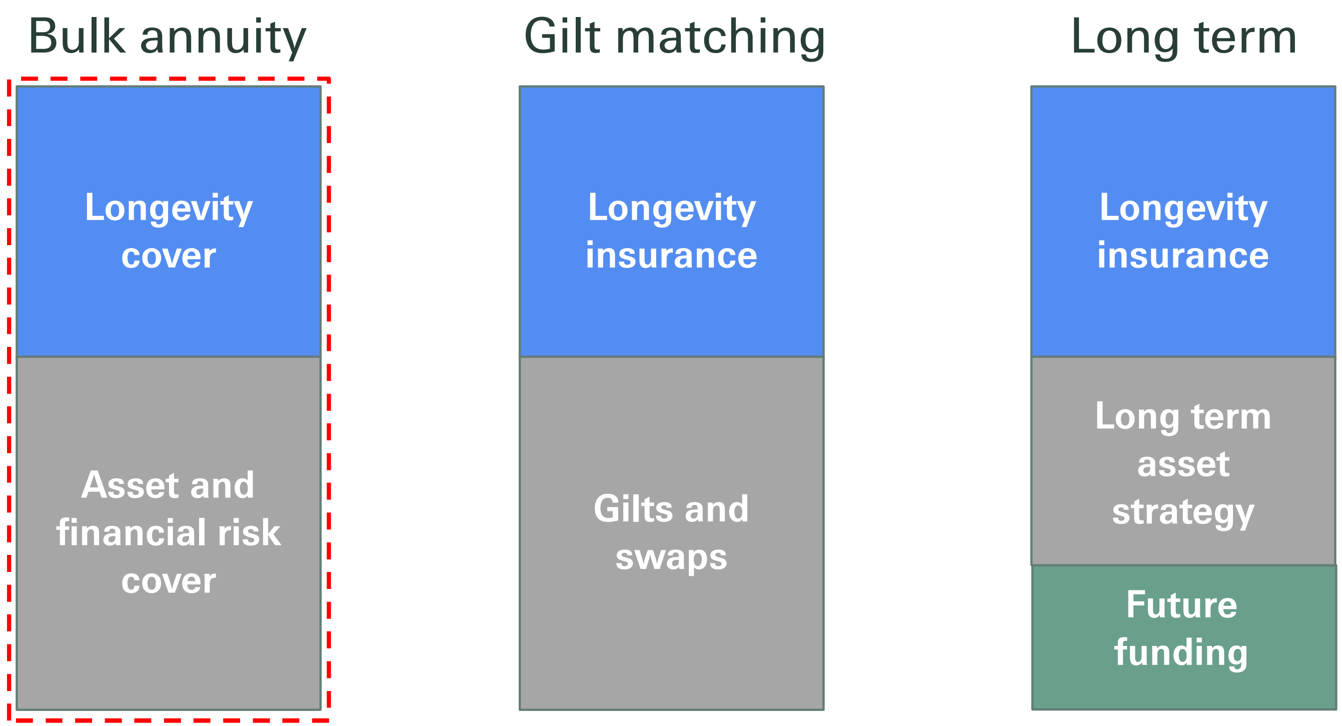
Where does this longevity exposure end up?

RSA →	£1.9 bn →	Goldman Sachs / Rothesay Life →	Reinsurers
Royal County of Berkshire →	£1.0 bn →	Written direct by reinsurer	
BMW →	£3.0 bn →	Deutsche Bank / Abbey Life →	Reinsurers
Babcock International →	£1.2 bn →	Credit Suisse →	Reinsurers

Reinsurer capacity is finite ...... but there is plenty of it for now

Longevity hedging isn't just for well funded pension plans



Most larger pension plans can utilise longevity insurance regardless of funding level

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Is longevity hedging the solution for pension longevity risk?

- Immature pension plans
- Those under reserving for longevity
- Trustees with a pessimistic view of future life expectancies
- Pension plans that want to keep the prudence margin (and take the risk)
- Trustees with more pressing issues than longevity eg employer covenant
- ... and in any case insurance capacity is insufficient to cover all UK longevity exposures!

The answer can only be "no" across all pension plans, but for many pension plans longevity hedging is the way forward

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