



Defined-contribution pension schemes in Europe

Risks and advantages for occupational retirement provision

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Main messages

- the shift towards DC has become an economic reality across Europe
- many criticisms of DC schemes are unfounded
- investment risk in DC schemes can be managed
- DC schemes are long-term savings plans
 - cost of guarantees
 - risk–return spectrum
- DC schemes can be structured to deliver best-practice governance and cost-efficient pensions



Overview

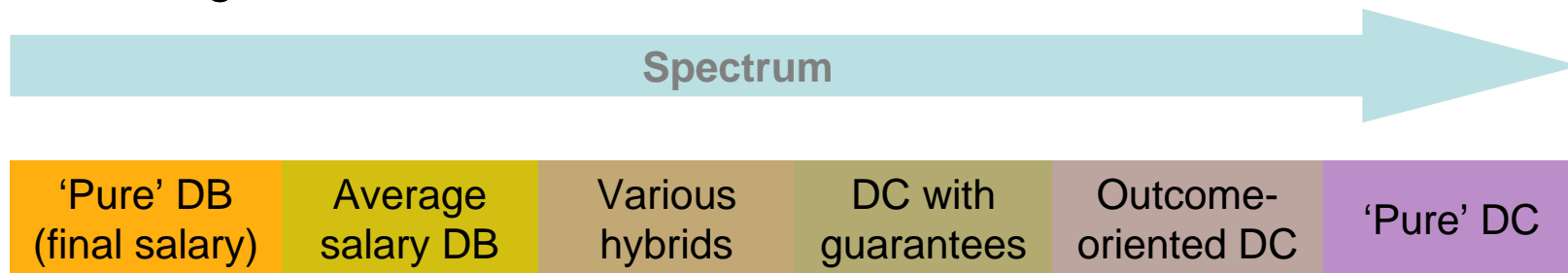
- the shift to DC
- DC risks and advantages: addressing misperceptions
- DC scheme design
 - investment framework
 - governance
 - individual choice
 - costs

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The shift towards DC is an economic reality

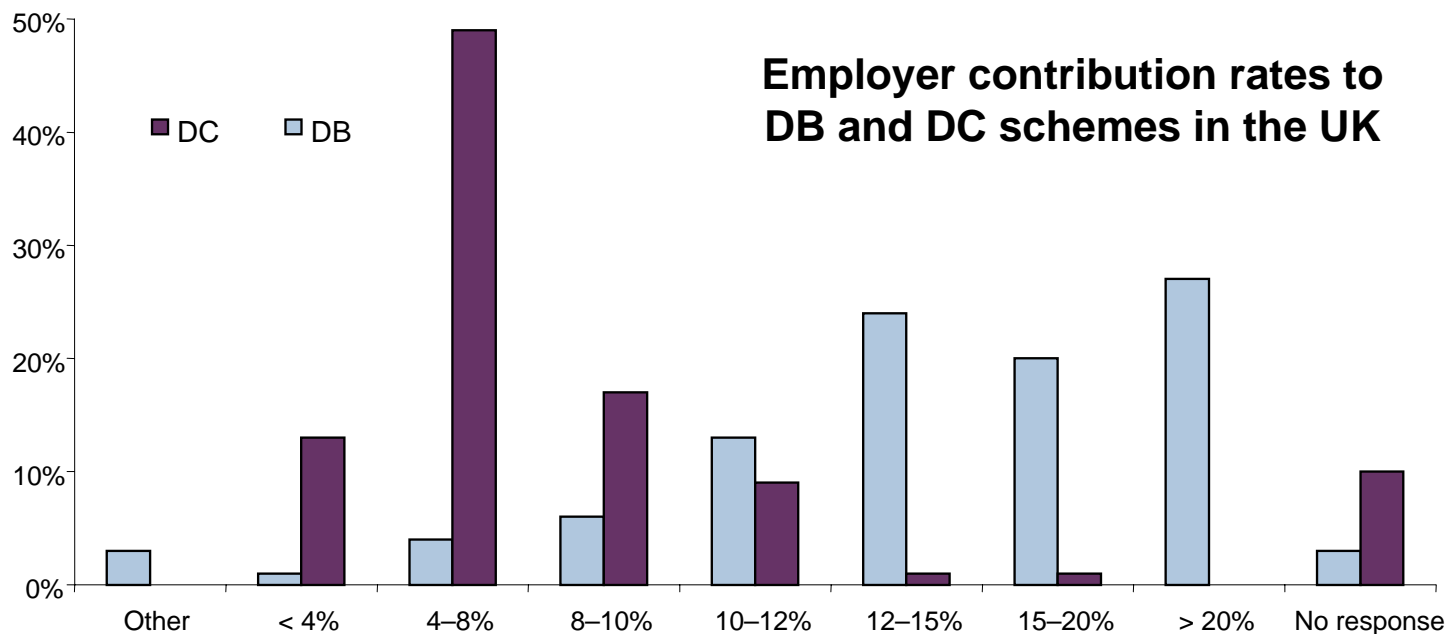
- across Europe
- emerging structures involve a complex set of allocations of risks and responsibilities
- lack of consistent definitions and comprehensive data
- simple DB or DC distinction is often not helpful for policy and strategic considerations





DB versus DC

Differences in contribution rates



Source: Government Actuary's Department (2006), 'Occupational Pension schemes 2005', 13th survey by the Government Actuary.

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Pension provision is not a free lunch



Risks and risk allocation

| | Final salary DB | 'Pure' DC |
|------------------------------|--|---|
| Investment risk | Borne by sponsor | Borne by member |
| Longevity risk | Borne by sponsor | Borne by member (including annuity conversion risk) |
| Wage path risk | Borne by member | Risk reduced because contributions based on lifetime earnings |
| Job tenure risk | Borne by member | Risk reduced due to greater portability of DC pensions |
| Employer default risk | Borne by member (unless pension guarantee scheme, where risk shifted to third party) | No risk to member (except where pension plan assets are invested in employer stock) |



Risks of DB schemes are often underestimated



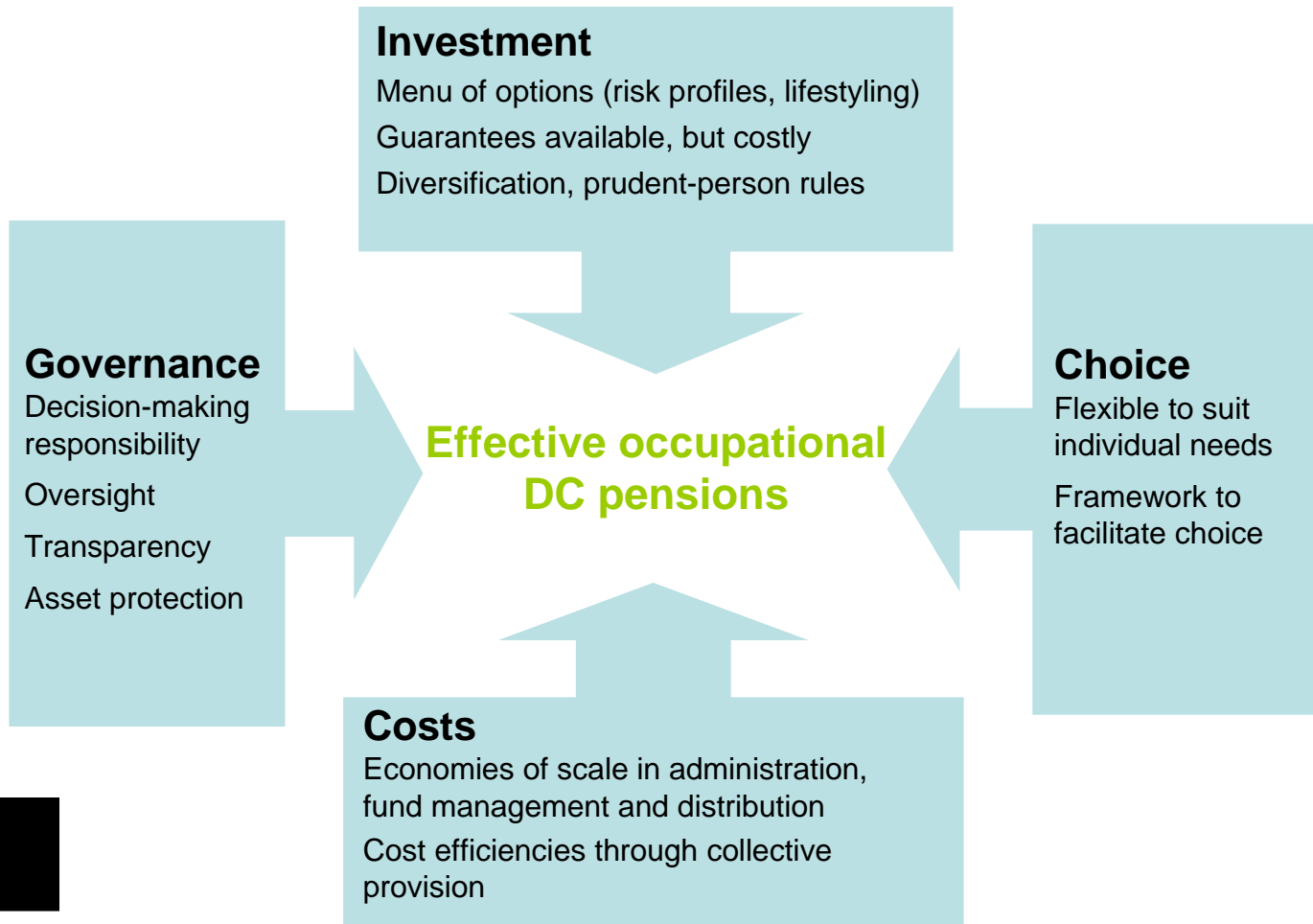
Other DC advantages

- individual control
- choice and flexibility
- portability
- DC advantages are supported in the academic literature

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DC scheme design





Investment of pension assets

Quantitative risk–return analysis shows

- trade-off between risk and return
- minimum return guarantees are not a ‘free lunch’
- investing in equity can deliver higher returns at comparatively low risk given the long investment horizon
- restrictive investment regulation is costly
 - benefits of prudent-person rules

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Pension investment (I)

Simulations of impact on retirement wealth (40 years)

| Percentile | 100% bonds | 100% equity | Lifestyle |
|---------------|------------|-------------|-----------|
| 10th | 37,102 | 56,968 | 52,684 |
| 25th | 46,772 | 85,376 | 71,781 |
| 50th (median) | 62,309 | 139,465 | 106,435 |
| 75th | 83,769 | 237,538 | 163,965 |
| 90th | 112,336 | 402,236 | 249,178 |

Notes: Simulations for 10,000 individual accounts, based on historical risk–return parameters for real government bonds and equity for the UK (obtained from Barclays Equity Gilt Study 2006). The individual contributes 5% of annual salary, from age 25 to 65. Salary starts at €20,000, growing at a rate of 2% (real). Lifestyle portfolio starts with 90% equity but is switched to 30% equity at age 55. Management fee is 1%.

Source: Oxera modelling.

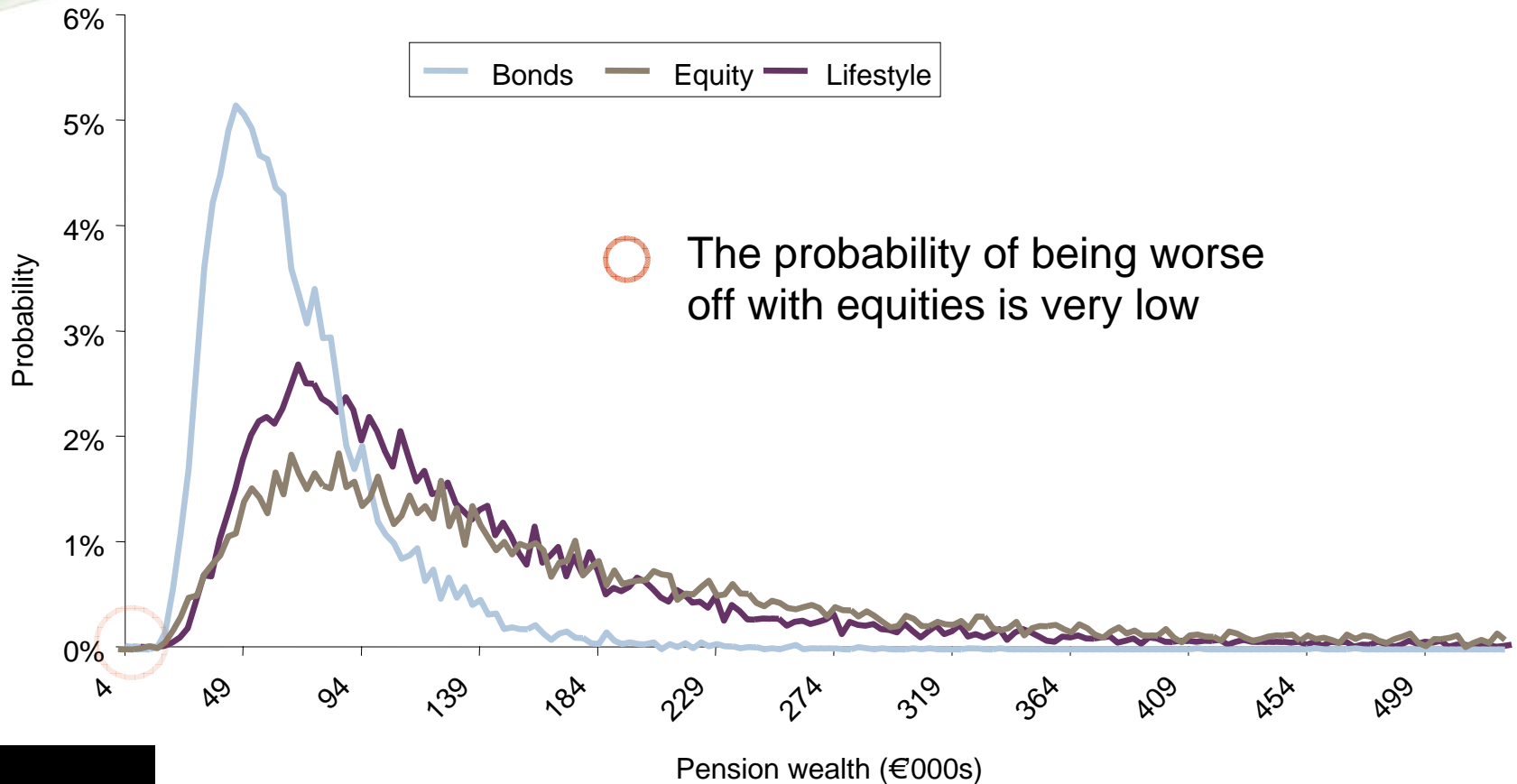
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investment in equity delivered significantly higher pension wealth on average



Pension investment (II)

Simulations of impact on retirement wealth (40 years)



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Notes: Based on assumptions described in previous slide.
Source: Oxera modelling.



Pension investment (III)

Simulations of impact on retirement wealth (20 years)

| Percentile | 100% bonds | 100% equity | Lifestyle |
|---------------|------------|-------------|-----------|
| 10th | 16,155 | 18,915 | 18,462 |
| 25th | 19,233 | 24,964 | 22,383 |
| 50th (median) | 23,669 | 34,573 | 28,255 |

Notes: Assumptions as in previous slides, but time horizon for pension accumulation is shortened from 40 to 20 years.

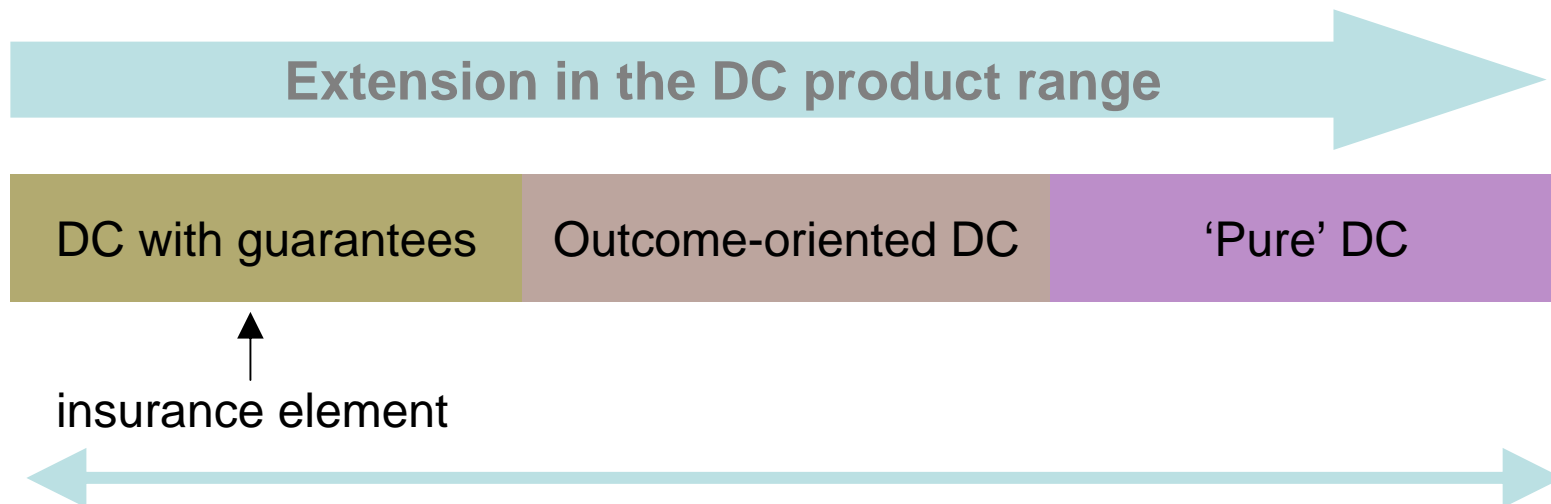
Source: Oxera modelling.

- compared with investing in bonds, equity delivered higher returns at a low probability of a worse outcome, given the long time horizon for pension investment



DC investment solutions

- DC plans are long-term savings vehicles that do not inherently have to contain an insurance element



Investment solutions:

- lifestyle funds
- target-outcome funds
- structured products
- diversified funds, etc





Governance of DC schemes

DC schemes can achieve best-practice governance

- framework to ensure safeguarding and investment of pension assets in the best interests of scheme members
 - clear allocation of decision-making responsibilities
 - oversight of investment and administration functions
 - asset protection
 - transparency and disclosure
- different solutions depending on specific scheme structure and wider institutional setting
 - trustee or similar body
 - supervisory framework for pension providers
 - product requirements (eg, UCITS standards)



Facilitating individual choice

1. pre-selection of fund range, packaged solutions
 - PERCO members in France choose between 5 and 10 funds, on average
 - governing bodies of Dutch pension funds pre-select around 5–6 funds (for DC part of funds)
 - UK trustees often limit choice to fewer than ten funds

2. default option(s)
 - lifestyle fund must be default for UK stakeholder pensions
 - individual account system in Sweden offers choice of around 700 funds, with a centrally managed, diversified fund as default

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Solutions complement information, advice and programmes to enhance financial capability



Cost efficiencies through collective provision

- collective arrangements at employer or industry level generate economies of scale, mainly in distribution
 - additional economies in administration and fund management
- despite collective character, occupational pensions can be largely individualised
 - fund options, individually tailored solutions
- structures are emerging that provide occupational and personal pensions in DC form
 - cost efficiencies through joint provision of second- and third-pillar products

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Summary

1. the shift to DC is an economic reality across Europe
2. DC risks are often overestimated and the advantages underestimated
3. DC schemes are long-term savings vehicles that do not inherently have to contain an insurance element
4. investment risk can be managed
5. DC schemes can be structured to deliver best-practice governance
6. solutions exist to facilitate individual choice
7. cost efficiencies can be achieved by offering individual accounts on a collective basis

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Questions & Answers



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Investment Managers