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Evidence of socioeconomic differences in mortality and policy implications

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Outline for today's presentation

- Evidence of differences in life expectancy across socioeconomic groups
 - Education
 - Income
 - Occupation
- Implications for pensions and insurance
 - Challenges to manage and mitigate longevity risk
 - Opportunities for product innovations to meet the needs of different segments
- Policy considerations
- Discussion

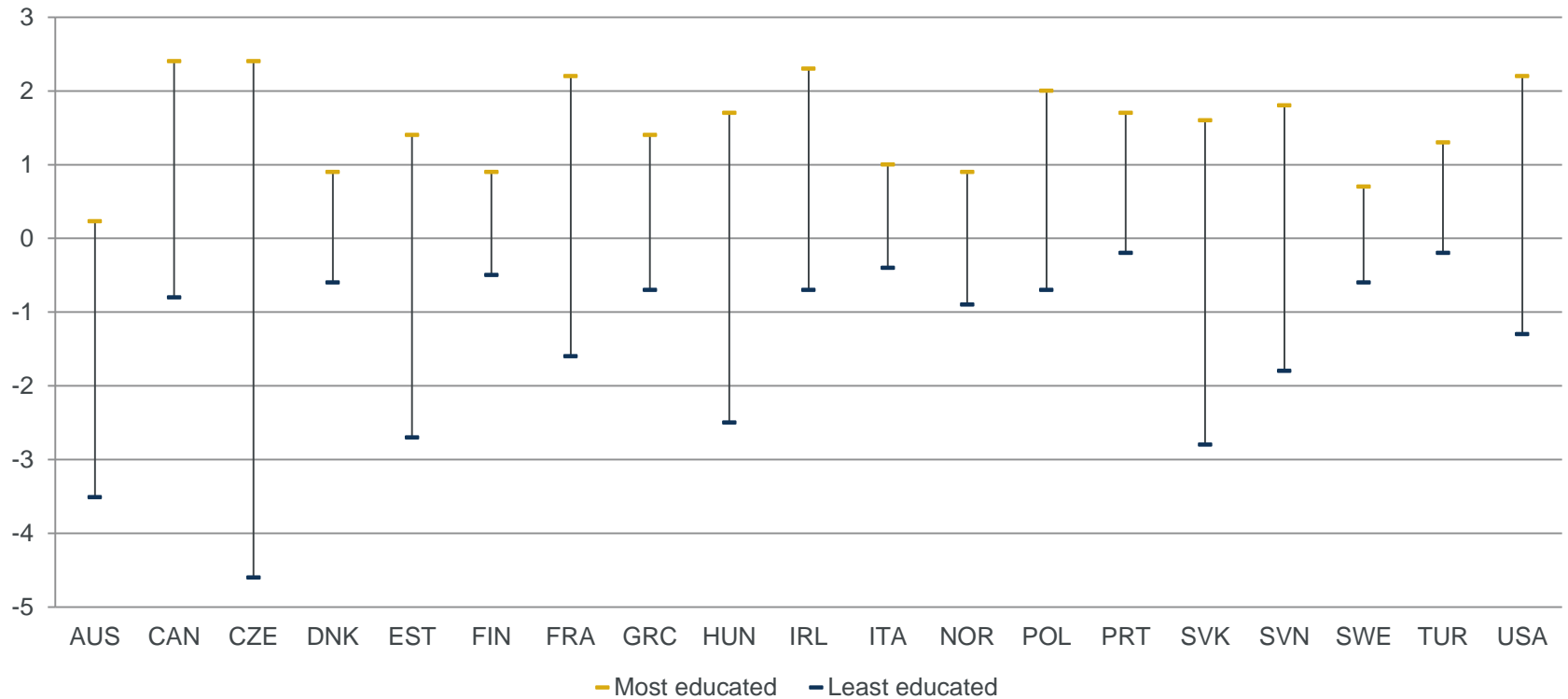


OECD Business and Finance
Outlook 2016



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Life expectancy at age 65 of the most and least educated males, relative to population average

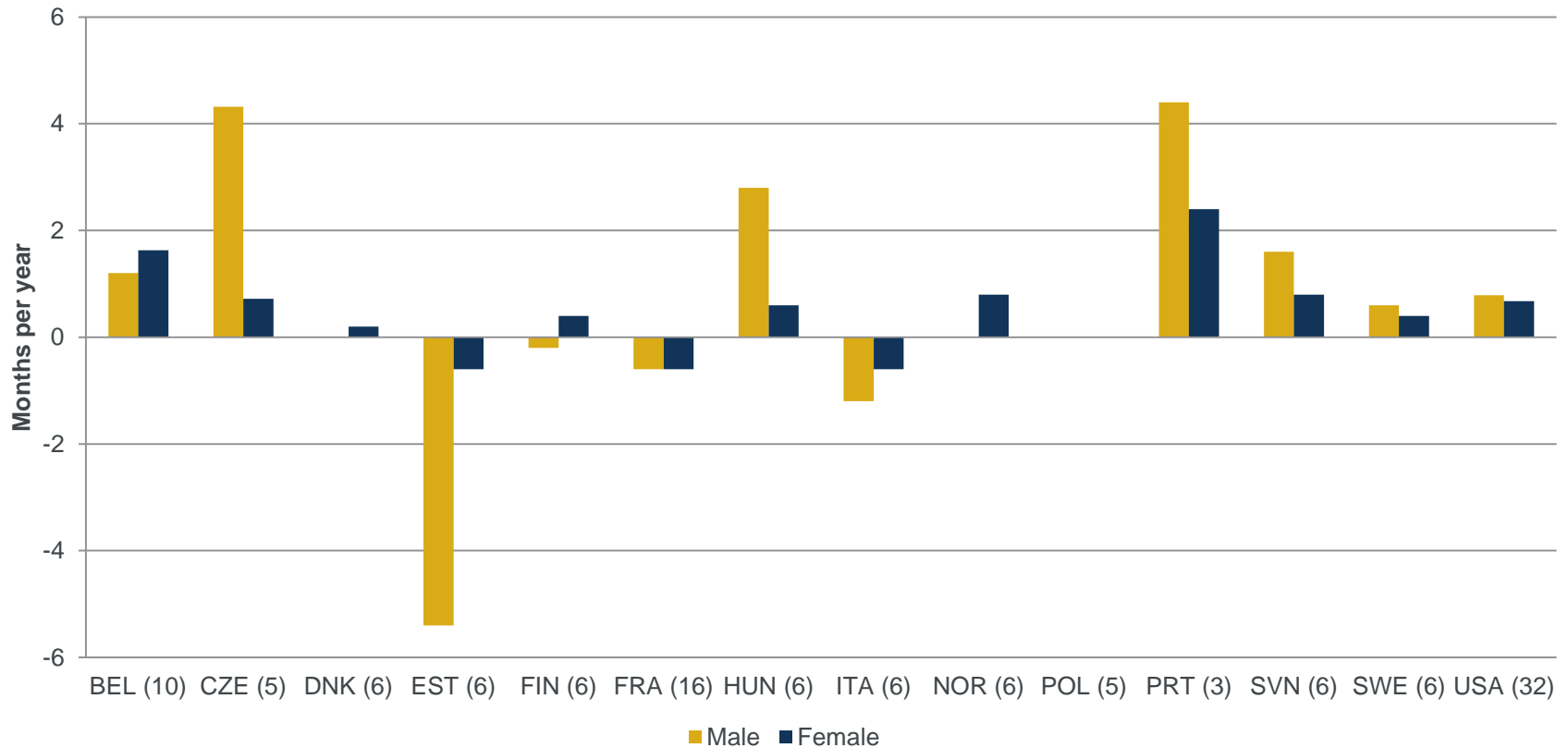


Sources: See OECD Business and Finance Outlook 2016



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Annualised difference in the change of life expectancy at age 65 between the most and least educated



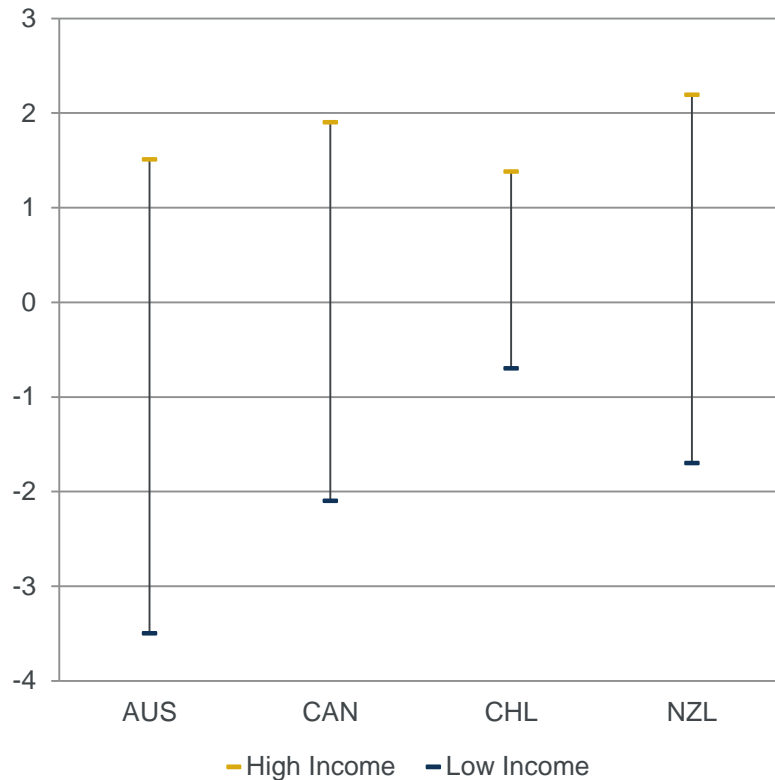
Sources: See OECD Business and Finance Outlook 2016



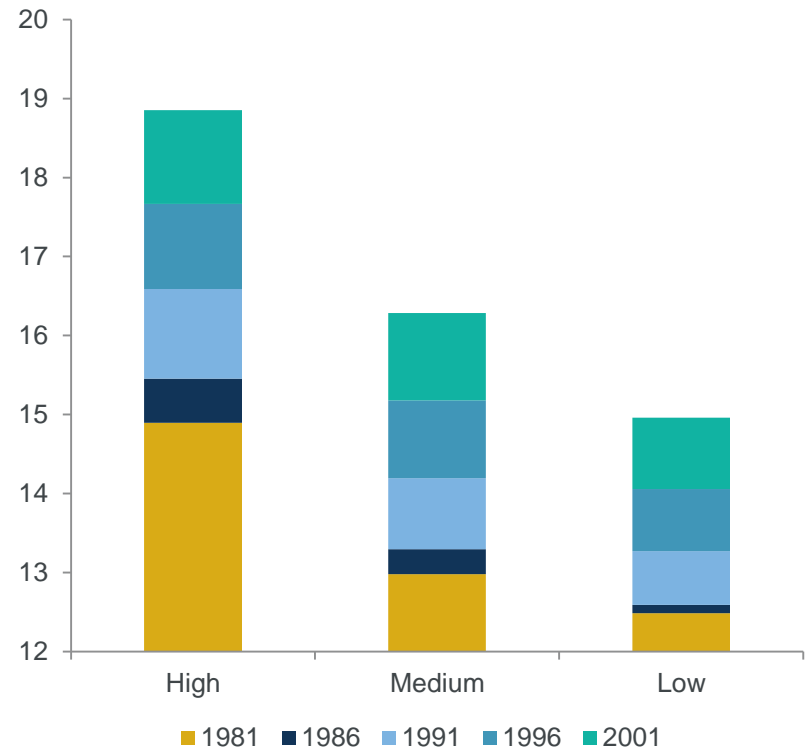
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Life expectancy at age 65 for males across income levels

Relative to population average



New Zealand, evolution 1981-2001



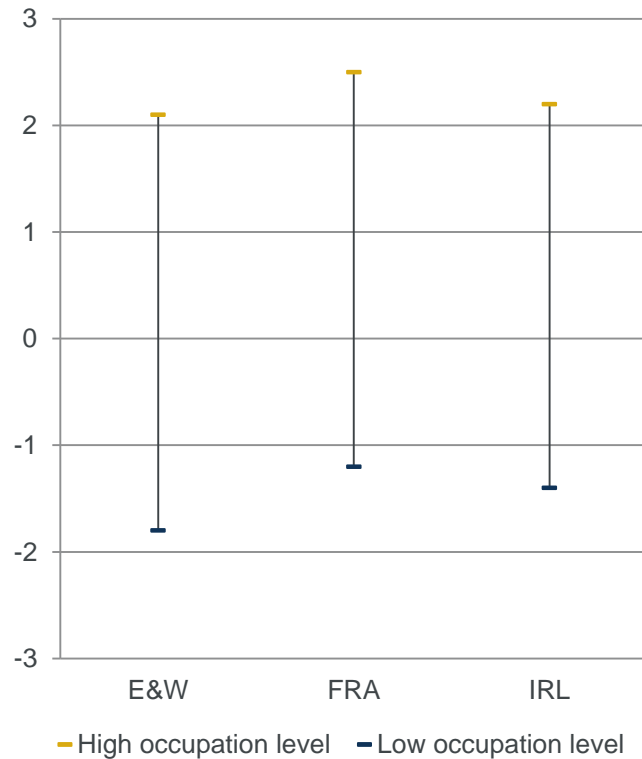
Sources: See OECD Business and Finance Outlook 2016



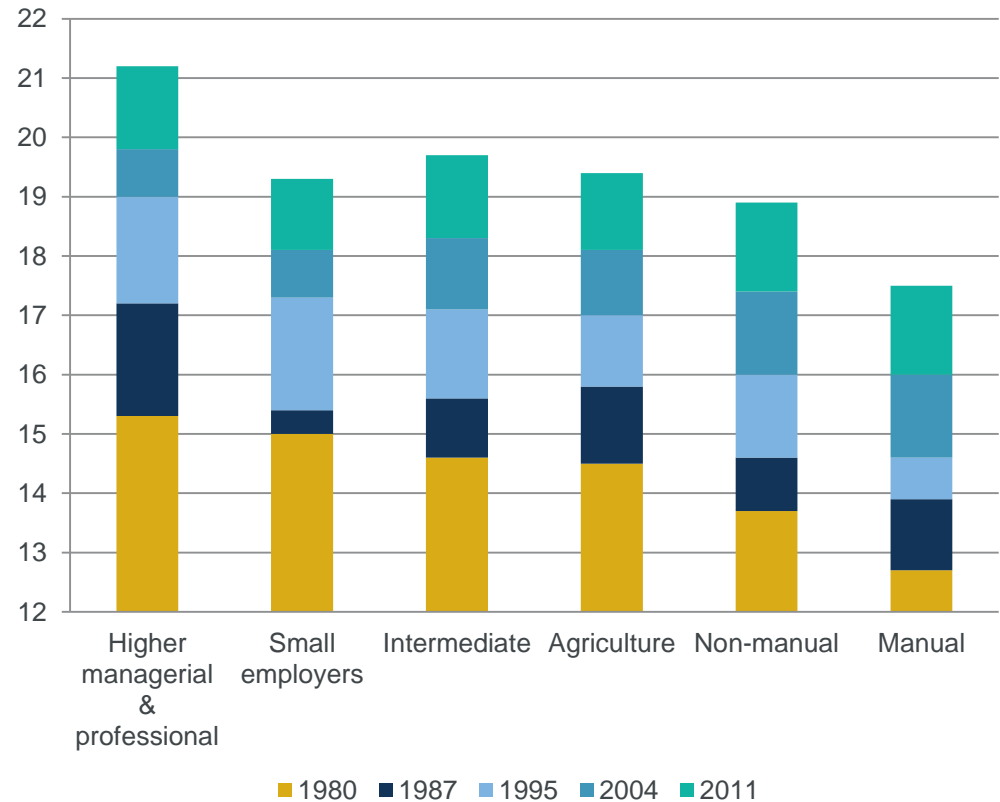
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Life expectancy at age 65 for males across occupation levels

Relative to population average



France, evolution 1980-2011



Sources: See OECD Business and Finance Outlook 2016



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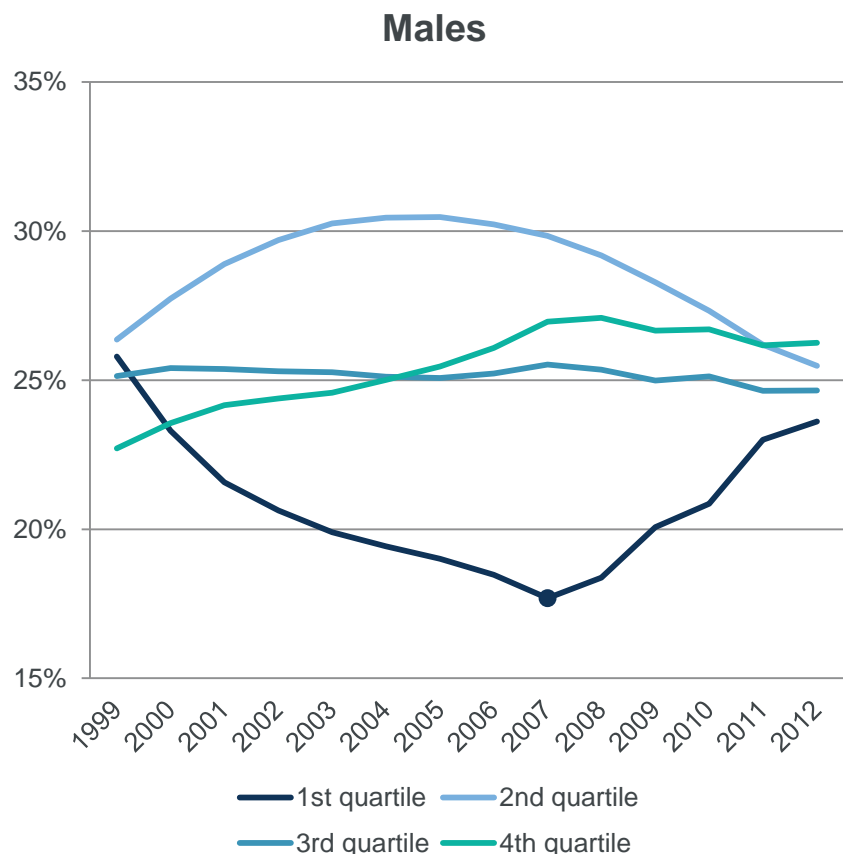
Challenges to establishing mortality assumptions

- Lack of sufficient data for mortality improvement assumptions
 - Base on general population
 - Base on combined sub-populations, e.g. across occupations
- External shocks may change underlying demographics
 - 2008 pension reform in Chile
 - 2014 pension freedoms in the UK



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Chile: 2008 pension reform



- 2008 pension reform increased coverage for lower income individuals
- Increased coverage for lower income individuals increased overall mortality for pensioners
- Implied mortality improvements of pensioner population understated

Source: Chilean Pension Supervisor

United Kingdom: 2014 removal of requirement to purchase an annuity

- 2012
 - 25% of annuities sold to existing customers were for pension pots less than 5,000 GBP
- July-September 2015
 - 90% of individuals not taking a guaranteed annuity rate had pension pots less than 10,000 GBP

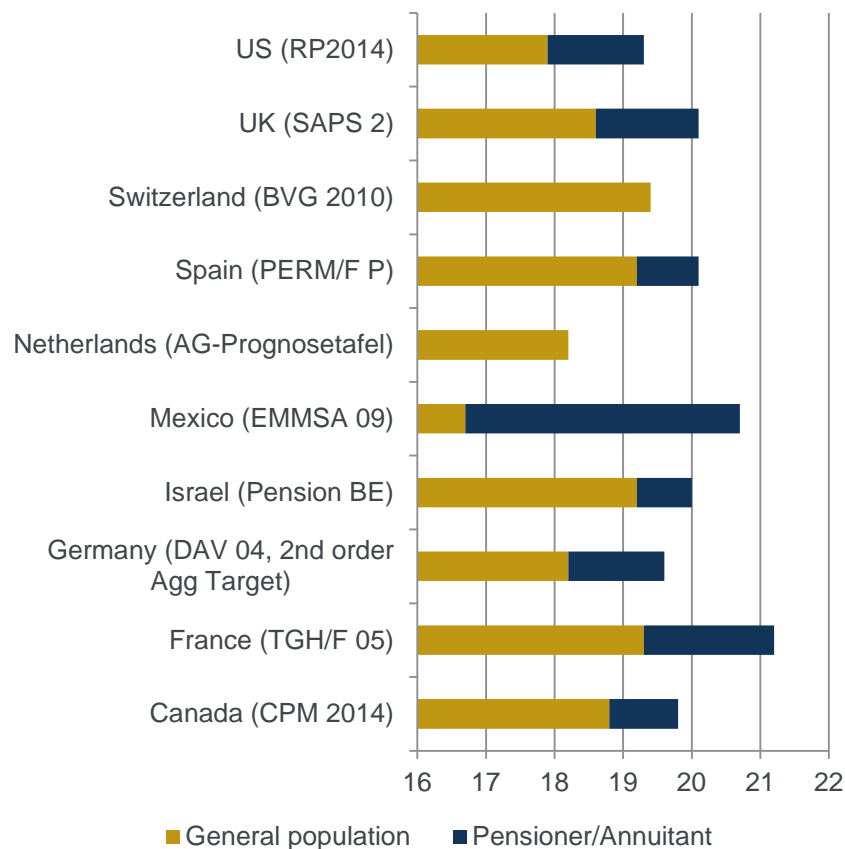
Source: FCA



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Challenges to the mitigation of longevity risk

Male life expectancy, age 65

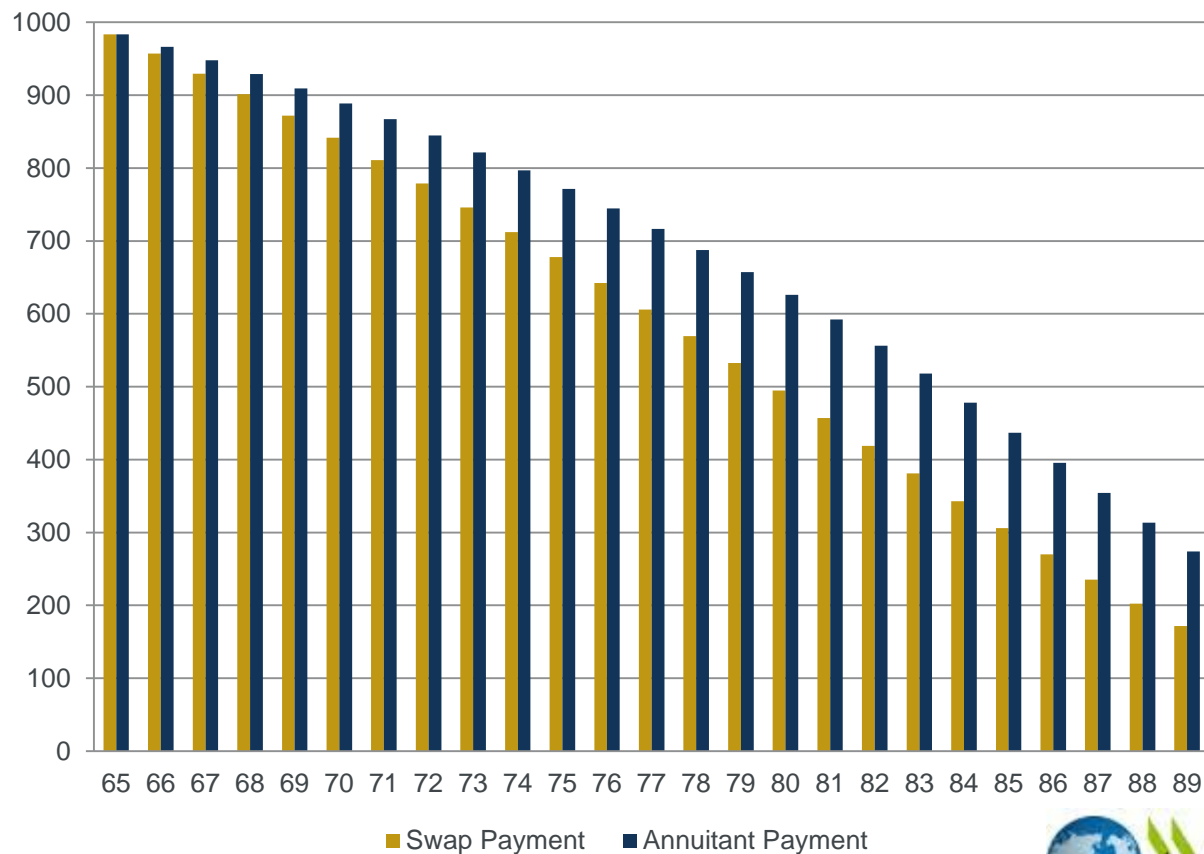


Pensioners and annuitants generally skewed towards higher socioeconomic groups

- Depends on structure of pension system
- Higher risk that mortality improvements will be higher than assumed
- Higher risk premium charged by reinsurers
- Capacity issues?

Source: See OECD Business and Finance Outlook 2016

Challenges to the mitigation of longevity risk



Source: Based on INSEE

Uncertainty around the effectiveness of an index-based hedge

- Indexing to the general population mortality less likely to cover additional payments to pensioners/annuitants

Opportunities to better meet varying consumer needs for retirement

- Lower socioeconomic groups
 - e.g. enhanced annuities offer higher levels of income for consumers having lower life expectancies due to behaviours such as smoking or health issues
- Higher socioeconomic groups
 - e.g. variable annuities offer higher levels of flexibility and liquidity for consumers more comfortable with investing and a desire to maintain control of assets



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Policy considerations

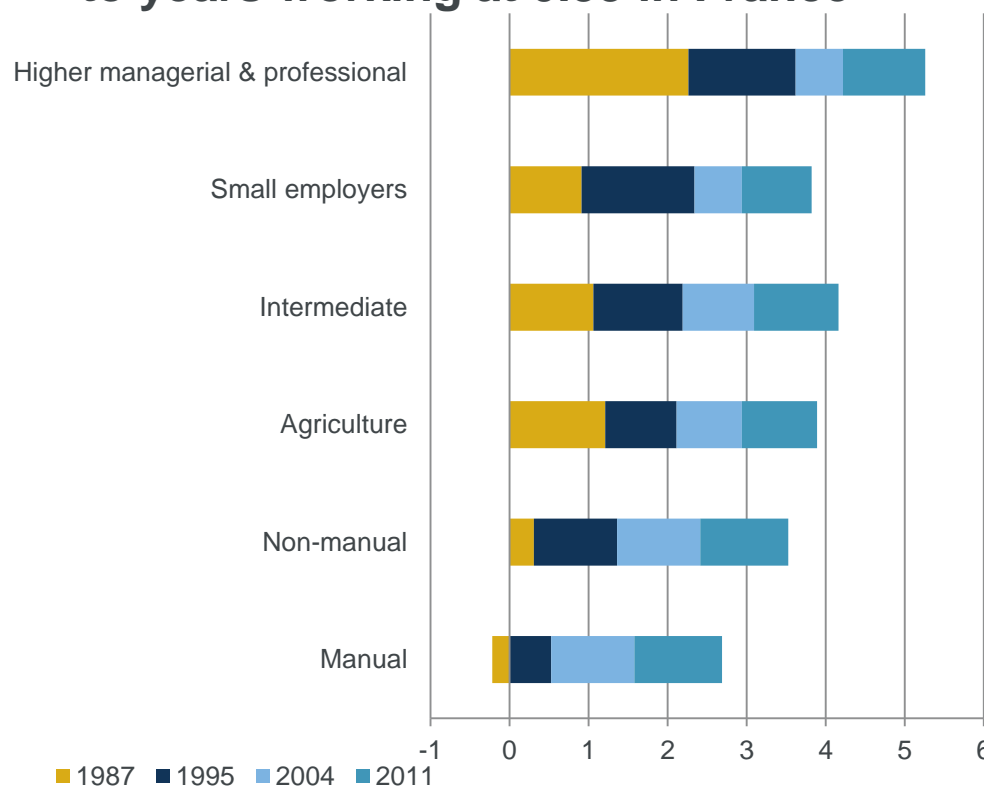
- Facilitate the measurement and management of longevity risk
 - Timely and accurate data by socioeconomic indicator should be made available
- Encourage the development of sustainable products to meet the needs of various segments
 - Carefully consider any ban on risk factors used for pricing
 - Appropriate reserve requirements
 - Encourage demand through the provision of information



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Policy considerations

Additional years beyond age 65 to maintain a ratio of years in retirement to years working at 0.33 in France



Source: Based on INSEE

- **Ensure that rules governing access to pensions do not penalise lower socioeconomic groups**
 - Minimum age to gain full access
 - Maximum withdrawal limits
 - Annuitisation requirements

Discussion

- Measuring and managing longevity risk
 - How are you addressing the impact of the pension freedom on annuitant demographics?
 - Are differences in improvement rates taken into account?
- Product opportunities
 - Are enhanced annuities still a solution for lower socioeconomic groups? They are not common in other voluntary markets...
 - What has the impact of the pension reform been on product development?
 - Are there barriers to product innovation?
 - What are the limits to risk segmentation?
- Sustainable pensions
 - How to address increases in life expectancy?



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Thank you!

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