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Saving for retirement and pensions policy

January 2025

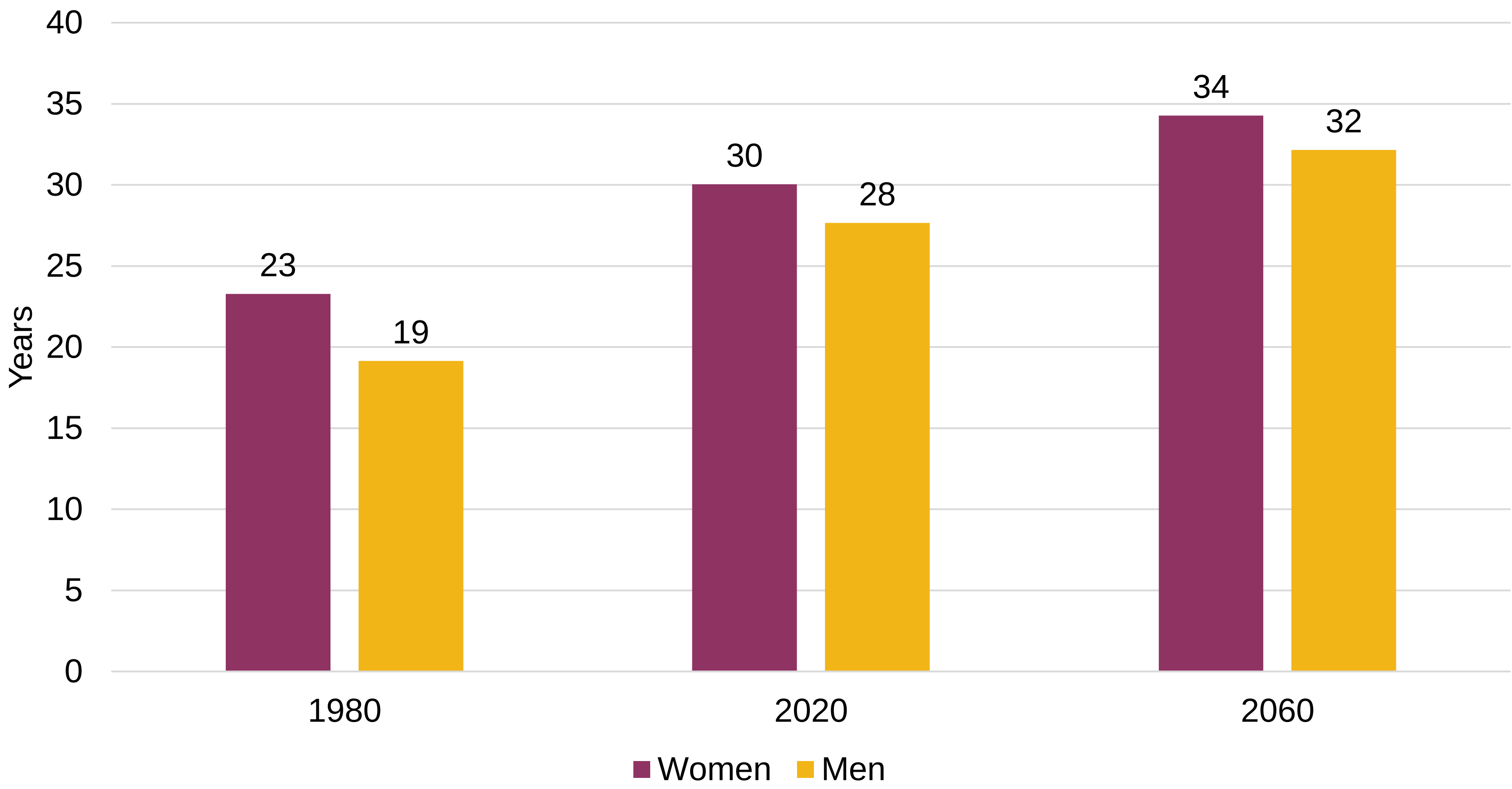
Public Economics Lecture Day

@TheIFS

Economic and Social Research Council

Populations are ageing

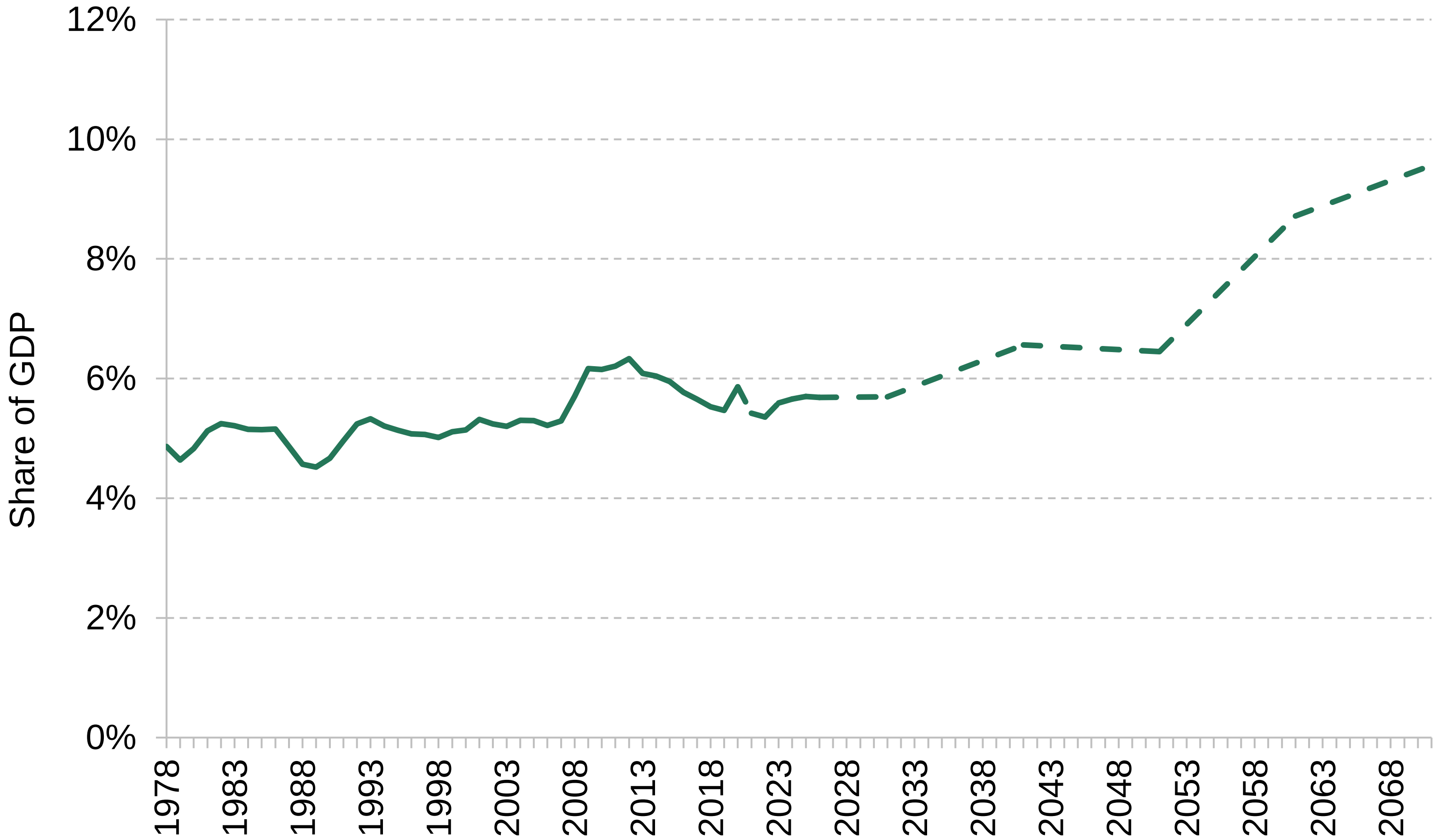
UK life expectancy at 60, by year that turn 60



Source: ONS

Welfare spending on pensioners projected to rise

GB welfare spending on pensioners as % of GDP



Source: DWP and OBR

Demographic change…

- Big implications for the age structure of developed economies

- Increases pressures on public finances – and in particular pension systems

- This has forced governments to implement changes to pensions policy

… has led to big (sometimes controversial) changes in pensions

Outline

1. Why do people save for retirement?
2. Why and how do governments intervene in pension saving?
3. Current challenges in public pension systems
4. What has happened to the UK state pension?
5. How have employer pensions in the UK changed?
6. Summary

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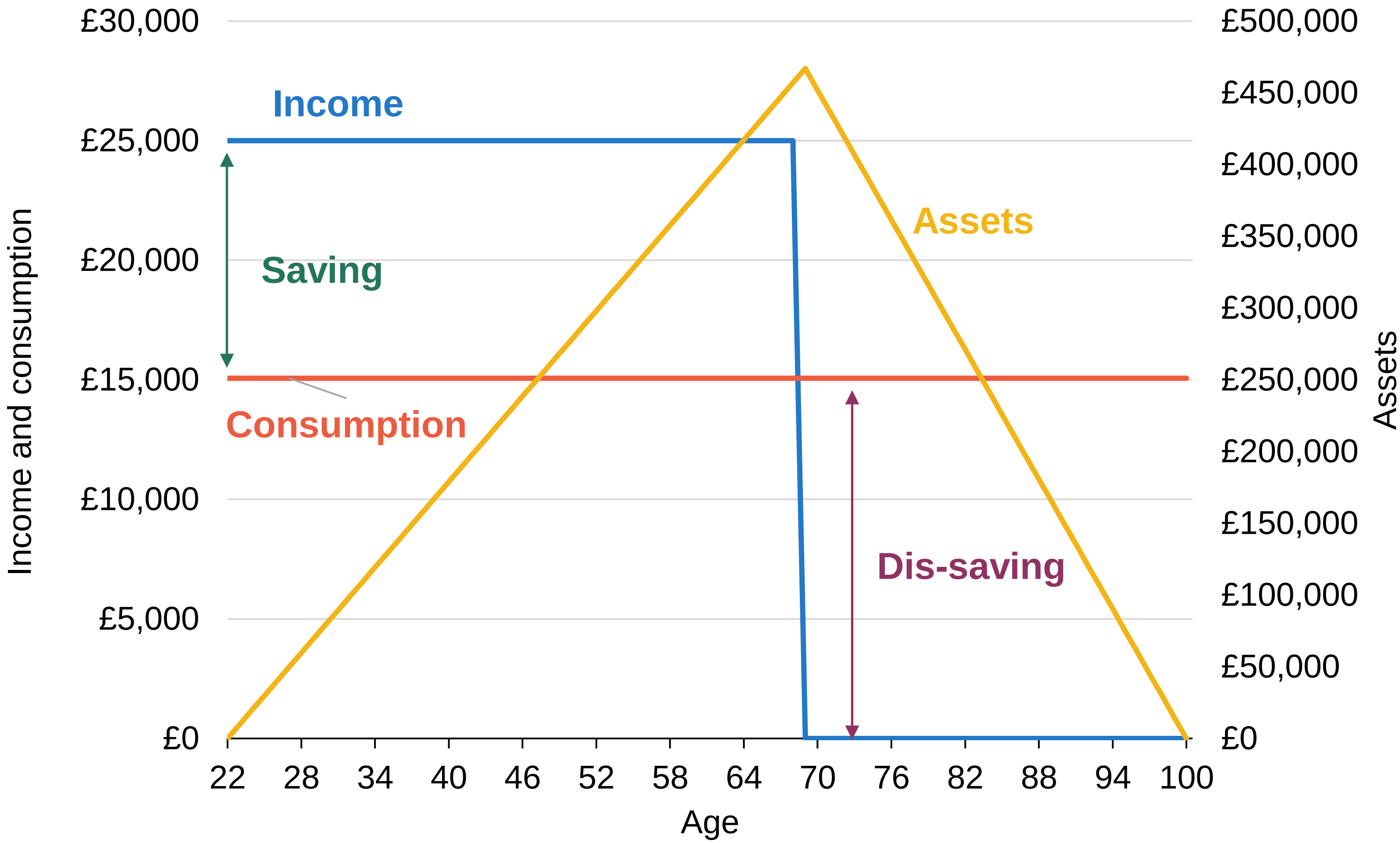
Why save for retirement?

- Life-cycle model
- Individuals live for 100 periods
  - Work age 22 to 67 with income $y_t = 25{,}000,\ t \in \{22, \ldots, 67\}$
  - Retire at age 68, so that income $y_t = 0,\ t \in \{68, \ldots, 100\}$
  - No uncertainty about earnings or lifespan
- Can save in a risk-free asset with constant rate of return r
- Individuals have utility $U = \sum_{t=22}^{100} \beta^{t-22} u(c_t)$
- Euler equation: $u'(c_t) = \beta(1+r)u'(c_{t+1})\ \forall t$
- With special case $\beta(1+r) = 1$, $c_t = c_{t+1}\ \forall t$

Life-cycle model

Consumption smoothing



Why save in a pension?

- People save into a pension in order to **smooth consumption**
  - Move resources from working life to retirement to maintain a level of consumption in later life when not willing or able to work

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What is the rationale for government intervention in retirement saving?

- Under the standard model, people make the right choices for themselves

- In reality we see a lot of government intervention

Why might the government intervene in pensions?

Incomplete information

- Inaccurate assessment of risk and uncertainty
- Lack of financial literacy
- Lack of knowledge of pensions

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Asymmetric information

- Adverse selection in annuity markets

Annuities

- Consumption smoothing is difficult because of longevity risk
- People can insure against this by purchasing a product called an annuity
  - Provides a guaranteed fixed income until end of life
- Why may the government intervene in the annuity markets?
  - Market failure due to asymmetric information leading to adverse selection

Why might the government intervene in pensions?

Incomplete information	Asymmetric information	Behavioural
• Inaccurate assessment of risk and uncertainty • Lack of financial literacy • Lack of knowledge of pensions	• Adverse selection in annuity markets	• Present bias • Inertia

Why might the government intervene in pensions?

Incomplete information	Asymmetric information	Behavioural	Redistribution
• Inaccurate assessment of risk and uncertainty • Lack of financial literacy • Lack of knowledge of pensions	• Adverse selection in annuity markets	• Present bias • Inertia	• Redistribute within or between generations

How do governments intervene in retirement saving?

1. **Public pension** systems
   - Taxes and mandatory contributions during working life, pension benefit from government in retirement
   - Usually a ‘pay-as-you-go’ system
2. **Private pensions** (usually employer provided)
   - Contributions can be made mandatory (e.g. Australia, Switzerland)
   - Incentives to encourage private saving in pension products

UK pension system

State provision complemented with private saving

- **State pension** – pay as you go public pension benefit system
  - Flat rate (£221.20 / week in 2024/25)
  - 30% of median full-time earnings
  - No earnings test or work conditionality
- **Employer pension**
  - In the past: mostly defined benefit
    - A set income in retirement, usually defined by earnings and time spent in scheme – risk sits with employer
  - These days: mostly defined contribution
    - Employee and employer contribute into a pension fund, value evolves according to the investments – risk sits with employee
- **Other saving**

Timeline of key policy changes

2000
SP (State pension) reformed to be more generous to carers and low earners

2006
Mandatory retirement age abolished

2007
Future increase to SPA (State pension age) legislated

Phasing out of earnings-related part of SP begins

2010
Women's SPA starts increasing

2011
Increase to SPA accelerated

Triple lock introduced

2012
Automatic enrolment introduced

2014
Increase to SPA accelerated

2015
"Pension freedoms" introduced

2016
New state pension

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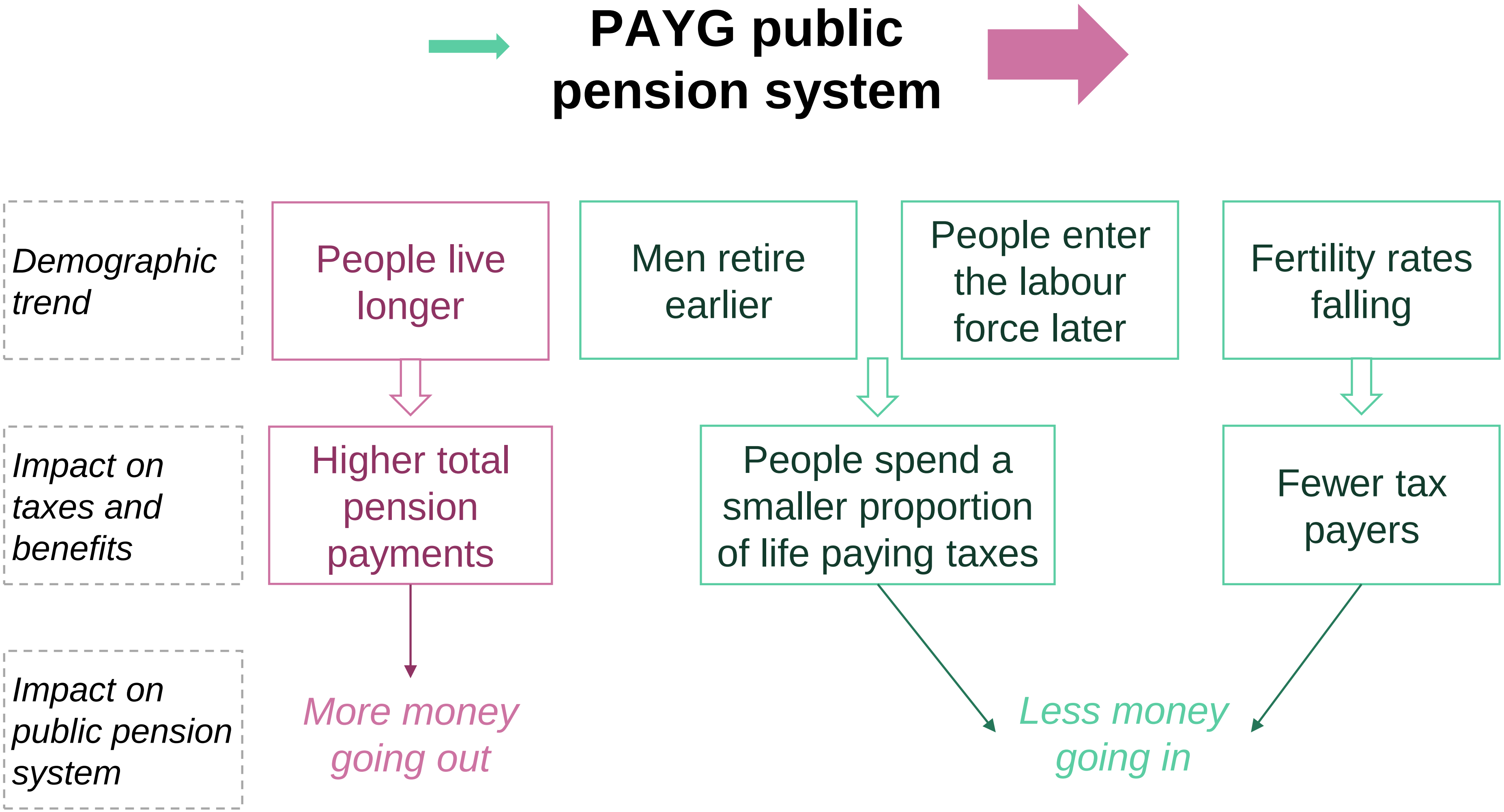
Public pension system sustainability



Pension system trade-offs

How to ensure sustainability of a public pension system?

- **Higher contributions**
  - But there are trade-offs; in particular labour market distortions
- **Less generous benefits**
  - May also incentivise more work and private saving
  - Trade-offs; may affect living standards of retirees

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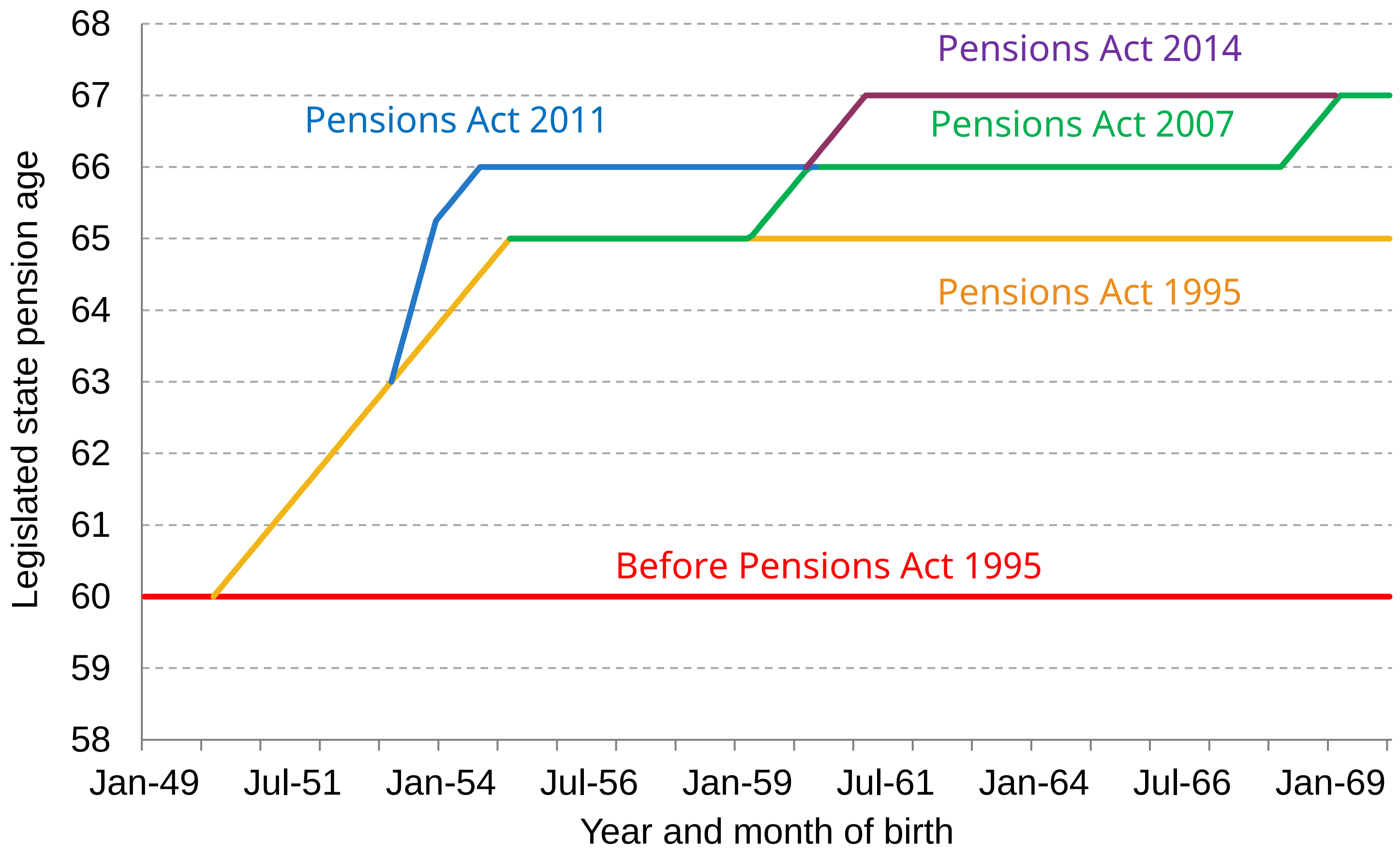
UK pension system

Changes in recent times – state pension

- UK has reduced state pension payments by increases in the **state pension age**

    - This is the age at which people can start receiving a state pension

Changes in women's state pension age (SPA)



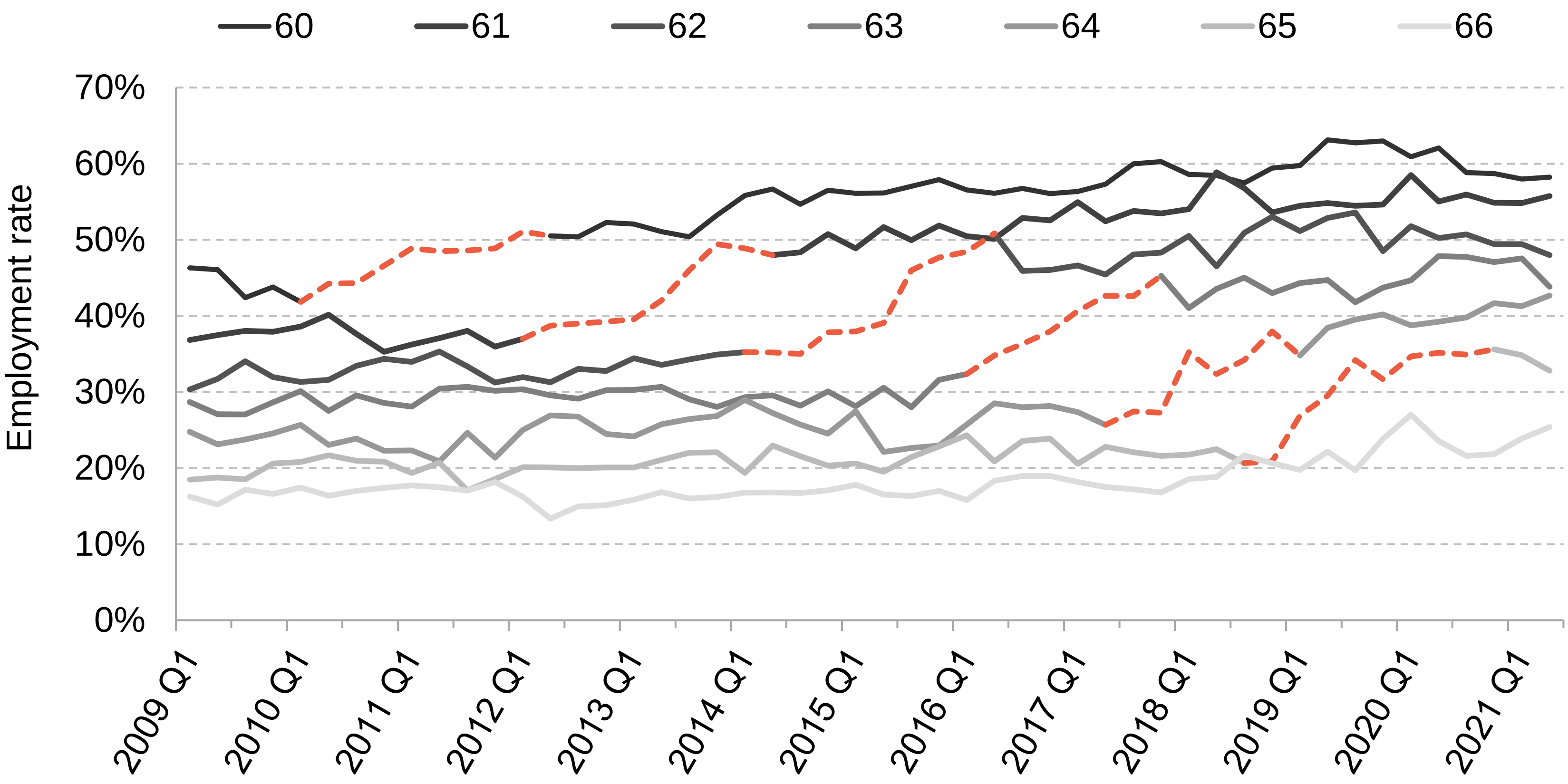
Effect of increasing the state pension age (SPA)

- SPA increase aimed to improve public finances by:
  - Reducing the number of years that people receive a state pension
  - Increasing employment rates of older working-age women

- SPA increase may affect work decisions via several mechanisms:
  - Reduction in lifetime wealth
  - Credit constraints
  - Social norms

- → Use roll-out of the SPA increase to quantify employment effect and identify important mechanisms

Effect of increasing the female SPA on employment rates



Source: Coile et al.. (forthcoming)

Effect of rising SPA

What was the effect of the most recent SPA increase?

- Cribb, Emmerson and Tetlow (2016) use a difference-in-differences methodology to estimate effect of SPA increase on employment

- In this case: compare employment rates over time of otherwise similar women who faced different state pension ages

Effect of rising SPA

How did increase in SPA affect women?

- They find that being under the SPA increases the probability of being in work by 6.3 percentage points
  - → Behavioural change leads to a fiscal strengthening that is 10% higher than a costing with no employment effects

- Coile et al. (forthcoming) show the key mechanisms are credit constraints & social norms

- However, Cribb and Emmerson (2018) find that earnings did not increase by enough to offset the lost state pension income
  - Income poverty women among the affected women increased by 6.4 percentage points

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Changes to employer pensions

Defined benefit to defined contribution

- Shift from defined benefit to defined contribution schemes, where it is the individuals' responsibility to make sure they are saving enough

- The reduced generosity of state pensions combined with an increased focus on defined contribution employer pensions:
  - → Transfer of risk and responsibility from employer and state to individuals in the UK

- But biases and other distortions mean people may not save optimally
  - Government intervention needed

Policy responses to transfer of risk

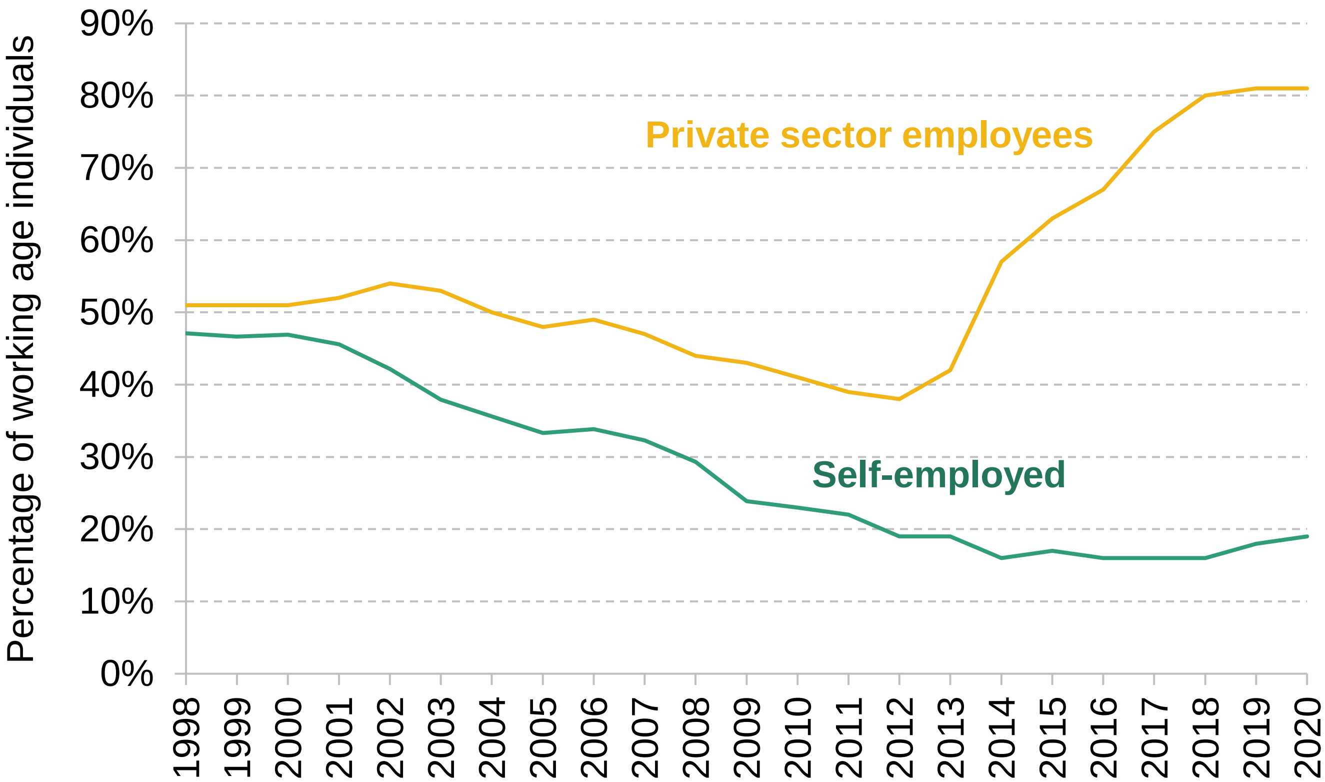
Nudge to encourage private saving

- Automatic enrolment
  - Employees aged 22 to SPA have to be automatically enrolled to a pension scheme by their employer

- Firms can choose default contribution rate, subject to minimum
  - Minimum default contribution rate initially 2% of pay (with 1% coming from employer)
  - Now 8% of pay (with 3% coming from employer)

- Rollout started in 2012, completed by 2018

Impact of automatic enrolment on pension participation



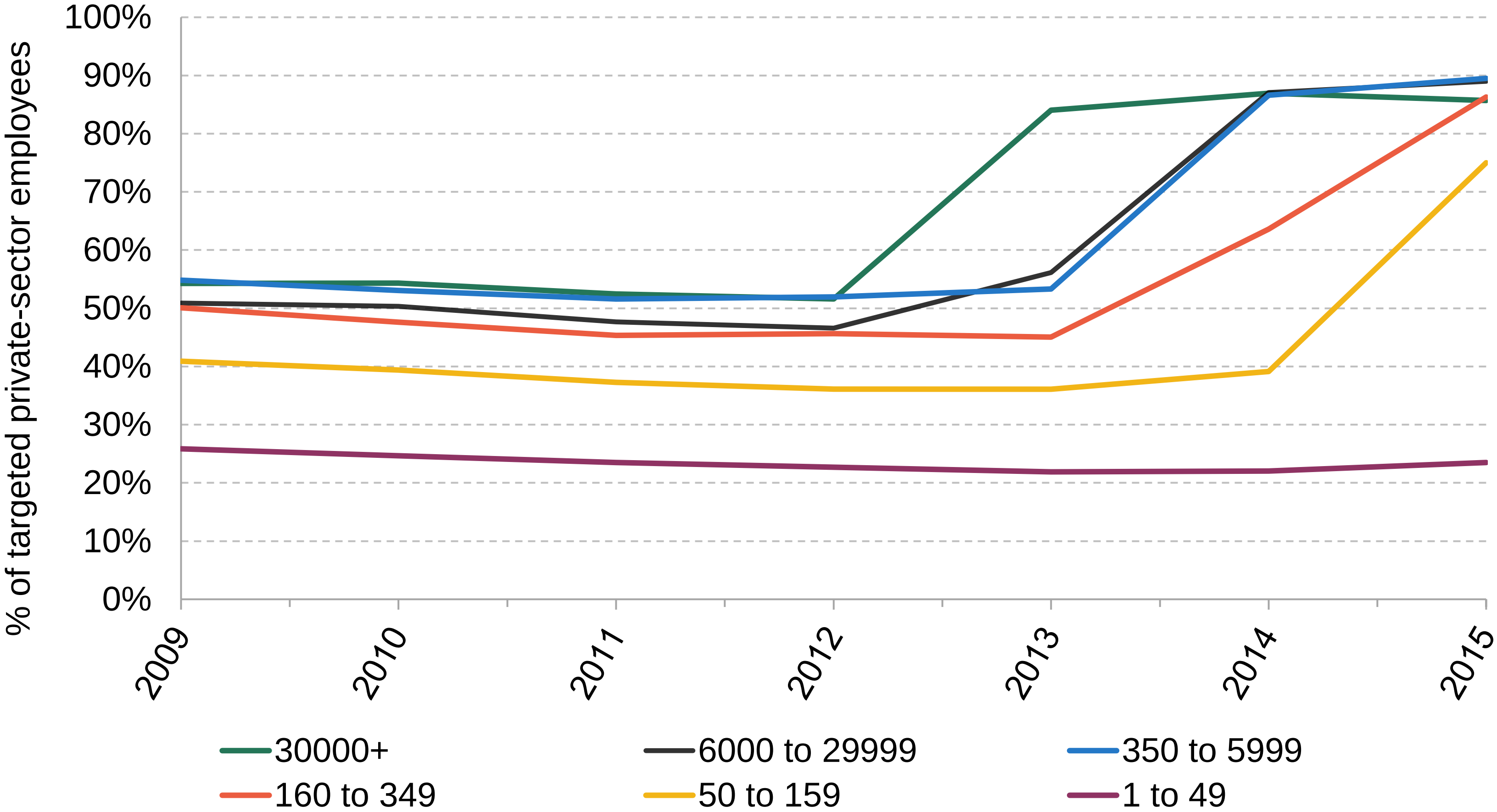
Source: Cribb and Karjalainen (2022) and DWP (2022)

Estimating the effect of automatic enrolment on pension membership

- Automatic enrolment was rolled out gradually by employer size
  - Largest employers had to start enrolling employees by late 2012
  - Smallest employers only had to start enrolling employees between late 2015 and early 2018
- Cribb and Emmerson (2019) exploit this staggered rollout to estimate the effect of automatic enrolment on pension membership
  - Again using a difference-in-differences methodology

Effect of automatic enrolment

Pension membership by employer size over time, targeted private-sector employees



Source: Cribb and Emmerson (2020)

Effect of automatic enrolment

- Cribb and Emmerson (2020) find automatic enrolment increased pension membership by 36 ppt for targeted private-sector employees

- Largest effects for those with the lowest rates of pension membership prior to automatic enrolment
  - Those in their 20s
  - Lower-paid employees
  - Those who have joined their employer more recently

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Summary

- Pension saving helps smooth consumption through the life-cycle
- People may not save optimally because of behavioural biases and other distortions, potentially justifying government intervention
- Demographic change challenges the sustainability of public pension systems and defined benefit schemes
- UK government increased state pension age to improve sustainability of public pension system
  - Led to a significant increase in employment rates of older women
- Also introduced automatic enrolment to encourage higher rates of private pension saving
  - Led to an increase in pension membership for targeted employees

Bibliography

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Additional reading:

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