

# When should people save for retirement, and how do they?

Tuesday 11th May  
10:00 - 11:00



# Context for this research

- Lots of focus on the ‘adequacy’ (or not) of retirement saving
- Less attention on **when** individuals should or do save for retirement
  
- 2 year programme of research funded by the Nuffield Foundation
  - How should saving change over working life?
  - How do employees and the self-employed behave in practice?
  - How do saving rates change with age, changes in earnings, and other changes in personal circumstances?

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- Today: discuss two initial publications



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# When should individuals save for retirement?

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# Using a simple economic model

- Not an attempt to model how people save in practice
- Aim to illustrate how ‘features of life’ would be expected to affect preferred patterns of saving
  - Earnings growth
  - Children
  - Student loan repayments
  - Financial incentives to save
- Yields practical implications for real-world policy

# The simple model

- Model an individual from age 22 to death
- Each year they choose how much to spend and how much to save
- Saving is in an illiquid risk free asset with a known return
- Solution will smooth living standards over the life cycle
  
- Baseline: all years of working life are the same

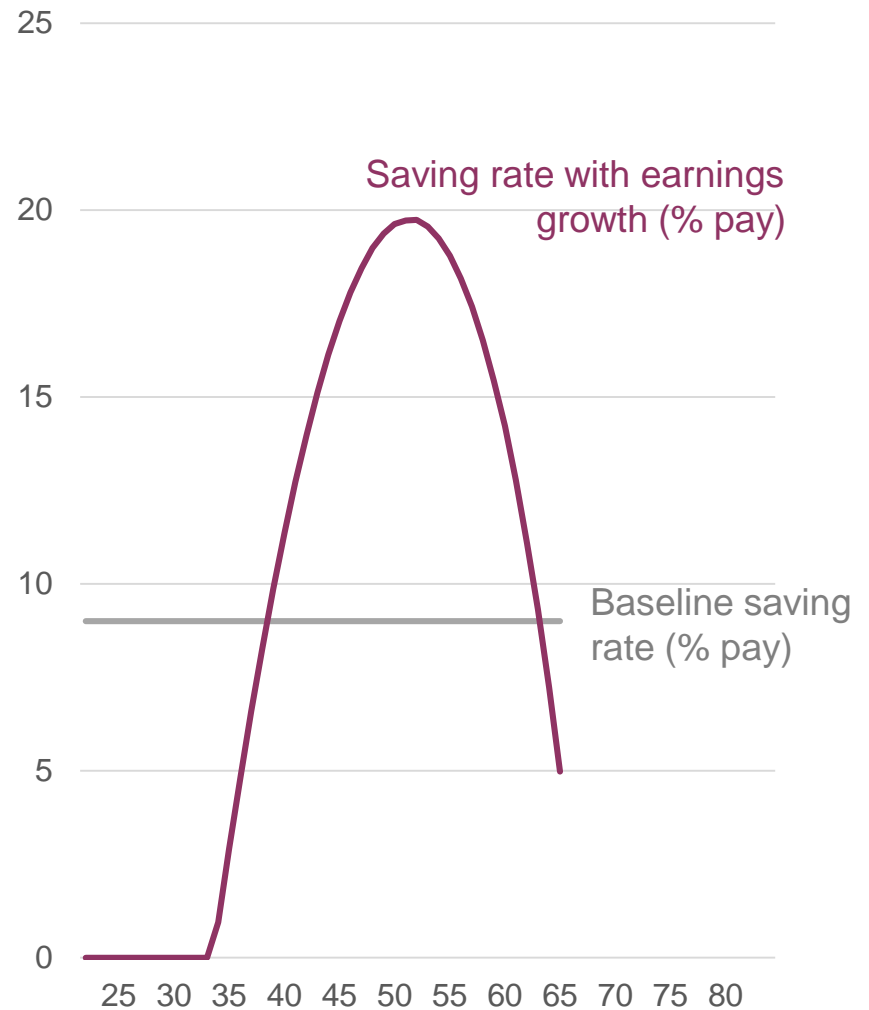
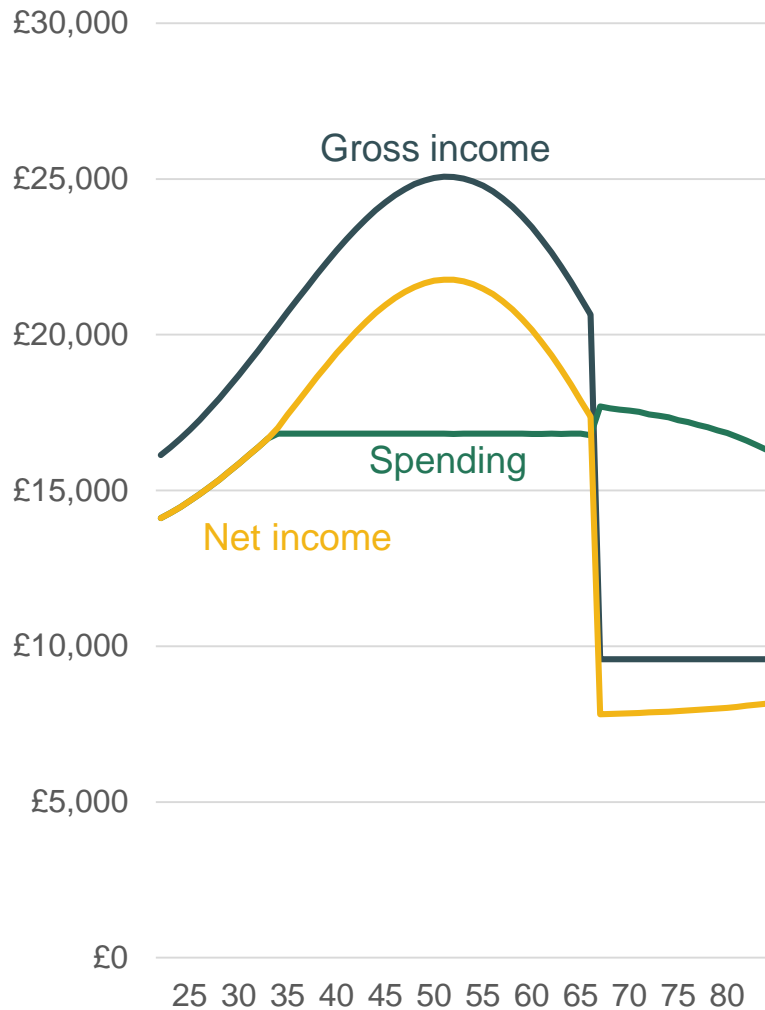
# Baseline model



Notes: Assumes 3% real rate of return and 3% discount rate.

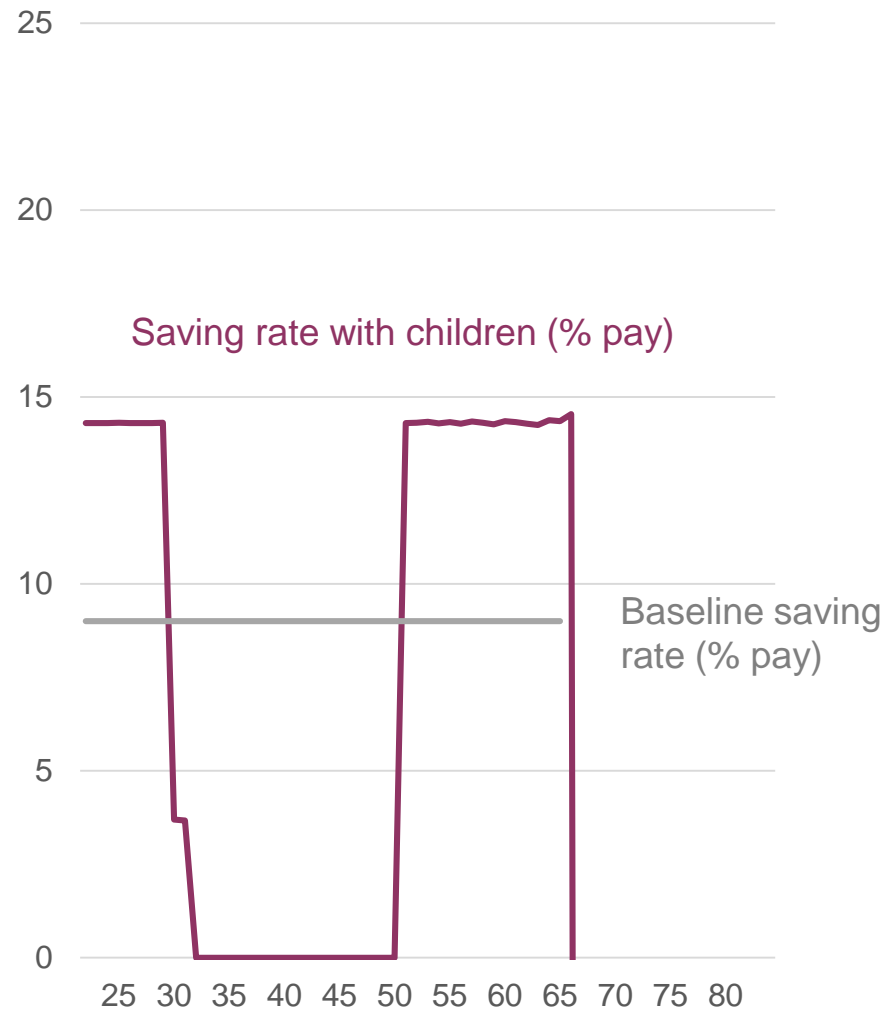
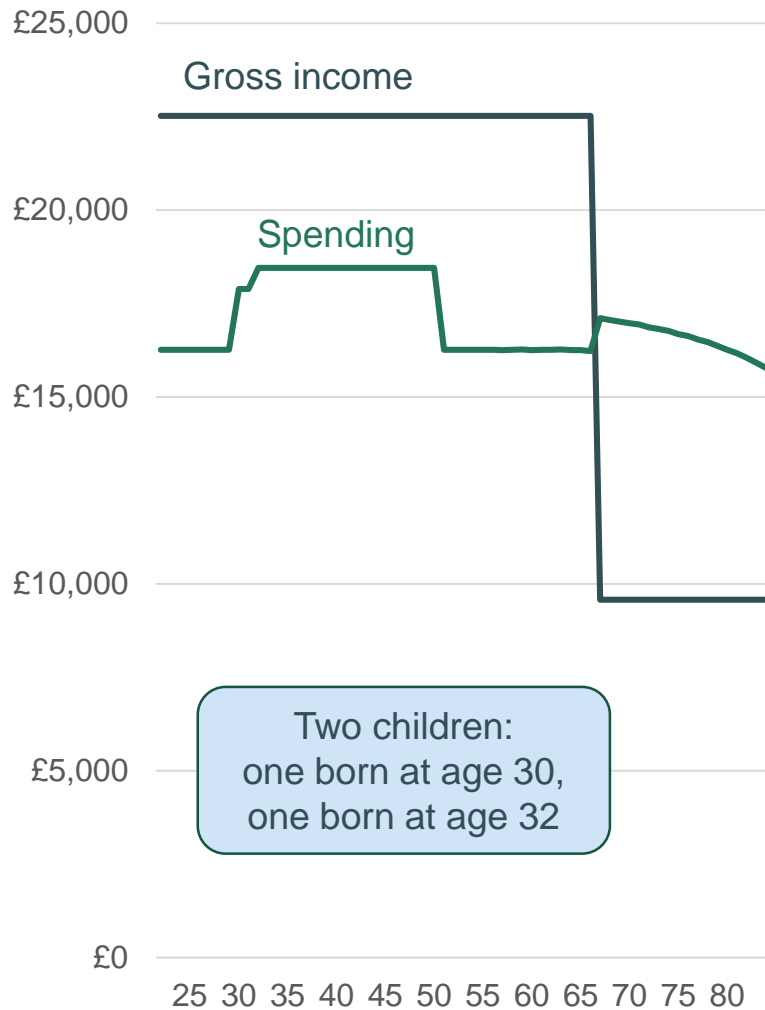
When should people save for retirement?

# Effects of earnings growth





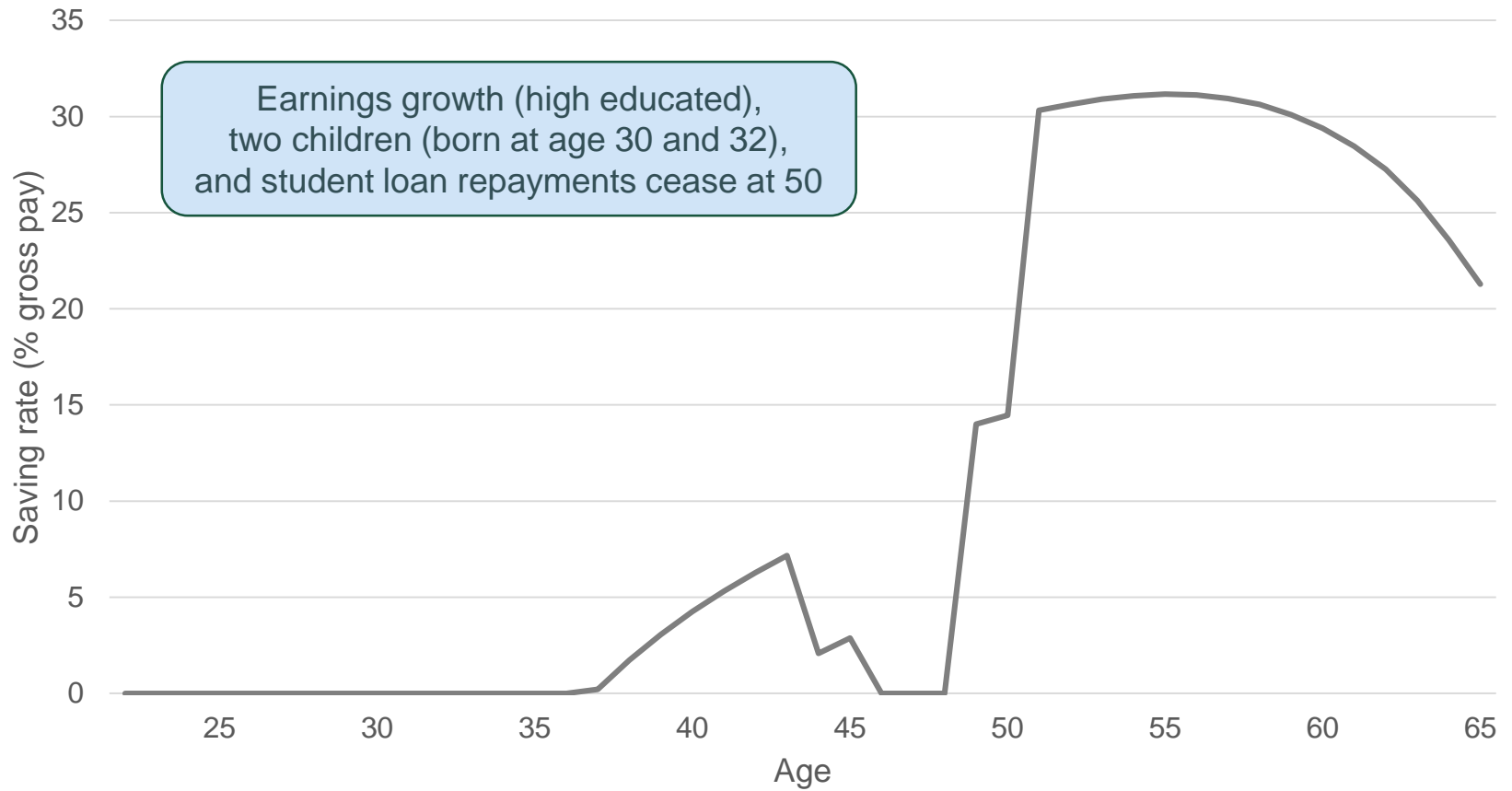
# Effects of children



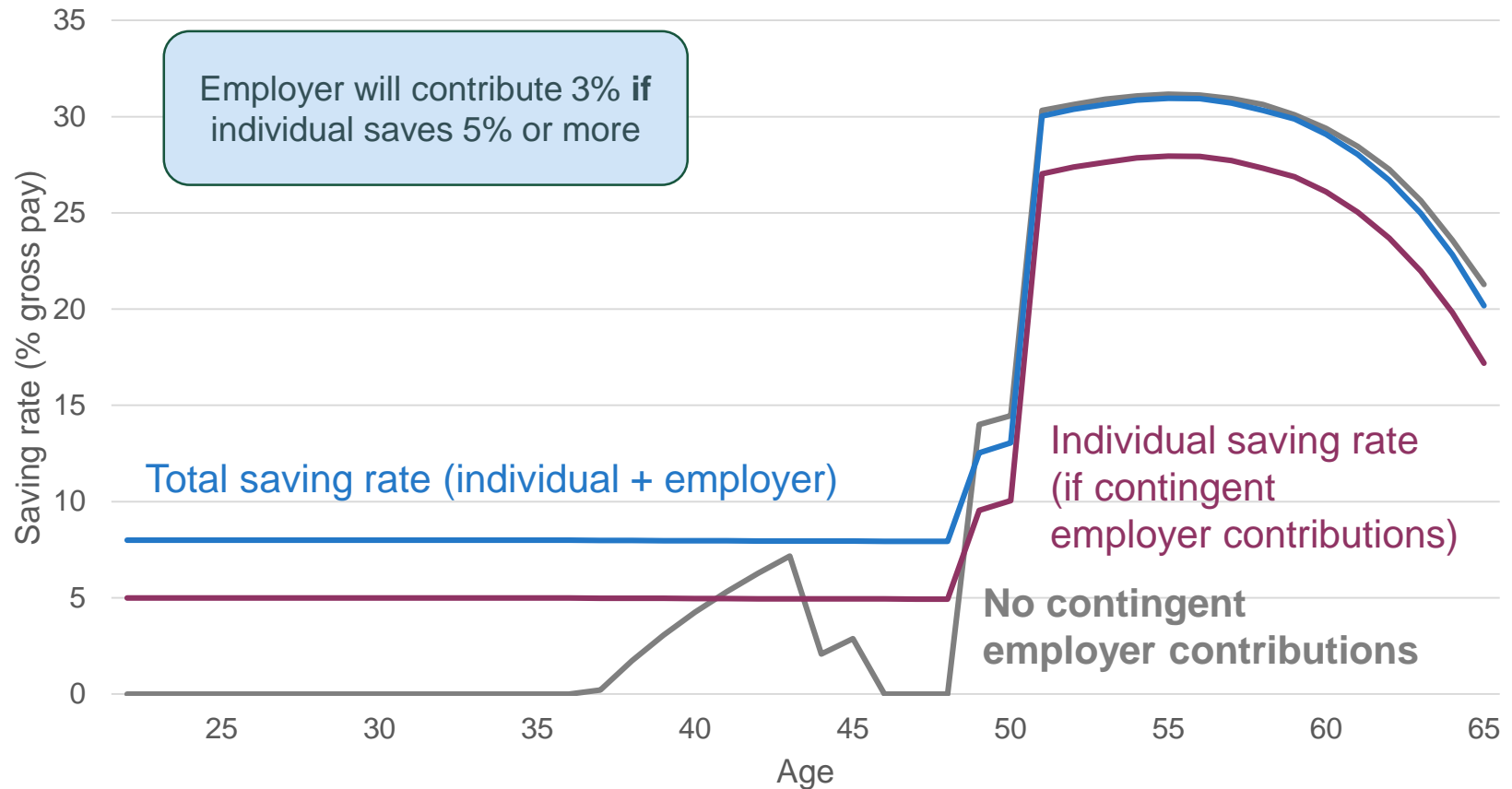
# Student loans

- Student loans have a particular repayment schedule
  - Repayments of 9% of income above a threshold (£26,575)
  - Remaining debt is written off 30 years after graduation
- Only a minority of graduates should expect to repay their loan in full
- [Complex interactions with salary sacrifice arrangements]
- Simulations indicate IF making loan repayments that cease after 30 years...
- ... at that point should increase pension saving by full amount of previous repayments

# Taken together



# Effects of an 'AE style' incentive



# Effects of earnings uncertainty

- More saving at younger ages
  - Don't leave all saving until later years in case earnings lower than expected
  - If earnings better than expected then save some for retirement
- With (uncertain) earnings growth, children, student loans and employer contingent contributions:
  - On average saving rate still increases sharply in later life
  - 73% of simulated high-educated would do more than half of their pension contributions in the last half of working life
  - Median: 71% of contributions made at ages 45+ (high-ed)

# Implications

- Very good reasons to expect saving rates to vary (substantially) over working life
- An important downside of defined benefit pensions: contributions cannot be easily varied over working life to match capacity to save
- Automatic enrolment currently has a single default contribution rate
  - Does not imply this makes people worse off than without AE
  - But future adjustments to AE or other saving policies should explicitly consider lifecycle factors
    - Age dependent default employee contribution rates?
    - Increases in contribution rates triggered by earnings rises?
    - Defaults to increase saving when student loans are repaid?
    - Nudges to increase saving when children reach age 18?



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# How do people save in practice?

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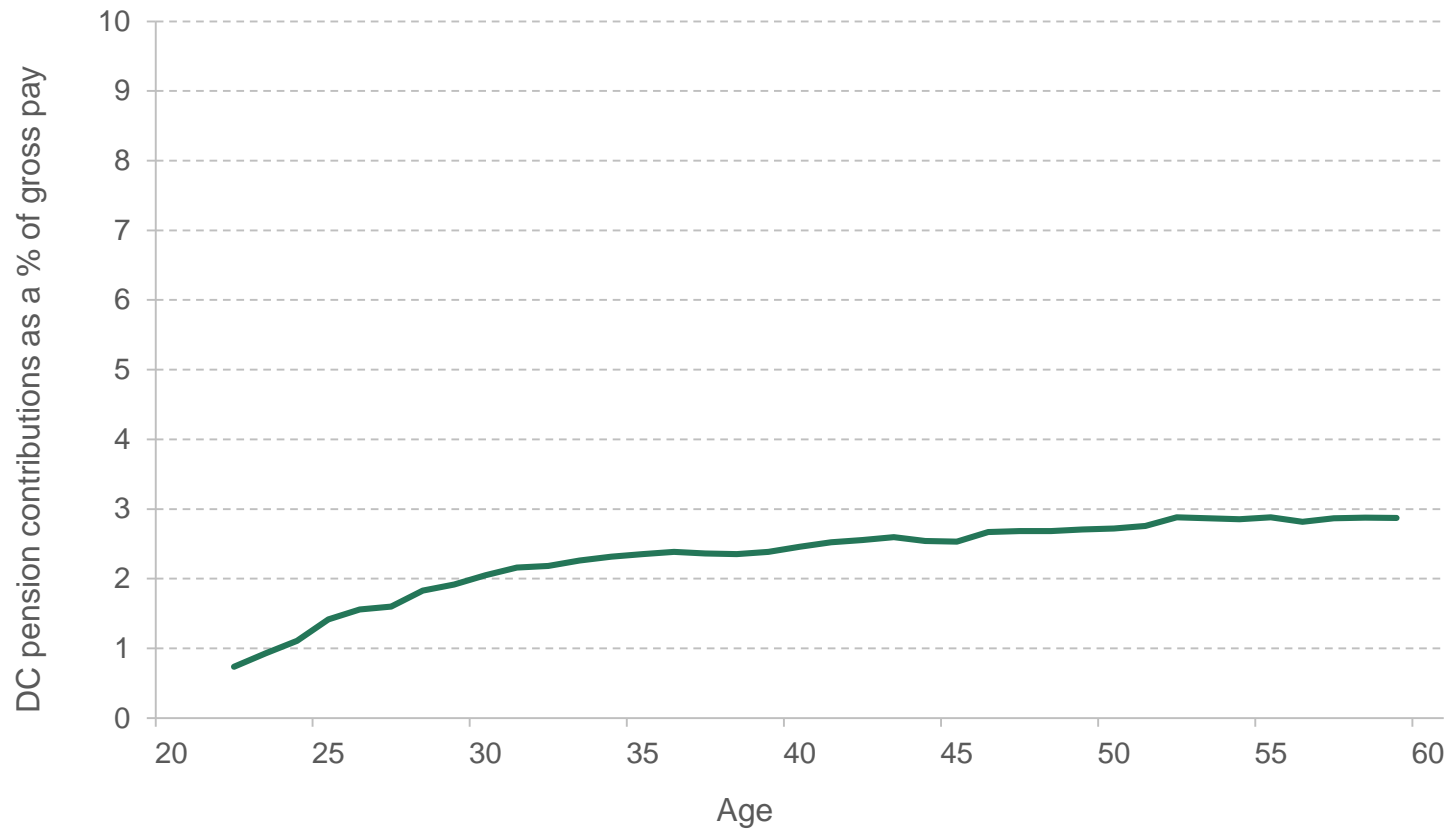
When should people save for retirement?

- We estimate age profiles, controlling for time and generation differences
- Focus on period 2005-12
  - Before Automatic Enrolment (AE)
  - We don't have enough years of data to confidently estimate age profiles post-AE
- When asking how people change their contributions with age, we'll focus on private-sector employees saving in defined contribution (DC) pensions



# Pension saving did increase with age, but only slightly

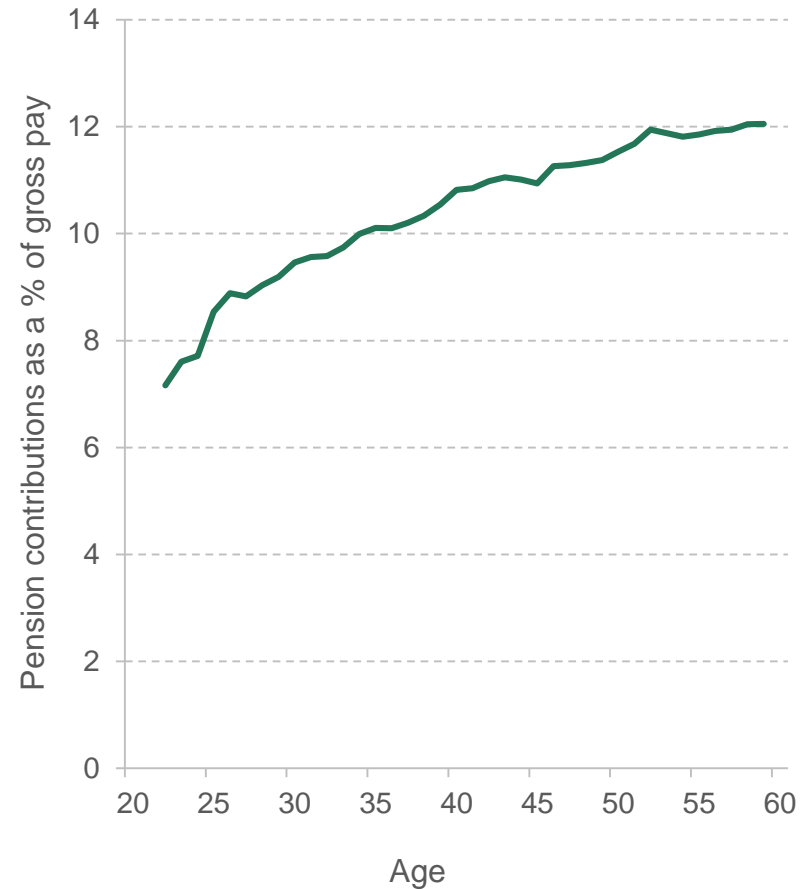
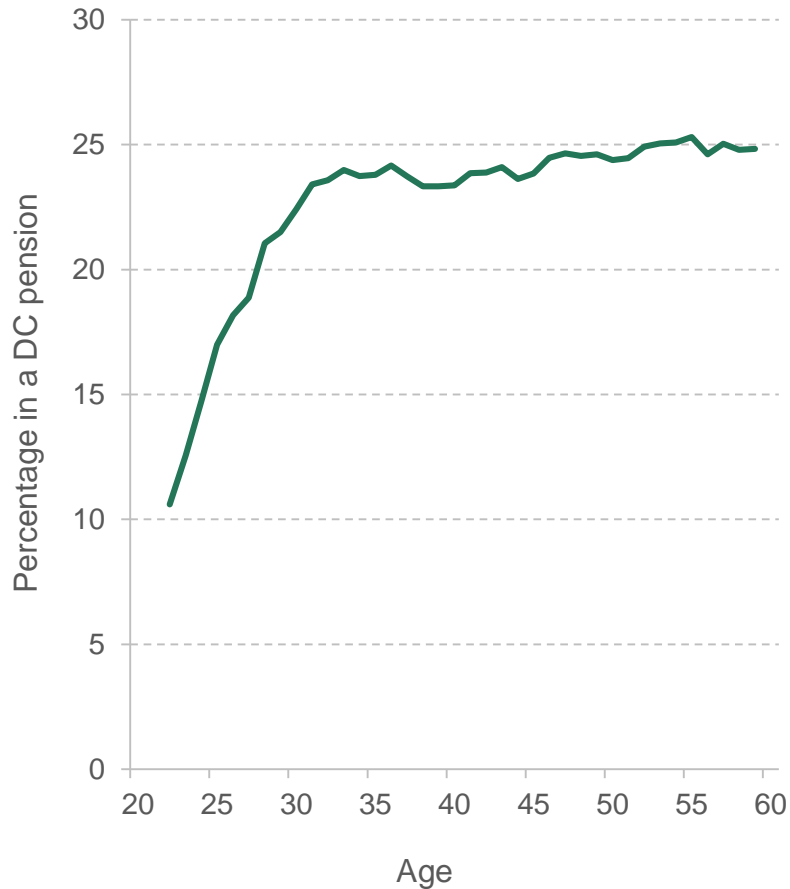
Average DC pension contributions as a percentage of gross pay for private-sector employees, by age (2005-12)



Source: Figure 2.3 of Crawford and O'Brien (2021)

# Pension membership and contributions drive this increase

Percentage of private-sector employees in a DC pension by age, and average contributions for private-sector employees in a DC pension by age (2005-12)



Source: Figures 3.1 and 3.2 of Crawford and O'Brien (2021)

# Key takeaways

- Before AE, DC pension saving did increase with age among private-sector employees...
- ... but not nearly as much as suggested by the theoretical model
- → Undersaving is particularly a problem in later working life
- Much of this increase was driven by people starting to save in a DC pension, particularly during early working life
- Automatic enrolment has dramatically increased private pension membership, particularly among younger individuals
- The effect of this will be to further flatten the age profile of pension saving
- → Future policies should consider lifecycle factors



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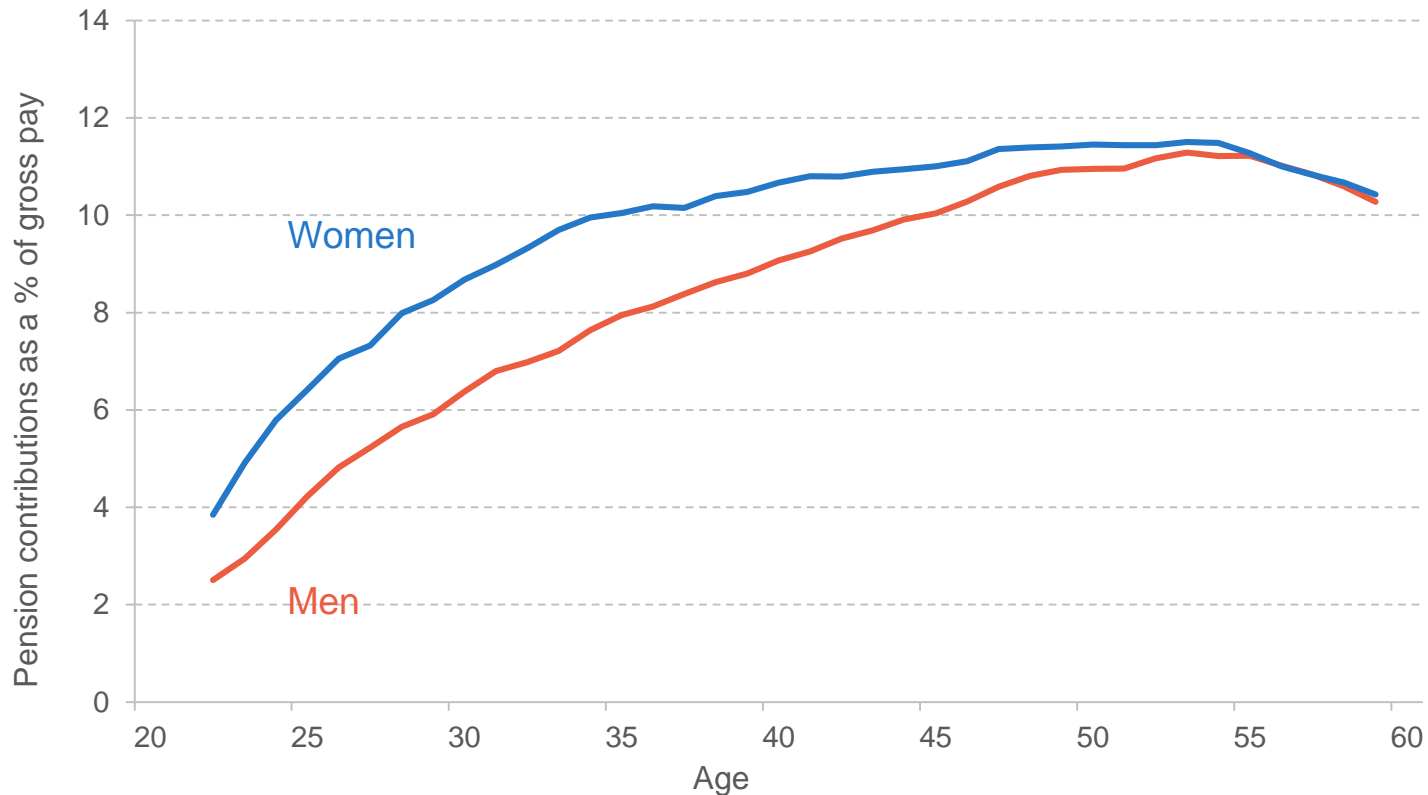
# Gender pension differences

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When should people save for retirement?

# Women saved a higher proportion of their earnings in a pension than men

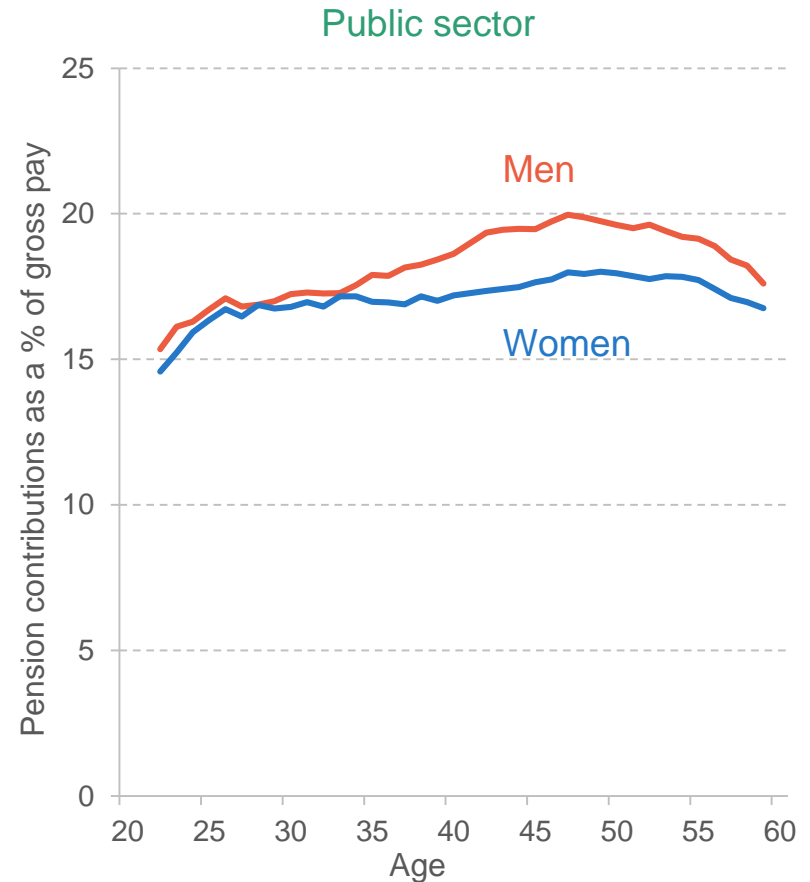
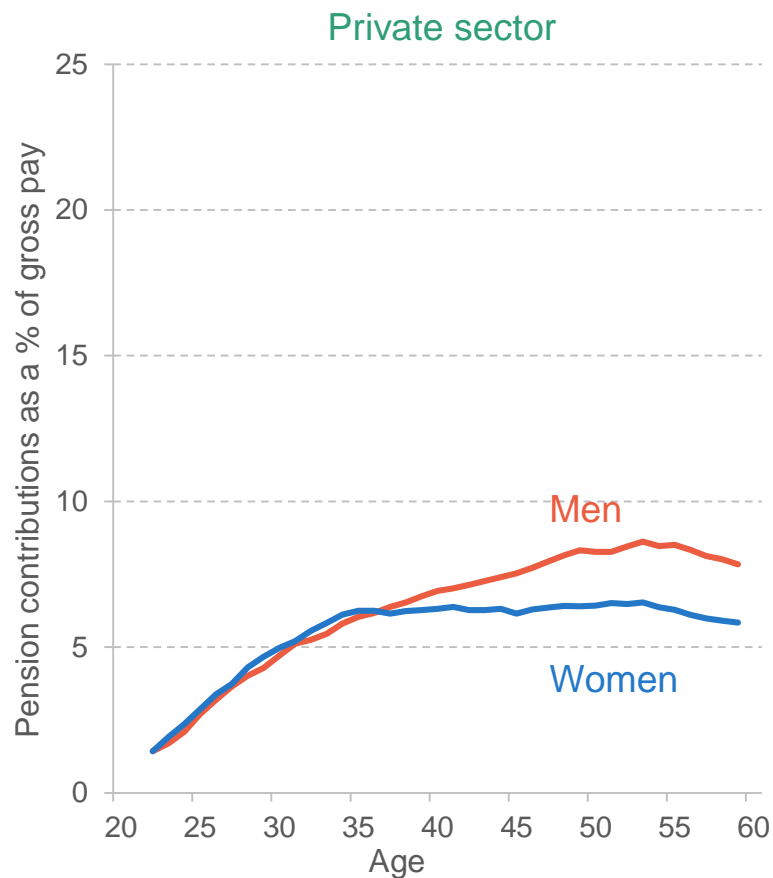
Average pension contributions as a percentage of gross pay for employees, by age and sex (2005-12)



Source: Figure 4.1 of Crawford and O'Brien (2021)

# Conditional on sector, a pension savings gap opens up at age 35

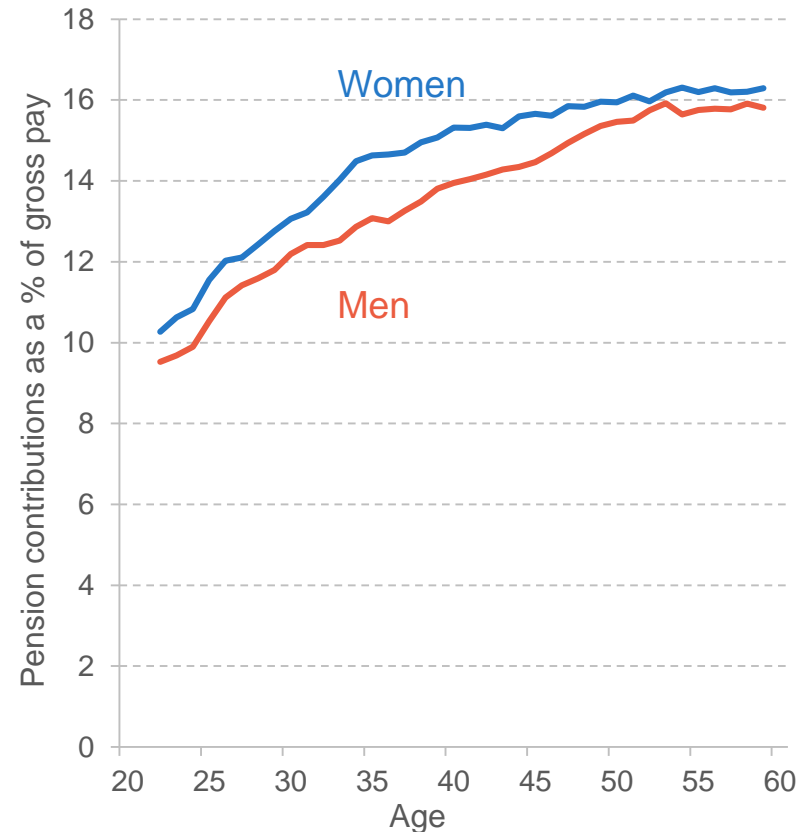
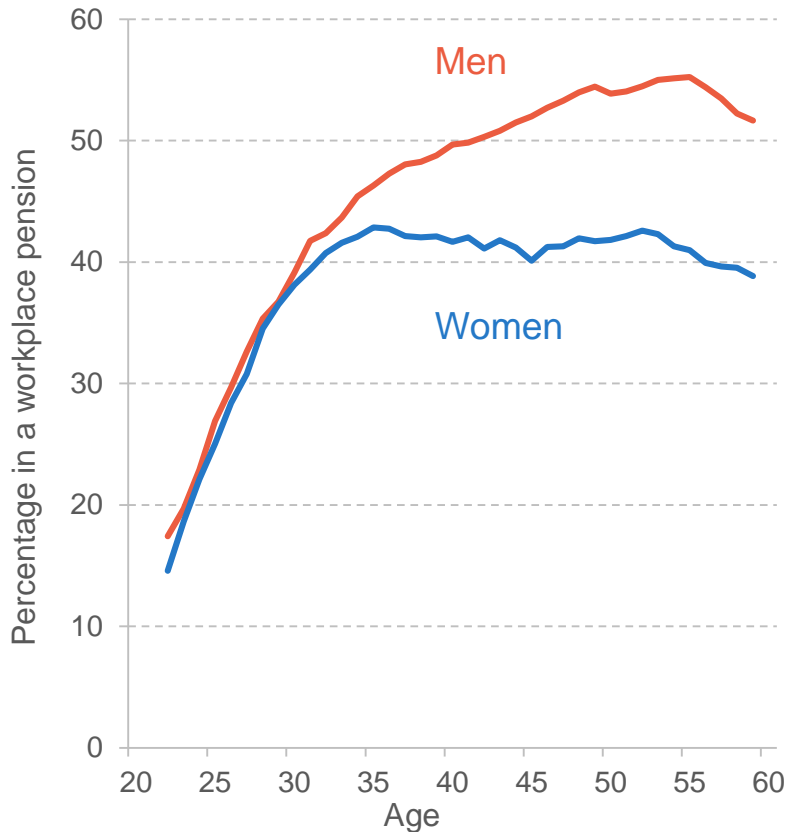
Average pension contributions as a percentage of gross pay for employees, by age, sex and sector (2005-12)



Source: Figure 4.2 of Crawford and O'Brien (2021)

# This gap was driven by lower pension membership among women

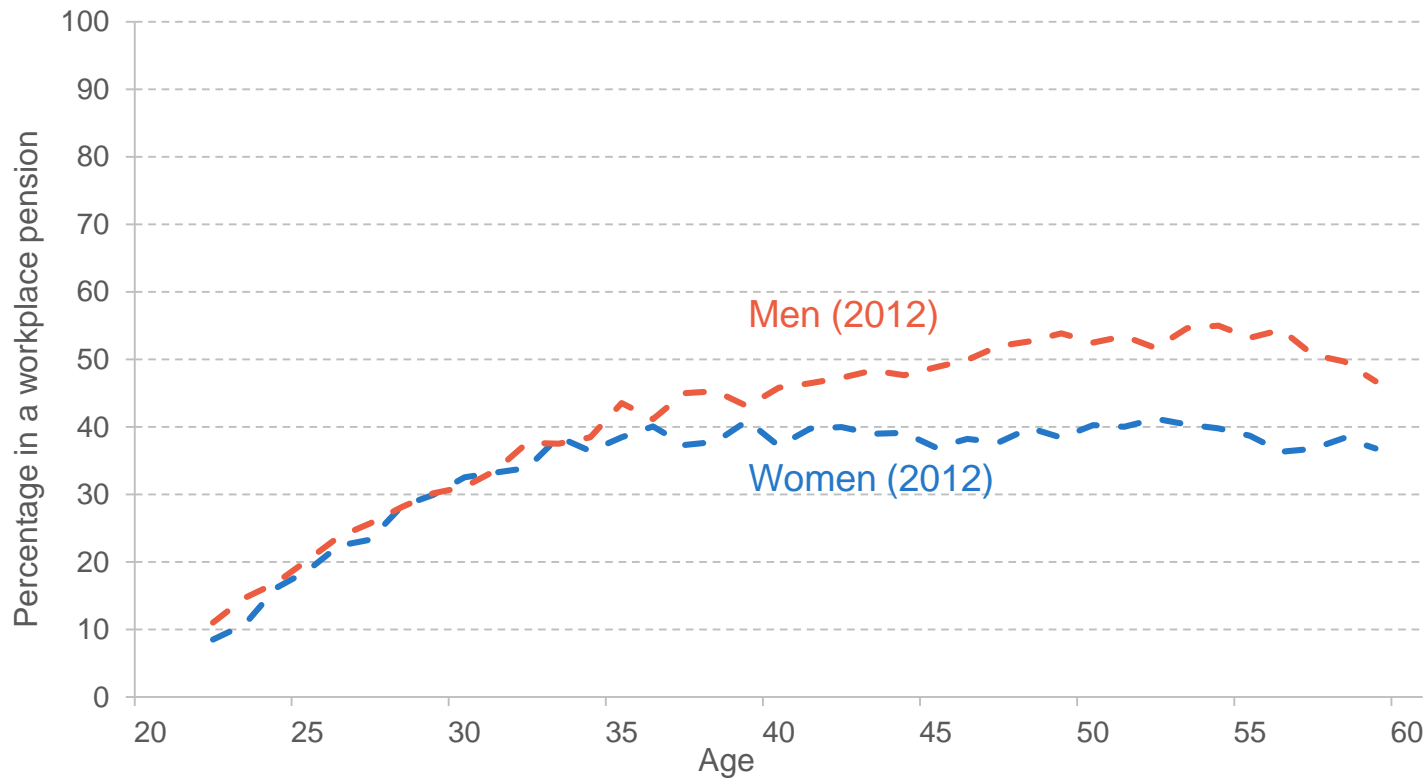
Percentage of private-sector employees in a pension by age and sex, and average contributions for private-sector employees in a pension by age and sex (2005-12)



Source: Figures 4.3 and 4.4 of Crawford and O'Brien (2021)

# The pattern post-AE has changed

Percentage of private-sector employees saving in a pension, by age and sex (2012 and 2019)

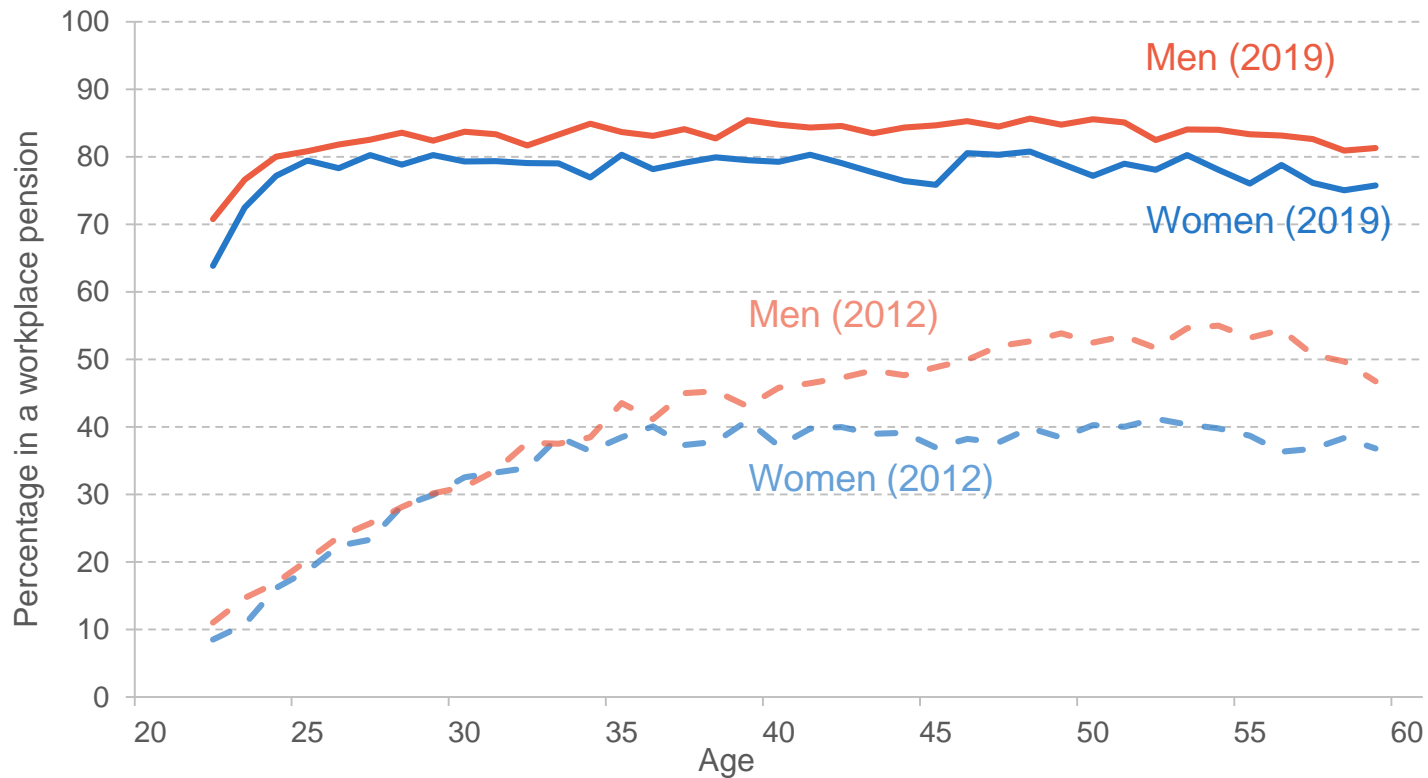


Source: Figure 4.5 of Crawford and O'Brien (2021)



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Source: Figure 4.5 of Crawford and O'Brien (2021)

# Key takeaways

- Pre-AE:
  - Conditional on sector, women on average saved a lower proportion of their earnings in a pension from age 35 on
  - This is because they are less likely to be saving in a pension after this age
    - → Linked to employment decisions after arrival of children?
- AE has increased pension membership substantially, probably reducing the gender gap in pension saving rates
- But, we still see that men are more likely to be saving in a pension at all ages due to AE targeting
- To understand the overall effects of AE, and the potential effects of future policy in this area, need to understand more about what was driving the pension gap pre-AE

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