

# Wage Progression in the UK

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DWP meeting, January 2017

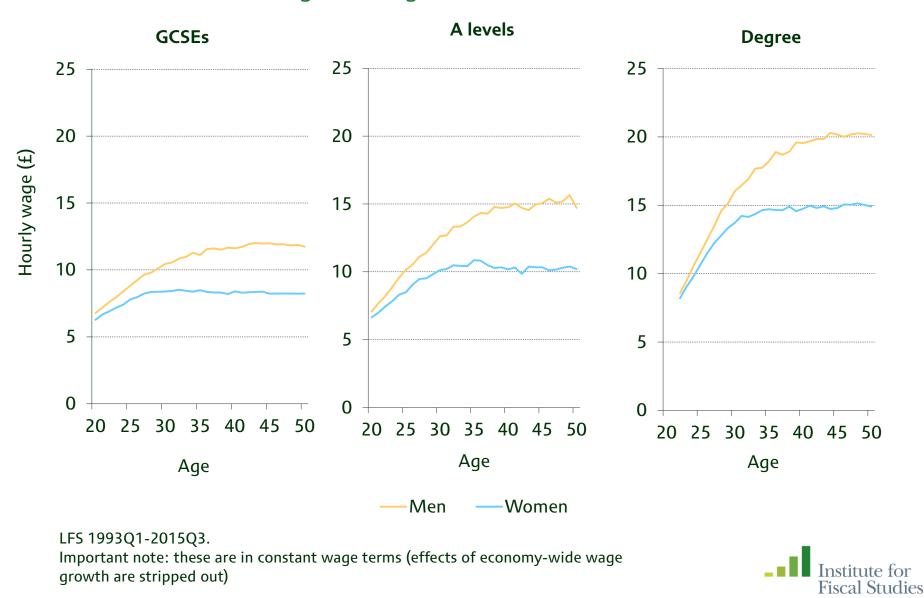
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## Outline

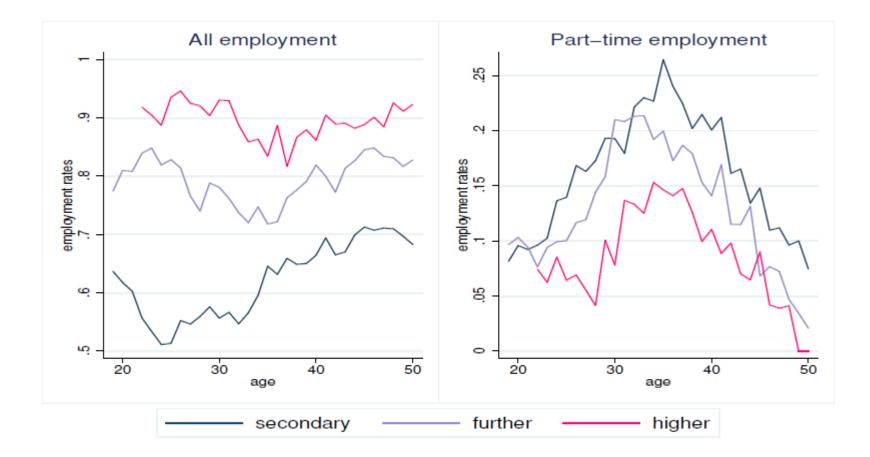
- Brief overview of recent and planned research relating to earnings progression
  - Women: wages over the lifecycle, and their relationship to family circumstances and career patterns
  - > Men: changing work patterns and their relationship to earnings
  - Plans for future research



#### Wage profiles by age, education and gender Association between age and wages breaks down for women in their 30s

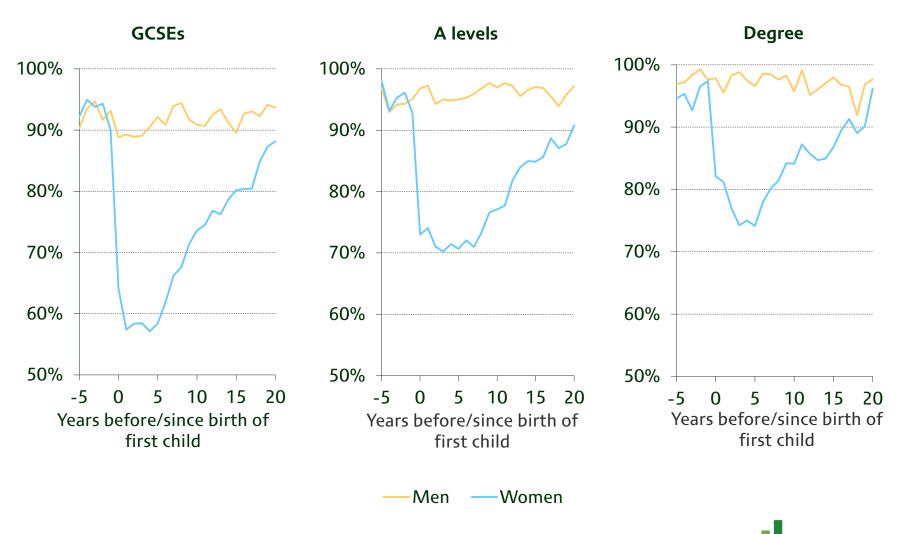


#### Female employment and working hours Work intermittency may explain wage stagnation for women





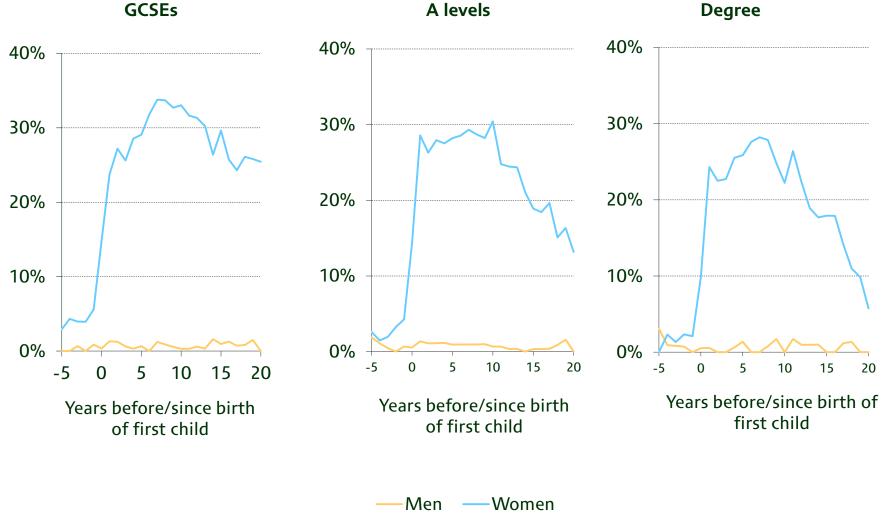
#### Employment before and after birth of first child Breaks in careers are related to motherhood



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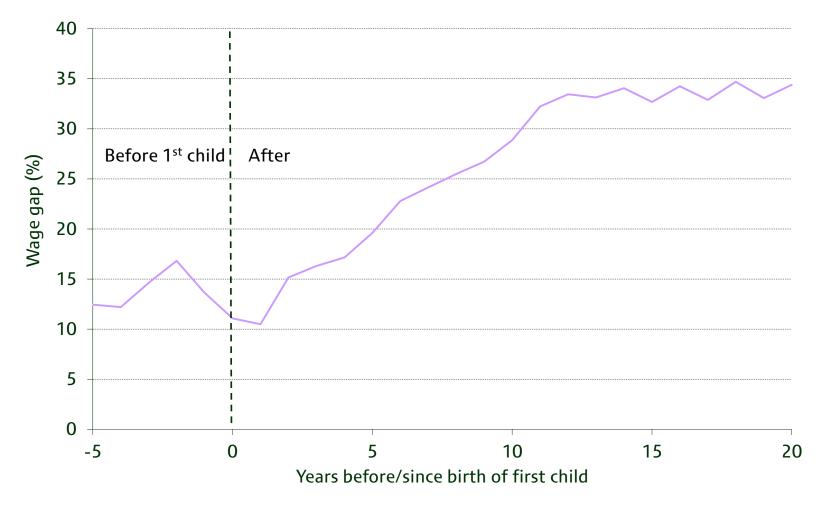
#### Proportion working part-time Short working hours prevalent among mothers of all education levels







#### Wage gap around childbirth for parents The arrival of children is a key driver of gender differentials in wage progression



British Household Panel Survey, 1991-2008



# Time spent out of paid work associated with lower wages when returning

- What is the importance of career breaks for the progression of female wages?
- Using BHPS data, we take women who are observed moving out of paid work and then later moving back in to paid work
  - Compare women whose career gaps were of different lengths
  - Controlling for past work experience
- We find:
  - Each extra year out is associated with 2% lower wages when returning
  - But this association is essentially zero for the low-educated...
  - And about 4.5% per year for those with A-levels and graduates



# A 'part-time wage penalty' is an important part of the gender wage gap

- PT work is not associated with an instantaneous fall in hourly wage
- Instead, it is associated with *lack of wage progression*
- BHPS data shows that women working FT hours see real wage growth of 3-4% per year, depending on education
- These growth rates drop to zero for those working PT
- PT workers earn less than FT workers not because they work PT now, but because more likely to have worked PT in the past



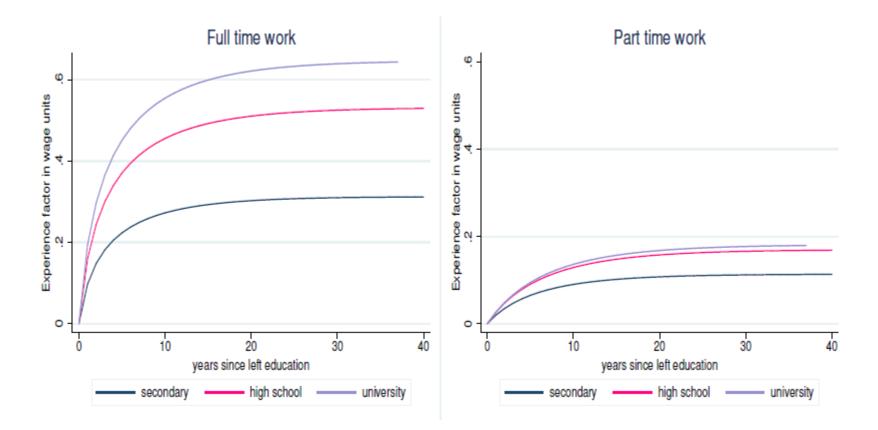
#### What are the returns to working experience?

- To study the *causal* relationship between the wages of women and the experience they accumulate in FT and PT jobs we develop a dynamic model of female labour supply, experience accumulation and wages
  - Experience accumulation depends on working hours
  - Returns to experience vary by education
- The model captures the variation in female labour supply by family circumstances
- We estimate this model on BHPS data for years 1991-2008



# Returns to working experience

Gains in wages for one extra working year vary by accumulated experience, working hours and education



Model predictions.



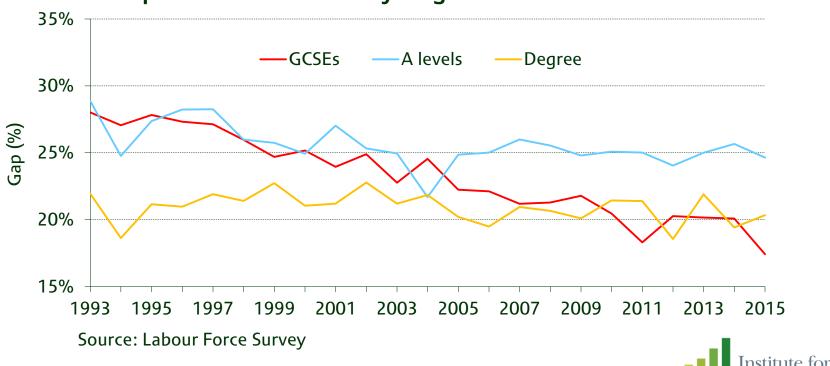
#### This is affecting earnings inequality among men



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## Research questions

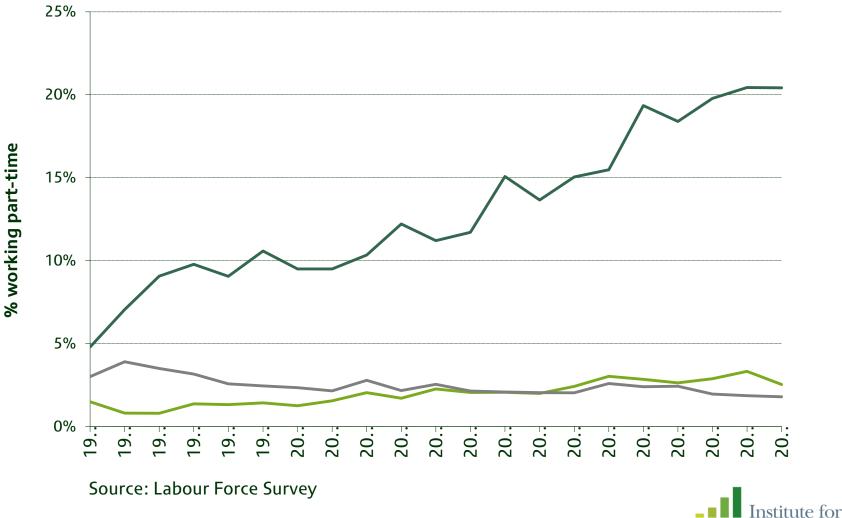
- 1. Why are hours of work falling for low wage men?
- 2. What implications does it have for human capital and wage progression for low-skilled men?
  - > And could it explain fall in gender wage gap among low-educated?



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Gap between mean hourly wages of men and women

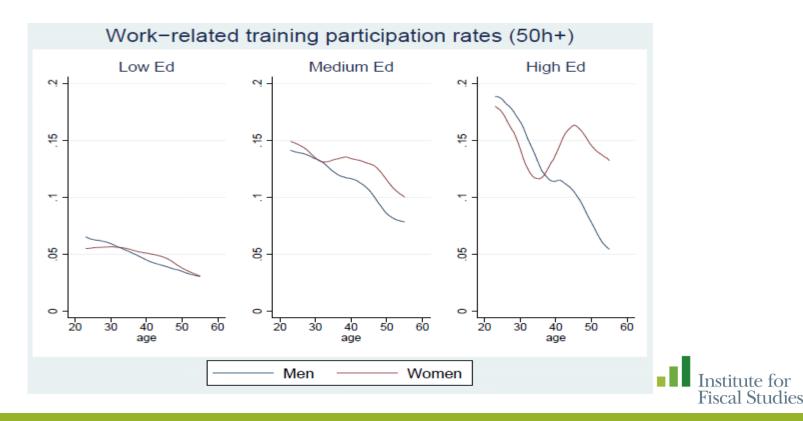
# Big increase in part-time work among low-wage men % working fewer than 30 hours per week, by hourly wage level (age 25-55)



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### Questions we are considering for further work

- What else drives the wage profiles of women and men?
  - Job-to-job transitions
  - Sector and occupation
  - Investments in training during working life



## Questions we are considering for further work

- Scarring' impacts of entering labour market during downturns
  - Project looking at long-term impacts on unemployment and earnings
  - > As well as how these are insured against (e.g. tax-benefit system)
- Looking at the end of working life (50+), health may become a critical driver of employment and productivity
  - We find that around 5-15% of non-working spells are driven by new health issues
  - These effects are very persistent
  - > The questions now are:
    - How does the interaction between health and employment affect productivity in the long-term?
    - Do these effects feedback into employment and retirement decisions?

