



## The return to a degree

New evidence from the birth cohort studies and Labour Force Survey



# TOPICS TO BE COVERED

1. Overview of the research team
2. Importance of the study
3. Key definitions and previous findings in this area
4. Datasets
5. Methodology
6. Results
7. Concluding remarks and future work



## THE RESEARCH TEAM

- This research has been produced collaboratively by the Department of Economics at the University of Warwick and the Higher Education Statistics Agency (HESA).
- Gianna Boero, Robin Naylor and Jeremy Smith (co-authors of this work) are all Professors within the Economics Department with an interest in the Economics of Education.
- Dan Cook and Tej Nathwani form part of the Policy and Research team at HESA.



## WHY HESA IS UNDERTAKING RESEARCH

- As our mission states, our aim is to support better decision making and help advance higher education in the UK.
- Research can also help HESA in meeting the requirements of the Code of Practice for Statistics.
- Under the Higher Education Research Act of 2017, HESA became the Designated Data Body.
- Fulfilling our duties under this Act can be assisted by this activity.



# WHY IS THIS TOPIC IMPORTANT TO RESEARCH?

- Higher education remains a key investment decision for young people.
- In England, the rise in fees and removal of grants has led to students incurring growing levels of financial liability.
- Given these costs, understanding the financial benefits of higher education is important for prospective students.
- Knowing the trajectory of graduate pay is also crucial for policymakers, following changes in the accounting of student loans in public sector finances.



# WHAT DO WE MEAN BY THE ‘RETURN TO A DEGREE’?

- Here, we are defining the ‘return to a degree’ as the extent to which the hourly pay of graduates exceeds that of non-graduates (in percentage terms) at age 25-26.
- Graduates are individuals who hold a first degree as their highest qualification (postgraduates are excluded).
- Non-graduates are individuals whose highest qualification is A level, GCSE or equivalent.



# WHAT DOES PREVIOUS EVIDENCE HAVE TO SAY ON THIS MATTER?

- The proportion of graduates relative to non-graduates has continued to rise in the last two decades.
- Yet, most evidence to date has suggested the return to a degree has stayed stable.
- A possible explanation for this is that the increased supply has been offset by greater demand for workers with high-level skills.



# LONGITUDINAL EDUCATION OUTCOMES (LEO): STRENGTHS

- LEO is an administrative dataset that links education, benefit and tax records.
- Its key benefits are its comprehensive coverage and the increased accuracy of the data available.
- Over time, it will enable longer-term labour market outcomes to be explored.



# LONGITUDINAL EDUCATION OUTCOMES (LEO): WEAKNESSES

- No data is available on hours worked, work tenure, non-cognitive skills or the health of the individual.
- Information on parental/household background is limited.
- These are important to account for when examining the return to a degree.
- Being relatively new, one cannot investigate how the return to a degree has changed over time.



# THE DATASETS: PART 1

- In this study, we utilise three different datasets.
- The British Cohort Study (BCS) follows around 17,000 individuals born in the UK in 1970 throughout their lives.
- Meanwhile, Next Steps follows the lives of approximately 16,000 individuals born in England between 1989 and 1990.
- The Labour Force Survey (LFS) is UK-wide and is primarily used to assess the state of the labour market.



## THE DATASETS: PART 2

- BCS and Next Steps are rich sources with information on household background, non-cognitive skills etc.
- Both gather employment and education outcomes at age 25-26.
- The LFS has been run quarterly since 1992 and collects information on age, hourly pay and highest academic qualification.



## METHODOLOGY: PART 1

- We begin by looking at the association between hourly pay and holding a degree in BCS and Next Steps.
- Initially, only gender is controlled for.
- We then successively control for other factors that may influence one's educational choice and hourly pay.
- The change in the return to a degree across the two decades is then calculated.



## METHODOLOGY: PART 2

- Using the LFS, we assess how robust the findings are from our examination of BCS and Next Steps.
- We start by constructing similar birth cohorts (i.e. those born around 1970 and 1990).
- The association between hourly pay and holding a degree is then explored, accounting for gender.
- The change in the return to a degree in the LFS is subsequently determined. No other controls are used.



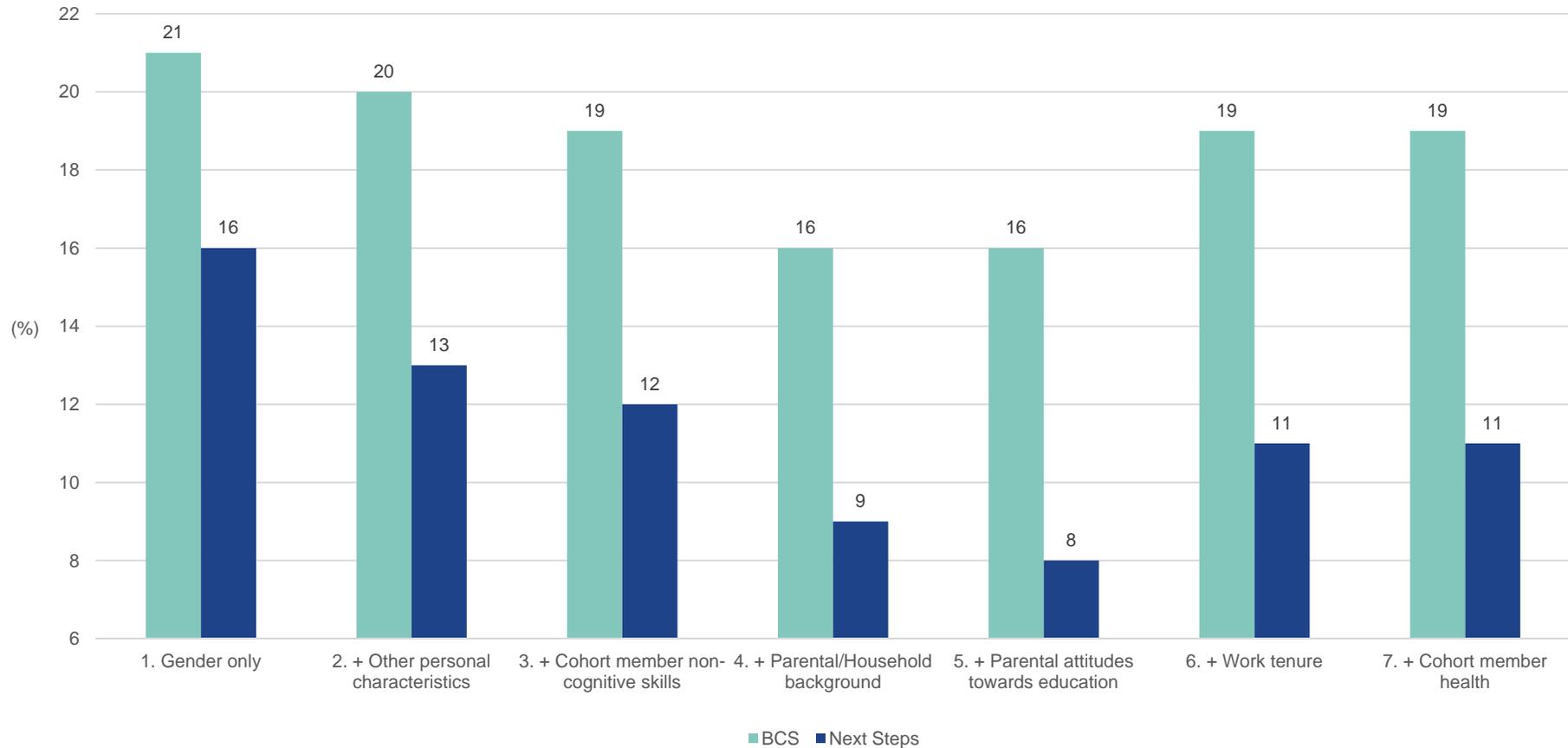
## METHODOLOGY: PART 3

- Additionally, we explore the return to a degree in the LFS for those born between 1980 and 1991.
- This is to understand more about the how the return has changed in between the two time periods of interest.
- Previous evidence has indicated that the return was stable for those born before 1980.
- Again, we look at the association between hourly pay and holding a degree, accounting for gender only.



# RESULTS: PART 1

The return to a degree in BCS and Next Steps. Controls are added on a successive basis.



## RESULTS: PART 2

- The return to a degree in the BCS was found to be 21% for both males and females when accounting for gender only.
- For a comparable birth cohort in the LFS, the return was 25% for males and 44% for females.
- In Next Steps, the return to a degree, when controlling for gender only, was 16% for both males and females.
- This compared to a return of 19% for both males and females when analysing a similar birth cohort in the LFS.



## RESULTS: PART 3

- Both the birth cohort studies and the LFS therefore indicate a decline in the return to a degree across the two decades.
- Our analysis of individuals born between 1980-1991 in the LFS suggests the fall is a recent phenomenon.
- In particular, the decline has particularly impacted those born after 1987.



## CONCLUDING REMARKS

- At this stage, these results should be considered tentative.
- Firstly, graduates tend to enjoy steeper earnings growth than non-graduates over time.
- Secondly, data on more recent birth cohorts is needed to establish whether the recent fall is a short-term dip or the start of a longer-term decline.



## FUTURE WORK

- We will look to access linked Next Steps – National Pupil Database data to control for attainment.
- The findings here will be updated by looking at the return at a later age and bringing in more recent birth cohorts, once the data becomes available.
- We shall also be examining how the return to a degree varies by classification awarded, which will use these three sources along with HESA data.

