



# THE RETURN TO A DEGREE: NEW EVIDENCE BASED ON THE BIRTH COHORT STUDIES AND THE LABOUR FORCE SURVEY

A research team from HESA and the Department of Economics at Warwick University have analysed the extent to which the financial return to a degree (i.e. the percentage by which the hourly pay of graduates exceeds that of non-graduates) has changed across two decades in which there has been a large expansion in higher education participation.

## KEY FINDINGS

- For a cohort born in 1989-1990, we find the return to a degree at age 25-26 to be 11 percent for both men and women.
- Amongst a cohort born in 1970, we estimate the return to a degree at approximately the same age to be 19 percent for both men and women.
- This suggests that the return to a degree has fallen by 8 percentage points across these two cohorts.
- Our analysis indicates that the decline has occurred relatively recently, mainly impacting on those born after 1987.
- We emphasise that the conclusions reached here are tentative until corroborated by further analysis at a later stage in the lifecycle and using more recent birth cohorts.
- This is because, over time, graduates tend to enjoy steeper growth in their earnings than non-graduates.
- Furthermore, additional data on cohorts born after 1990 is needed to determine whether the recent fall is a short-term dip or represents the beginning of a more general decline.

## INTRODUCTION

Higher education remains a significant investment decision for young people throughout the UK, given both the cost of tuition and the length of time spent outside the labour market. In England, major funding changes since 2012 (most notably a rise in fees and the removal of maintenance grants) have led to students increasingly relying on loans, thereby incurring a growing level of financial liability.

Although the benefits of higher education are not solely monetary in nature, the cost of studying means it is imperative for prospective students and their families to be supplied with information on the financial benefits of obtaining a degree, so informed choices can be made. For policymakers, data on graduate pay plays an important role in understanding the impact of student funding arrangements, as any debt that is not repaid will add to public sector borrowing.

## DATA AND RESULTS

The Longitudinal Education Outcomes (LEO) dataset (an administrative source linking education, benefit and tax records) has underpinned most of the recent analysis on the return to a degree. Although this covers a far larger population than previous data sources, it is not without its limitations. For instance, no data is available on non-cognitive skills and individual health, whilst information on the household background of the individual is limited. Given such factors can impact on the decision to enter higher education and future pay, it would be preferable to take these into account when assessing the return to a degree. Despite the precise nature of HMRC salary records, the absence of working hours data can make evaluating the return to a degree problematic if graduates and non-graduates display sizeable differences in this regard. Moreover, LEO only encompasses relatively recent graduates. Consequently, one cannot explore how the return to a degree has changed over time.

The British Cohort Study and Next Steps datasets are used in this study to supplement the understanding that has been gained from the LEO data. These studies follow the lives of individuals born in 1970 and 1989-1990, respectively. They contain rich information on the cohort member and their families, with data on hourly pay also available. By comparing the results obtained across these two cohorts, we can examine the extent to which the return to a degree has changed across two decades, during which there have been substantial changes in higher education and the labour market.

Due to data availability, our analysis focusses on the return at age 25-26. This is earlier than one would ideally wish to undertake this exploration, as graduates tend to enjoy steeper earnings growth than non-graduates over time. Looking initially at just the association between holding a degree and hourly pay for both cohorts, we find the return to a degree to be 21 percent for the 1970 birth cohort and 16 percent for those born around 1990. This indicates a fall in the return to a degree of 5 percentage points. After controlling for other factors such as non-cognitive skills and work tenure, we estimate the return to a degree for those born in 1970 to be 19 percent, while for the 1989-1990 birth cohort, it is 11 percent. This implies a slightly greater decline of 8 percentage points across the two cohorts, once other factors are taken into account.

Following on from this analysis, we investigated the robustness of these results by using the Labour Force Survey (LFS) to see whether it produces similar findings. This resource is not as rich as the birth cohort studies; hence other factors (e.g. non-cognitive skills) cannot be taken into consideration when analysing the relationship between having a degree and hourly pay. However, given the LFS has been conducted quarterly since 1992, we are able to construct similar birth cohorts and replicate the approach used for the birth cohort studies at age 25-26. We find comparable results for males with the return to a degree falling by 6 percentage points across the two decades, although we find a much larger decline of 25 percentage points for women.

Given the observed decrease, we additionally utilise the LFS to explore the return to a degree for those born between 1980 and 1991. Our results indicate that the decline appears to be a recent development, primarily affecting those born after 1987. Further data is needed on cohorts born after 1990 to determine whether this is a short-term dip or represents the start of a more general decline.

## FUTURE RESEARCH

This study has focused on how the overall return to a degree has changed across a period in which there has been a large increase in higher education participation. Once the relevant data become available, our future work will look to conduct the above analysis at a later stage in the lifecycle and using more recent birth cohorts to see whether this provides additional evidence of a decline in the return to a degree.

Alongside more people going to university, there has also been a growing proportion of graduates receiving an upper second class award or above, raising concerns within the sector over possible grade inflation. To date, the impact this has had on how the return to a degree varies by class awarded has not been explored. This will therefore be the subject of our next briefing.

### STAY IN TOUCH

 + 44 (0) 1242 255 577

 [www.hesa.ac.uk](http://www.hesa.ac.uk)

 @ukhesa

